

Summary in English

1. Introduction

Throughout this thesis a myriad of definitions, acronyms, examples, statistical information and qualitative data has been presented. This rather technical and methodological approach to metaphor in fiction may have struck researchers working on metaphor in literary texts from more traditional literary-critical approaches as somewhat overwhelming, perhaps even beside the point. This final chapter hopes to make clear what exactly has been gained from constructing, annotating and analysing the fiction corpus the way it was done in the *Metaphor in Discourse* project, and how this perhaps unusual approach to metaphor in literary texts has yielded exciting new insights.

This chapter will first summarize the main findings of this thesis in relation to the research aims as outlined in the Introduction (Section 9.2). First the three-dimensional approach taken to analysing metaphor in discourse will be discussed (9.2.1), as well as the corpus-linguistic approach taken to analysing metaphor in literature (9.2.2). Section 9.2.3 will then discuss the MIPVU procedure (as presented in Chapter 3) and its application to the fiction sample (as presented in Chapter 4). The findings concerning the linguistic forms of metaphor in fiction (Chapters 5 and 6) will be summarized in Section 9.2.4, followed by a summary of the findings concerning the linguistic forms and conceptual structures of personifications in fiction and their communicative functions and cognitive representations (Chapters 7 and 8) in Section 9.2.5. Finally, Section 9.3 will reflect on how specific choices and decisions that were made in the *Metaphor in Discourse* project may have given rise to specific limitations of the research presented in this thesis, while at the same time revealing interesting directions for future research.

2. Summary of the main findings

2.1 A three-dimensional approach to metaphor in discourse

As pointed out in the Introduction and Chapter 1, one of the innovative aspects of the *Metaphor in Discourse* project is its integrated three-dimensional approach to analysing metaphor in authentic discourse. Cognitive linguists have shown that metaphor is a matter of thought rather than of language and have argued that metaphor is pervasive in everyday language (e.g., Lakoff 1993; Lakoff and Johnson 1980). Corpus linguists and discourse analysts have, however, pointed out that claims about the ubiquity of metaphor in language and thought should be based on an examination of its occurrence in authentic discourse contexts rather than on invented or elicited examples (e.g., Cameron and Low 1999; Deignan 2005). They have also emphasized that metaphors should be analysed in authentic and rich linguistic contexts, as corpus evidence reveals that the forms and functions of linguistic metaphor cannot be reliably predicted on the basis of conceptual metaphors (e.g., Deignan 2005). Recent studies have demonstrated the importance of considering metaphor in authentic discourse settings (e.g., Cameron 2003; Cameron and Low 1999; Charteris-Black 2004; Deignan 2005; Heywood et al. 2002; Semino 2008; Steen 1999a, b, 2002b, d) and have demonstrated the need for reliable identification procedures that can account for the many different forms of metaphor in discourse and the way in which metaphorical expressions can be related to underlying conceptual structures.

In addition to critiques from corpus linguists and discourse analysts about the relation between linguistic and conceptual metaphors, psycholinguists have demonstrated that not all metaphorical expressions are necessarily processed as metaphor, that is, via comparison (cf. Bowdle and Gentner 2005; Gentner and Bowdle 2001, 2008; Giora 2001, 2008; Glucksberg 2001, 2008; Glucksberg and Haught 2006). This points to the need to distinguish not only between metaphor in language and metaphor in thought, and between metaphor in grammar and metaphor in usage, but also between semiotic and behavioural approaches to metaphor (Steen 2007). Only behavioural analyses can provide insight into the cognitive representations of metaphor during discourse comprehension. As was also pointed out by Gibbs (1994), the products of metaphor (i.e. metaphorical expressions) cannot be used to make claims about the processes of metaphor (i.e. metaphor processing). The *Metaphor in Discourse* project therefore adopted an encompassing approach to metaphor analysis that systematically distinguished between the linguistic forms, conceptual structures, and communicative functions of metaphor in different domains of discourse, as well as their semiotic versus behavioural analysis. Within the project, metaphor was defined as a cross-domain mapping in conceptual structure (e.g., Lakoff 1993; Lakoff and Johnson 1980) and it was argued that these cross-domain mappings can be realized by different linguistic forms which may have different functions and effects in different discourse settings. The project's corpus-based approach enabled a large-scale and

exhaustive investigation of all the different forms and functions of metaphor in four distinct domains: academic discourse (Herrmann in prep.), conversation (Kaal in prep.), news texts (Krennmayr in press) and fiction (this thesis). In a parallel project at VU *University Amsterdam* the same systematic approach was applied to a corpus of Dutch conversations and news texts (Pasma in press).

Following Steen (2008, in press a), this thesis has argued in favour of adopting a three-dimensional approach to metaphor in discourse that includes metaphor in language, metaphor in thought and metaphor in communication as three independent levels of analysis. Including metaphor in communication as an independent level of analysis allows researchers to explain why and how the same linguistic forms and conceptual structures of metaphor can sometimes be used deliberately to achieve a particular rhetorical goal rather than being a general tool in language and thought to fill lexical gaps in the language system or frame complex and abstract concepts that can only be understood (partially) indirectly. Whether metaphorical expressions are used deliberately or non-deliberately in communication will most likely affect how these metaphors are cognitively represented during comprehension, that is, whether they are also processed as metaphors. The communicative properties of metaphor are closely related to its specific communicative purpose (divertive, informative, persuasive, etc.) and the particular domain of discourse (see also Cameron 2003; Charteris-Black 2004; Semino 2002a; Steen 2008). This thesis has hopefully demonstrated the advantage of adopting a three-dimensional model of metaphor in discourse that distinguishes between metaphor in thought, language and communication as it allowed for a more detailed description of the similarities and differences in metaphor use between the four included domains of discourse.

2.2 A corpus-linguistic approach to metaphor in literary texts

The preliminary example of metaphor in fiction from *Life of Pi* that was discussed in the Introduction illustrated a number of common assumptions about metaphors in literary texts. The personifications in the excerpt were so detailed, complex and well-structured that it was hard to imagine them occurring in a non-literary context. It was also argued that such metaphors are more likely to have been created and used deliberately by the author as well as recognized and understood as metaphors by the readers. This was related to the fact that such creative, complex, extended and deliberate personifications are foregrounded, which draws attention to their status as metaphors. Such foregrounding and its defamiliarizing effect are generally claimed to be a typical characteristic of literature (e.g., Leech 1969, 2008;

Mukařovský 1970; Nowotny 1962; Short 1996), as the language itself becomes the centre of attention and this makes its aesthetic qualities more noticeable and memorable.

It was argued that the metaphors from *Life of Pi* illustrate the kind of metaphors that are generally associated with literature – such as personifications, similes, deliberate metaphors and extended metaphors (e.g., Ben-Porat 1992; Leech and Short 2007; Lodge 1977; Sayce 1954; Semino 2008; Semino and Steen 2008; Steen and Gibbs 2004; Werth 1994, 1999) – as well as the functions commonly attributed to such metaphors, such as the expression of subjective experiences and the creative or novel use of conventional metaphors to offer new perspectives (e.g., Semino 2008; Semino and Steen 2008). Goatly (1997) and Semino (2008) have also argued that metaphor in literature is characterized by a high degree of systematic textual patterning, for example in the form of repetition, clustering, and literalization. With regard to the relation between metaphor in literature and metaphor outside literature two main approaches were discussed: the discontinuity approach, which sees metaphor in literature as primary and considers the metaphors in everyday language to be lesser derivations, and the continuity approach, which sees metaphor in everyday language use as primary and considers the metaphors in literature to be creative elaborations and extensions of conventional patterns. Nevertheless, both approaches assume that the metaphors in literature are somehow more novel, creative, meaningful and aesthetically pleasing than the metaphors in everyday language use.

This may in part be due to the fact that most studies of metaphor in literature have focused on the distinctive use of metaphor in specific genres, in specific texts, or by specific authors (cf. Semino 2008; Semino and Steen 2008; Steen 1994; Steen and Gibbs 2004). Moreover, studies of metaphor in literary texts have typically focussed on novel and unique uses, aiming to show how particular uses or patterns form an essential part of the particular style of a literary work, author or genre (e.g., Crisp 1996; Donald Freeman 1993, 1995, 1999; Margaret Freeman 1995; Hamilton 2002; Hiraga 1999; Popova 2002, 2003; Semino 2002b; Semino and Swindlehurst 1996; Simon-Vandenberg 1993; Werth 1999). By contrast, the texts that were included in the present thesis were not selected because they were known to contain interesting uses, forms or functions of metaphor. It was argued that as many studies of metaphor in literature have focused on exceptional literary works and exceptional literary writers, the common view of literary metaphor as being exceptionally creative, original, elaborate and complex may not accurately represent metaphor use in most popular fiction. Although exceptional writers such as Shakespeare and Donne are clearly “masters of metaphor”, the mastery of metaphor that is displayed in most novels may be of an entirely different kind.

Steen and Gibbs (2004) have pointed out that only corpus-linguistic studies can address the question whether literary metaphors are indeed more rhetorically prominent or used more deliberately than metaphors in non-literary discourse. This thesis therefore considered it to be an empirical question whether the type of creative, original, elaborate and deliberate metaphors typically associated with literature are in fact frequent in fiction and whether they are more frequent in fiction than in other domains of discourse. To answer this question, a corpus-based approach was used and explicit identification methods were employed to ensure that metaphors were identified in the same way in each domain of discourse, as only such an encompassing cross-register comparison can shed light on the question which forms and function are typical of fiction. Studies on literary metaphor have typically not provided quantitative evidence for claims that literature contains a greater number of metaphors and have tended to concentrate on what is specific to literature without paying sufficient attention to patterns of metaphor in general language use and cognition and without systematically distinguishing between the use, function and effect of metaphor (e.g., Gibbs and Steen 1999; Steen 1994; Steen 2007). As this thesis was aimed at establishing the forms, frequency and distribution of metaphor in fiction based on an explicit identification procedure and corpus-linguistic techniques, it has not offered the kind of attractive, challenging or original interpretations of unique uses of metaphor that many literary scholars may be used to. Nevertheless, it is hoped that the current approach shows how literary and linguistic approaches to metaphor in fiction can successfully be united. The corpus-based analyses provided in Chapters 4 to 8 hopefully provide new insights into the extent to which the specific properties of metaphors in fiction, their distribution and their use in context are part of the specific nature of metaphor in literary texts.

2.3 The development of a more comprehensive and explicit method for the identification of the linguistic forms of metaphor in discourse: MIPVU

The *Metaphor in Discourse* project aimed to examine the interaction between the linguistic forms and conceptual structures of metaphor in discourse and consider their use and function in four distinct domains (academic discourse, news texts, fiction and conversation). As discussed in Section 9.2.1, the project's corpus-linguistic approach enabled a detailed investigation of all the different linguistic forms of metaphor. One first goal of the *Metaphor in Discourse* project was therefore to test and further develop the Metaphor Identification Procedure

(Pragglejaz Group 2007). Although MIP had already been shown to yield reliable results, the *Metaphor in Discourse* project aimed to extend the procedure in such a way that not only indirect expressions of metaphor in discourse could be reliably identified and annotated but also direct expressions (i.e. metaphor expressed by simile and analogy) and implicit expressions (i.e. metaphor expressed via ellipsis and substitution). This resulted in a number of specifications, adaptations and additions to the MIP procedure (see Steen, Biernacka, et al. 2010), which finally led to the development of MIPVU (Steen, Dorst et al. 2010a, b).

The complete MIPVU procedure was presented in Chapter 3 of this thesis. The most important addition in MIPVU with regard to the original MIP concerns the addition of separate categories for direct and implicit forms of linguistic metaphor. This distinction was created to indicate that the linguistic forms of metaphor in discourse can relate to their underlying conceptual structures in three different ways, namely indirectly, directly or implicitly. In line with this addition in MIPVU, the term ‘metaphor-related word’ (“MRW”) was introduced to signal that words can be related to metaphor without being used metaphorically themselves, as is the case in similes. In addition, the binary distinction of metaphor that was used in MIP (i.e. words are either used metaphorically or not) was turned into a three-way distinction between words that are clearly related to metaphor, words that are clearly not related to metaphor and words that are borderline cases. A fourth relation to metaphor (“MFlag”) was created to allow for the annotation of metaphor signals, such as *like* and *as* (cf. Goatly 1997).

The application of MIPVU to fiction was demonstrated in Chapter 4. This chapter showed that MIPVU can be used as a reliable and flexible tool for the identification of metaphor-related words in fiction. It also discussed a number of additions and specifications in MIPVU that proved to be most relevant to the analysis of fiction. Firstly, the extension of the procedure to include the annotation of similes and analogies (i.e. “direct MRWs”) as well as their signals (i.e. “MFlags”) proved particularly useful for fiction: these directly expressed linguistic forms of metaphor were shown to play an important role in fiction and the fiction sample actually contained almost half of all the direct MRWs in the corpus (see Chapters 5 and 6). Similarly, the additional code for possible personification (i.e. “PP”) allowed the analysts to mark cases that could be considered personification from one perspective but metonymy from another; these linguistic forms of personification were also shown to have a clear discourse function in fiction: these PPs were often used in body-part personifications, which create the effect that body parts are acting of their own accord independently of the character they belong to (see Chapters 7 and 8). The addition of a category for borderline cases of metaphor (coded “WIDLII” for When In Doubt, Leave It In) proved useful in the analysis of character descriptions that blur the boundary between concrete and abstract uses of

especially prepositions and verbs. With regard to the analysis of proper names and nicknames, MIPVU introduced the distinction between mention and use (Sperber and Wilson 1981; Wilson and Sperber 1992), while it was specified that in the case of cultural references the dictionary should be followed as much as possible to minimize the influence of personal preferences and familiarity with the original source.

The subsequent demonstration of the application of MIPVU to an excerpt of fiction showed how these additions and specifications in MIPVU enabled the procedure to deal with the many different manifestations of metaphor in fiction. The analysis of the excerpt also revealed that most of the metaphorical expressions in the fiction sample did not appear to be comparable to the highly literary, creative, elaborate and original metaphors that were found in the excerpt from *Life of Pi* (Martel 2001). The great majority of the metaphors in the fiction sample, and the corpus as a whole, involved cases of unmarked, highly conventional metaphorical expressions from everyday language use. Nevertheless, a few cases were shown to stand out in the fiction excerpts due to their novelty, explicit signalling or systematicity. These cases were related to two phenomena that turned out to be essential forms of metaphor in fiction, namely simile and personification. Both of these types of metaphor were shown to involve a complex interaction between linguistic forms and conceptual structures that were not captured by MIP but could be taken on board by MIPVU thanks to the discussed additions.

The results from the reliability tests discussed in Chapter 4 showed that the application of MIPVU produced reliable results for fiction and that the annotation of fiction was less subject to analyst bias than the other registers, indicating that the majority of the lexical units in fiction are either clearly related to metaphor or clearly not related to metaphor. The reliability tests provide evidence for the reliability and validity of the quantitative analyses concerning the frequency and distribution of the linguistic forms of metaphor in fiction reported in Chapters 5 and 6, as well as the analyses concerning the different forms, functions and effects of personification reported in Chapters 7 and 8.

In short, it was demonstrated that MIPVU is able to identify the types of metaphor that are generally discussed in studies of metaphor in literature, such as simile and personification but also extended and novel metaphors, by starting from a systematic and encompassing approach. MIPVU can therefore be considered a valuable addition to current studies of literary metaphor, providing a sound methodological basis for claims that are now often made on the basis of intuitions and specially selected examples that may not be representative. Though literary texts may indeed more often contain unique and creative metaphors than other registers, this thesis has hopefully shown that it is possible and valuable to identify and analyse the different linguistic forms of metaphor in fiction on the basis of an

explicit and flexible method like MIPVU as the use of such a method adds reliability and validity to the claims that are made about the nature of metaphor in literature which may then be directly compared and contrasted with findings for metaphor in other domains of discourse.

2.4 The linguistic forms of metaphor in fiction

As pointed out in the Introduction, the overall goal of the *Metaphor in Discourse* project was to describe and analyse which linguistic forms with which attending conceptual structures are used in which discourse situations, for which purpose and to which cognitive effect. Chapters 5 and 6 of this thesis provided a detailed account of the patterning of the linguistic forms of metaphor in fiction. In Chapter 5 the patterns found for fiction were compared to those established for academic discourse, news, and conversation. In Chapter 6, the patterns of linguistic metaphor in fiction were further refined by systematically distinguishing between narrative and dialogue. The main similarities and differences that were found between fiction and the other registers (academic discourse, news, and conversation) as well as between the sub-registers of fiction (narrative prose and dialogue) are presented below.

The frequency of metaphor in fiction

In many ways, these quantitative analyses are the most newsworthy part of this thesis. Although metaphor in literature has been studied by researchers from many different fields using many different models for many different purposes, the present quantitative, cross-register investigation of the patterns of linguistic metaphor in fiction is rather exceptional. It has generally been assumed that literary texts are highly metaphorical and that literary texts contain more metaphors than non-literary texts. The current analyses provide quantitative evidence that neither claim appears to be true for the current sample of contemporary fiction texts. Fiction in fact had a relatively moderate proportion of metaphor-related words: 11.9% of the lexical units in fiction was related to metaphor. This proportion was considerably lower than the proportions found in academic texts (18.6%) and news texts (16.4%) though considerably higher than the proportion of MRWs found in conversation (7.7%). This finding suggests that the importance attributed to metaphor as being *the* language of literature (e.g., Leech 1969, 2008; Mukařovský 1970; Nowotny 1962; Short 1996) may have given a false impression regarding its

relative frequency both within literature and in comparison to other domains of discourse.

However, this moderate frequency does not take away the fact that metaphor may still have an essential role to play in literary texts, and that this role may be different from metaphor's role in other genres. The relative differences in metaphor frequency between the four domains of discourse in the project can be related to the findings of Biber (1988, 1989). The three-way interaction between register, word class and metaphor revealed that much of the observed variation in metaphor can in fact be accounted for from the perspective of the natural and functional variation between word classes across registers (e.g., Steen, Dorst et al. 2010a, b). When the interaction between metaphor and word class is temporarily fixed, the bulk of metaphor can be seen as a constant function of the four registers, with academic discourse having the highest incidence of metaphor-related words, followed by news, then fiction, then conversation. It was argued that this variation can be related to Biber's (1988, 1989) distinction between an 'Informational versus Involved Production' (Dimension 1). That is, the use of metaphor appears to correlate with an informational production: academic discourse and news texts, which are characterized by an informational production, have the highest incidence of linguistic forms of metaphor. Conversation, which is characterized by an involved production, has the lowest incidence. Fiction, which is characterized by a moderate score that is in between an informational and an involved production, is situated in between academic discourse and news on the one hand and conversation on the other hand in terms of its instance of metaphor-related words. These findings suggest that news texts and academic discourse, and to a lesser extent fiction, have more need for metaphor-related words to express their content than conversation does. This may be related to the fact that conversations are interactional rather than transactional.

With respect to the eight main word classes (adjectives, adverbs, conjunctions, determiners, nouns, prepositions, verbs and the rest category) it was shown that in fiction verbs, prepositions and nouns were most often related to metaphor; together, these three word classes accounted for 75% of the metaphor-related words in fiction: verbs (29.4%), prepositions (26.7%) and nouns (19.2%). Adjectives (10.9%), determiners (7.1%), and adverbs (5.0%) were less often related to metaphor. Conjunctions (0.5%) and the rest category (1.3%) were hardly ever related to metaphor. The results showed that MRW verbs, prepositions and adjectives were significantly overused in fiction, while MRW nouns, adverbs, conjunctions, determiners and rest items were significantly underused. However, the same patterns were often found in the other registers, indicating that the overuse of particular word classes related more to general patterns of metaphor in language than to specific patterns of metaphor in particular registers.

For instance, all four of the registers overused MRW verbs and prepositions. This overuse of MRW verbs in all four registers was related to the frequent metaphorical use of the delexicalized verbs, such as *make*, *take*, *give*, *get*, *come* and *go* (cf. Cameron 1999; Deignan 2005; Heywood et al. 2002). The overuse of MRW prepositions in all four registers was related to the fact that most prepositions have basic spatial senses while they are frequently used metaphorically in their abstract temporal and causal meanings. These findings show that while claims about the importance of particular word classes for metaphor in specific genres may be true (e.g., Lodge (1977) on the importance of verbs and adjectives in personification metaphors; Cameron (2008) on the importance of metaphorically used verbs and prepositions in conversation), they should also be considered in light of the finding that this importance may be due to general language tendencies rather than the use of metaphor for specific purposes or in specific types of discourse (cf. Deignan 2005).

Fiction overused MRW adjectives while the non-MRW adjectives were underused. This pattern was also found in the news texts and conversations, but this word class was neutral for metaphorical and non-metaphorical usage in academic discourse. The analysis of the most frequently used MRW adjective lemmas revealed that many of the metaphorical uses in all four of the registers could be related to adjectives with basic meanings involving sizes (e.g., *big*, *small*, *great*) and dimensions (e.g., *deep*, *long*, *high*). Nevertheless, fiction and news were characterized by high type-token ratios for metaphor-related adjectives and a high percentage of unique MRW adjectives. This suggests that the overuse of MRW adjectives in fiction and news also relates to their role in creative variation aimed at enlivening the style of a text and making it more aesthetically pleasing. The same can be argued for the use of metaphor-related verbs in both fiction and news texts.

MRW nouns, on the other hand, were underused in fiction and news while non-MRW nouns were distributed as expected according to statistical chance. It was speculated that the underuse of MRW nouns in fiction may be due to the fact that referents in the text world are anchored by using non-metaphor-related nouns, which are then described in creative and original ways by using metaphor-related adjectives and verbs. It may even be that metaphor-related nouns are – consciously or unconsciously – avoided when writers select which information to present. Fiction centres on the description of characters who interact with other characters, handle concrete objects, go to different locations, and so on. These characters, objects and locations are then repeatedly referred to as the story unfolds. It seems likely that the nouns referring to these entities will remain predominantly non-metaphorical while the adjectives and verbs used to describe the characteristics, behaviour and actions of the entities vary and change over the course of the narrative. Thus, it makes more sense for metaphor-related uses of nouns to be more

local and one-shot, as in *That girl is a dog* or *He turned on me like a snake*, while repeatedly referring to a girl by using the noun *dog* would be too excessive and even confusing. This corresponds with the finding that the most frequently used MRW nouns were all nouns that are semantically relatively empty, such as *thing*, *point*, *way* and *end*, which are highly conventional and likely to go unnoticed as being metaphorically used.

Nevertheless, both fiction and news were again both characterized by a high type-token ratio for MRW nouns and a high percentage of unique MRW nouns, suggesting that despite their relative underuse in these registers they are characterized by a high degree of creative variation. In both conversation and academic discourse the MRW nouns were distributed according to chance but their degree of variation was much lower. MRW adverbs were also underused in fiction, news, and academic discourse while they were distributed according to chance in conversation. Conversation was also the only register that overused MRW determiners, while MRW determiners were underused in fiction, news and academic discourse. The significant underuse of MRW conjunctions and rest-category items was a characteristic of all four registers and shows that this word class is hardly ever related to metaphor regardless of the domain of discourse.

Even more surprising than the finding that fiction was less metaphorical than academic discourse and news texts was the finding that there was no significant difference between narrative and dialogue in fiction with respect to the proportion of metaphor-related words they contained: the dialogues in fiction contained 12.0% metaphor-related words while the narrative prose contained 11.8%. This was contrary to the expectations formulated on the basis of the differences found between the spoken and written registers in Chapter 5. On the basis of the low incidence of metaphor in conversation it had been predicted that the dialogues would contain fewer metaphor-related words than the narrative prose. The finding that the narrative prose and the dialogues contained the same proportion of metaphor-related words indicated that fiction's moderate proportion of metaphor-related words in the cross-register comparison was thus not caused by a difference between narrative and dialogue. With regard to metaphor use, dialogue in fiction is therefore more similar to narrative in fiction than to face-to-face conversations. This finding provides further support for the claim that literary dialogues are not an accurate or faithful representation of spoken conversation (e.g., Abercrombie 1963; Fludernik 1993, 1996, 2009; Oostdijk 1990). Conversely, the narrative prose in fiction was more similar to the dialogues in fiction than to the news texts and academic discourse. This was particularly interesting given the fact that the two-way interaction between sub-register and word class showed that in terms of the general distribution of the eight main word classes, the narrative prose in fiction had a distribution that corresponded to an informational production (similar to

news and academic discourse) while the dialogues had a distribution that corresponded to an involved production (similar to conversation).

This reveals that the distribution of metaphor-related words in narrative and dialogue in fiction did not follow the same opposition between involved and informational productions as the cross-register comparison did. Narrative's moderate proportion of metaphor-related words was more similar to dialogue than to news and academic discourse; it was suggested that this may be due to the fact that realistic fiction is primarily aimed at describing characters, their appearance, their surroundings and their actions in a realistic way, which will lead to very local uses of metaphor (Lodge 1977). News and academic discourse are more informational than narrative prose in fiction and may typically also need more metaphors as they deal with more a complex and abstract subject matter. The dialogues in fiction were shown to contain a much larger proportion of metaphor-related words than was expected on the basis of the findings for conversation. In addition, they were characterized by high type-token ratios and large proportions of unique metaphor-related adjectives, nouns, and verbs. In this respect, the dialogues were again similar to the narrative prose in fiction and dissimilar to the real-life conversations. Taken together, these findings indicate that dialogues in fiction do not only contain more metaphor-related words than real-life conversations but also more varied ones. This can be related to the finding by Biber and Finegan (1989, 1992, 2001) that literary dialogues (in fiction and drama) were considerably more informational than face-to-face conversations due to their role in carrying the story line. As metaphor was shown to correlate with an informational production, it makes sense that the dialogues thus also contain more metaphor-related words than the conversation.

Types of metaphor in fiction

The quantitative findings in Chapters 5 and 6 also provided a more accurate view of the occurrence and relative importance of indirect versus direct and implicit forms of linguistic metaphor. It was shown that in all four registers, both direct forms of metaphor and implicit forms of metaphor were rare. The bulk of metaphor in discourse is expressed indirectly, that is, by language that is metaphorically used. Moreover, these indirect expressions of metaphor were typically unsignalled. Together, these findings show that the amount of attention that has been paid to the traditional *A IS B* and *A IS LIKE B* forms within cognitive linguistics (e.g., Kövecses 2002; Lakoff 1993; Lakoff and Johnson 1980; Lakoff and Turner 1989) and psycholinguistics (e.g., Aisenman 1999; Bowdle and Gentner 2005; Chiappe and Kennedy 2000, 2001; Chiappe et al. 2003; Gentner and Bowdle 2001, 2008;

Glucksberg 2001, 2008; Glucksberg and Haught 2006; Kennedy and Chiappe 1999) may have given a wrong impression about the frequency and importance of these forms in authentic language use. The indirect MRWs are predominantly responsible for the differences in the overall degree of metaphor between the four registers. That is, academic discourse had the highest percentage of indirect metaphor-related words (18.2%), followed by news (16.0%), then fiction (11.4%) and finally conversation (7.6%). Of all the indirect MRWs in the corpus, 20.4% occurred in the fiction sample, compared to 36.1% in academic discourse, 28.8% in news, and 14.7% in conversation. A similar pattern was found for the distribution of the implicit metaphors across the four registers: of all the implicit MRWs in the corpus, 41.6% occurred in academic discourse, 29.2% in news, 18.6% in fiction and 10.7% in conversation. This shows that for both indirect and implicit MRWs fiction is situated in between academic discourse and news on the one hand, and conversation on the other.

The direct expressions of metaphor, such as similes and analogies, were shown to follow a different distributional pattern than the indirect and implicit forms. While fiction was situated in between academic discourse and news on the one hand and conversation on the other in its distribution of both indirect and implicit MRWs, the direct MRWs turned out to be most typical of fiction. Of all the direct MRWs occurring in the corpus, 49.1% occurred in fiction, 33.3% in news, 11.9% in academic discourse and only 5.7% in conversation. These quantitative findings provide empirical support for the claim that direct forms of metaphor play an important role in fiction (e.g., Goatly 1997; Lodge 1977; Sayce 1954), though they are not as frequent as has been assumed. In comparison with the other registers, direct MRWs are indeed clearly associated with fiction. However, although these direct forms of metaphor are relatively more frequent and influential in fiction, they are in fact not frequent. In fiction, they only account for 3.1% of all the metaphor-related words and 0.4% of all the lexical units. The fact that researchers have associated such expressions with literary texts may therefore be due to other factors than sheer frequency, for instance their deliberateness (due to their explicit signalling) or their high imagery value (due to the fact that many similes create image metaphors). As mentioned above, the amount of attention that such direct forms of metaphor have received may have created the impression that they are frequent and perhaps even more frequent than indirect forms of metaphor. However, the majority of metaphor-related words in fiction was used indirectly (95.9%) rather than directly (3.1%) or implicitly (1.0%).

Moreover, the comparison between narrative and dialogue in fiction revealed that direct MRWs were typical of the narrative prose in fiction rather than the dialogues. Though direct MRWs were rare in both narrative (0.5%) and dialogue (0.1%), 88.5% of all the direct metaphor-related words in the fiction sample

occurred in the narrative prose and only 11.5% in the dialogues. This finding was related to the fact that direct forms were also relatively frequent in news texts but infrequent in conversations (Chapter 5), suggesting that direct forms are preferred in domains of discourse in which style and rhetoric play an important role. This could be due to the fact that such direct forms are usually more explicit and deliberate, which makes them more likely to be used in texts in which authors use rhetorical devices to make their texts more attractive and add creativity and colouring. In conversations such direct forms are probably rare since conversations take place in real time and it would require too much time and effort to carefully consider and construct such creative or elaborate metaphors. This may also be why they are apparently avoided in fictive dialogue as well, as authors may feel such metaphors would be misplaced in representations of casual conversations.

It was also shown that the direct expressions of metaphor in narrative were typically longer and more complex than the direct expressions in dialogue. It is likely that short and simple similes are preferred in fictive dialogues as authors expect that too complex and elaborate similes would strike the reader as unnatural or unrealistic. In the narrative prose, on the other hand, such elaborate direct expressions were used to create vivid imagery and complex mappings between entire source-domain and target-domain scenes rather than entities. In such cases it is more likely that authors wish to demonstrate their creativity and impress the reader. With respect to their underlying conceptual structures, it was discussed that in both narrative and dialogue in fiction, many of the direct MRWs involve comparisons between people and animals or between different types of people. These comparisons are therefore closely related to image metaphors (e.g., Crisp 1996; Gibbs and Bogdonovich 1999; Gleason 2009; Lakoff 1987; Lakoff and Turner 1989) and Gleason's (2009) claim that image metaphors promote visualizations. The direct metaphors involving comparisons between people and animals or different kinds of people often emphasized physical resemblances that help the reader visualize what a character looks or behaves like. This finding was related to Gentner's (1982) claim that analogies in literature are mostly used for expressive purposes and involve rich attribute mappings rather than mappings of causal or spatial relationships.

In relation to the direct expressions involving mappings between people and animals or different types of people, it was argued that many of these expressions seemed to foreground the unexpectedness of the described similarity by emphasizing the dissimilarity between the entities compared; this entails that the dissimilarity between the entities is foregrounded information that is essential to the point of the comparison, otherwise the comparison loses its effect of unexpectedness. This characteristic is particularly noteworthy, as similes have traditionally been considered to highlight the similarity between entities rather than

the dissimilarity. In addition, it was argued that for many of the direct expressions the ground of the comparison provided the most salient information; in relation to this characteristic, it was demonstrated that most of the similes in the fiction data cannot be converted into corresponding metaphors, as most of the studies on the differences between metaphor and simile suggest (e.g., Aisenman 1999; Bowdle and Gentner 2005; Chiappe and Kennedy 2000, 2001; Chiappe et al. 2003; Gentner and Bowdle 2001, 2008; Glucksberg 2001, 2008; Glucksberg and Haught 2006; Kennedy and Chiappe 1999).

For example, in the expression ‘Robin-Anne, despite her apparent frailty, attacked the sandwiches and salad *with the savagery of a starving bear*’ (example 66, Chapter 6), the simile *with the savagery of a starving bear* is in fact used to highlight an unexpected similarity between Robin-Anne and a starving bear. The unexpectedness of the similarity is emphasized by the addition *despite her apparent frailty*. It is the point of the simile to show that Robin-Anne is actually nothing at all like a bear, and yet she still eats like one. The simile serves to provide a rich visualisation of Robin-Anne’s *attacking* her food: the ground of the comparison, *attack*, is therefore the most salient information. The simile does not say something about Robin-Anne – it says something about her *attacking*, that is, the way she’s eating. This complex simile cannot be reduced to ROBIN-ANNE IS LIKE A BEAR, much less ROBIN-ANNE IS A BEAR. In the fiction data, similes and metaphors rarely occur in the traditional A IS (LIKE) B form, and they simply cannot be rephrased as A IS B metaphors or A IS LIKE B similes as their form and function is too complex.

Unlike the similes found by Low (2010) in his academic lectures, the similes in the fiction data are often imaginative and non-conventional and they are clearly aimed at drawing the attention of the reader. In some texts they were also used to create rhetorical networks throughout the text, which provides support for the claim by Goatly (1997) and Semino (2008) that metaphor use in literature is characterized by an increased systematicity in textual patternings. Nevertheless, most of the similes in fiction did appear to serve relatively local purposes and have local effects, as was also found by Low (2010: 291), who argues that the similes in his data are used for the type of “local control” that is often associated with control of saliency and foregrounding at the discourse level. As direct expressions of metaphor are typically signalled (by MFlags) they are more likely to be used and understood as deliberate metaphors. The current findings suggest that directly expressed metaphors do indeed appear to be typical of fiction – and narrative prose in fiction in particular – and that this may be due to their deliberateness and the fact that they often draw attention to their status as metaphors.

Conclusion

These quantitative findings demonstrate the value of doing linguistic metaphor identification and analysis in the way that was done in the *Metaphor in Discourse* project. This precise, exhaustive and quantified cross-register comparison has revealed new insights into the patterns of linguistic metaphor in fiction and has provided quantitative evidence that either confirmed or refuted a number of claims that are commonly made about literary metaphor: for instance, it was shown that fiction was in fact not highly metaphorical (only 11.9% of the lexical items in fiction was related to metaphor), and that fiction was less metaphorical than news and academic discourse. On the other hand, the claim that direct expressions of metaphor such as similes play an important role in fiction was confirmed, as fiction contained by far the largest proportion of all direct MRWs in the corpus, though even in fiction this direct form of metaphor was rare (accounting for only 3% of the MRWs in fiction) in comparison to indirect forms of metaphor (which accounted for almost 96% of the MRWs in fiction).

The annotation and analysis of the corpus have led to a better understanding of the different forms and functions of metaphor in fiction, especially in relation to other registers. The cross-register comparison has led to an exhaustive account of the actual occurrence and relative importance of the different linguistic forms of metaphor. Its results have direct implications for theoretical debates on the study of metaphor, particularly in relation to the distinction between metaphor and simile in many psycholinguistic studies on metaphor understanding (e.g., Aisenman 1999; Bowdle and Gentner 2005; Chiappe and Kennedy 2000, 2001; Chiappe et al. 2003; Gentner and Bowdle 2001, 2008; Glucksberg 2001, 2008; Glucksberg and Haught 2006; Kennedy and Chiappe 1999). The quantitative findings presented in this thesis show that *A IS B* metaphors and *A IS LIKE B* similes are rare in all four registers, suggesting that these psycholinguistic experiments may be asking participants to do things that they rarely have to do in real-life encounters with metaphor and simile.

2.5 Personification in fiction: Linguistic forms, conceptual structures, communicative functions and cognitive representations

The *Metaphor in Discourse* project aimed to examine the interaction between the linguistic forms and conceptual structures of metaphor in discourse, and establish its communicative functions in four domains of discourse as well as its cognitive representation during comprehension. The manually annotated corpus provided new insights into the most frequent forms and functions of metaphor in fiction. One

particular type of metaphor that appeared to be both frequent and important in fiction – personification – was selected for a detailed case study. In Chapter 7 the different linguistic forms of personification were discussed in relation to their underlying conceptual structures as well as their communicative functions. This case study resulted in a proposal for a distinction between four types of personification in discourse (see Dorst in press). In Chapter 8 the cognitive representations of these four types of personification were investigated in a psycholinguistic study of the recognition of personifications in fiction by non-expert readers (that is, readers who were not experts in metaphor analysis).

Chapter 7 showed that the identification of the linguistic forms of personification in fiction proved to be a complex matter. Some examples appeared to be clear personifications at a linguistic level while a full realization as a personification in conceptual structure seemed tenuous. Others, such as the body-part personifications, could be related to clear personification effects in communication although their analysis as linguistic and conceptual personifications was less straightforward. It was therefore argued that what counts as a personification may differ considerably between analysts depending on which level of analysis is considered.

It was shown that at the linguistic level, selection restrictions play an important role in the realization of personifications by verbs and adjectives. For example, in an expression such as ‘She tells me she needs to understand [the drug] if she’s going to *defeat* it’ (example 14, Chapter 7), the personification of the drug is realized via the selection restrictions of the verb *defeat* as this verb requires both a human agent and a human patient when it is used in its basic sense of winning against someone in a fight. Moreover, the conventionality of linguistic expressions may disguise the personification, in which case the personification can be considered historical or “dead”, as in the case of many verbs of motion and possession such as *come* in ‘Though she thought sleep would never *come*’ (example 18, Chapter 7) or *give* in ‘The gangway lamps seemed to *give* no light’ (example 19, Chapter 7). Nevertheless, such “dead” personifications may be revitalized and become foregrounded as personifications if the linguistic expressions are used deliberately, for instance in explicitly signalled similes or in extended personifications. For example, in an expression such as ‘The plane climbs reluctantly’ (see Chapter 8), the use of the adverb *reluctantly* revitalizes and foregrounds a human interpretation of the dead or at least highly conventional personification *climb*.

The possible personification of body-parts was shown to be frequent in the fiction data. These personifications proved to be problematic during the annotation process as their analysis in context was often ambiguous between a metaphorical and a metonymic interpretation, as illustrated in expressions such as ‘Their tense,

edgy faces *watched* Delaney closely’ (example 30, Chapter 7) and ‘Madame Mattli waved a *dismissive* hand’ (example 38, Chapter 7). It was shown that while such body-part personifications can normally only be related to skeletal conceptual structures, which renders their status as personifications at the conceptual level tentative at best, their communicative function as personifications is typically clear and relates to the presentation of body parts as acting of their own accord. It was pointed out that this phenomenon is not only frequently exploited in fiction but also in movies, commercials and cartoons.

The findings from Chapter 7 demonstrate that the general definition of personification within cognitive linguistics as an ontological metaphor in which a non-human entity is described in terms of a specific type of person (e.g., Kövecses 2002; Lakoff and Johnson 1980; Lakoff and Turner 1989) is insufficient to serve as a basis for a systematic analysis of the different manifestations of personification in authentic discourse. The findings were therefore integrated in a new model for the identification of personifications in discourse based on a distinction between four different types: novel personification, personification-with-metonymy, default personifications and conventional personifications.

In Chapter 8 a psycholinguistic study was presented that investigated the cognitive relevance of the proposed categorization model by examining the recognition of personification in fiction by non-expert readers. The results of this exploratory study suggested that the recognition of personifications in fiction was not influenced by the presence of novel personifications. Though participants recognized the novel personifications significantly more often than the other types of personification, they did not become more aware of the other personifications in the text or recognize more personifications after they had encountered a novel personification. This suggested that personifications are recognized and dealt with locally, without a spill-over effect between sentences or texts.

The results did demonstrate a conventionality effect, as predicted by the Career of Metaphor hypothesis (Bowdle and Gentner 2005; Gentner and Bowdle 2001, 2008). Of the four proposed types, the novel personifications were recognized most often, though not significantly more than the personifications-with-metonymy. The default personifications were recognized less often than the personifications-with-metonymy and the conventional personifications were recognized least often. This suggests that there is a cline in the recognizability of personifications ranging from novel personifications to conventional personifications, with personifications-with-metonymy and default personifications in the middle. This in-between status of the latter two types was interpreted in light of the fact that they are not fully conventionalized (i.e. they do not have separate senses in the dictionary) but not entirely novel either. The finding that the participants recognized the personifications-with-metonymy as personifications

while noting the involvement of a metonymy supports the claim that metaphor and metonymy are independent and interacting forces (e.g., Geeraerts 2002; Goossens 2002; Pragglejaz Group 2007; Steen 2007). In general, the findings suggested that the differences between the proposed categories reflect differences that are psychologically relevant to readers.

The recognisability of the personifications in the fiction excerpts also appeared to be influenced by the nature of the source domain. It was suggested that the concreteness of the source domain may have a considerable influence on the recognisability of personifications since concrete source domains involving for example movement or character traits often lead to visualisation effects. Such personifications thus play an important role in the creation of imagery in fiction texts, similar to the similes involving mappings between people and animals or different types of people (see Chapter 6). It was argued that such personifications may be understood via embodied simulation, as studies by Gibbs (2006b) have shown that readers often make sense of conventional metaphors in narratives by imagining what they themselves would do in the described situations or what it would feel like to perform the described activities. Since such embodied simulations are inherently performed from the perspective of the human body, it makes sense that the simulation process creates a sense of personification even for conventional personifications such as ‘the plane *climbs*’ or ‘the lamps *gave* no light’.

As was the case for many of the similes, the potential visualisation effect of many personifications is closely related to the function of image metaphors (e.g., Crisp 1996; Gibbs and Bogdonovich 1999; Gleason 2009; Lakoff 1987; Lakoff and Turner 1989). Gibbs and Bogdonovich (1999) have shown that such image metaphors often involve mappings of detailed mental images rather than general knowledge about the entities involved. This may in part explain why some of the personifications in fiction appeared to have a clear communicative function as personifications while their conceptual analysis was problematic; if such personifications convey an image rather than knowledge then this may be the reason why there were no clear candidate concepts to fill in during steps 4 and 5 of the five-step procedure (Steen 1999b, 2001, 2002d, 2009).

That such personifications can still have a clear communicative function is supported by the finding that the participants in the study appeared to feel quite strongly about the function and effect of the personifications they recognized. Their comments frequently referred to the creation of vivid imagery and the fact that the personification allowed them to relate to the entities described. They also emphasized that the personifications add emotion to the text and help evoke a certain atmosphere. These comments revealed the participants’ perception of the function of literary metaphor and literature in general, as most of them referred to

aesthetic qualities and effects rather than explanatory or instructive functions aiding general cognition and understanding. Participants also referred to the author's intentions in using the personifications. This suggests that the participants were aware of the literary status of the texts and focused on identifying poetic and aesthetic effects and functions that the personifications should have given the discourse context and the author's intentions. This finding was related to observations that discourse context and authorial intentions influence the way texts are read and processed and that literary reading strategies boost attention to metaphor (Gibbs et al. 1991; Steen 1994; Zwaan 1994).

The analyses of the linguistic forms, conceptual structures and communicative functions of personification in fiction, as well as their cognitive representations, together reveal that personification may have been treated as an unproblematic phenomenon within cognitive linguistics (e.g., Kövecses 2002; Lakoff and Johnson 1980; Lakoff and Turner 1989) due to the fact that only clear and deliberate examples of particular types of personification were used. The systematic analysis of the linguistic forms and conceptual structures of personification in this thesis emphasized the influence of conventionality, deliberateness and metonymy. It was noted that many highly conventional, even "dead", personifications can be analysed as personifications in their linguistic forms and conceptual structures independent of the fact that they have likely not been used deliberately as personifications by the author and are likely not recognized or understood as personifications by the readers. The linguistic and conceptual analysis of such personifications still yields interesting results concerning the general cognitive power of personification in the language system. It was emphasized that more research is needed to investigate how the different levels of analysis interact, especially in relation to the deliberate versus non-deliberate use and the conscious versus unconscious processing of the different linguistic forms and conceptual structures of personification.

The case study of the linguistic forms and conceptual structures of personifications in fiction, and their relation to different communicative functions and cognitive representations, has hopefully demonstrated the value of adhering to a three-dimensional approach to metaphor in discourse as proposed by Steen (2008, in press a). This approach allows analysts to distinguish between personifications in language, thought and communication (see Steen 2007) but also to keep analyses of the products of metaphor (i.e. metaphorical expressions) separate from analyses of the processes of metaphor (see Gibbs 1994). The personification study also highlighted the benefits of using explicit identification and analysis methods such as MIPVU (Steen, Dorst et al. 2010b) and the five-step procedure (Steen 1999b, 2001, 2002d, 2009). The systematic three-dimensional approach helped to demonstrate why personification in discourse is a more complex matter than has

generally been assumed (e.g., Kövecses 2002; Lakoff and Johnson 1980; Lakoff and Turner 1989; but see Low 1999; MacKay 1986) and helped to define what counts as a personification at which level of analysis. Both a clear theoretical model and an explicit methodology are indispensable in enabling comparisons between studies and fruitful discussions between analysts working within different disciplines.

3. Limitations and suggestions for future research

In analysing nearly 190,000 words manually, in a systematic and consistent way, a wide range of decisions had to be made, some of which were more practical in nature than others. These decisions have sometimes steered the *Metaphor in Discourse* project in particular directions, thereby focusing on particular aspects while not addressing others. Some of these decisions and their consequences for the research reported in this thesis are discussed below.

As pointed out before, MIPVU did not consider historical metaphor or metaphor in morphology and syntax. In addition, MIPVU did not cross word category boundaries when basic and contextual senses were compared and contrasted, such that the meaning of the noun *dog* could not provide a basic sense for contextual meanings of the verb *to dog*. In the case of animal metaphors, which were shown to be frequent in fiction, this decision has led to the exclusion of such potential cases of metaphor by morphological conversion (see Deignan 2005). Derived verb and adjective forms (e.g., *to dog*, *foxy*), although graphically often still closely related to the noun form (e.g., *dog*, *fox*), can be considered another form of historical metaphor. However, detailed studies of animal metaphors in fiction could decide to include derivational animal metaphors as one particular type and consider whether such forms are more or less frequent than other forms, such as explicit metaphors and similes comparing people and animals (e.g., ‘That girl is a *dog*’ (BMW); ‘You look [...] as a *raccoon*’ (FAJ) or animal-related verbs, nouns and adjectives that are used to describe people (e.g., ‘Keep your voice down, Adam *growled*’; ‘the workrooms beyond were a *hive* of frenzied activity’ (BMW)).

Although this thesis discussed animal metaphors and personifications as two specific types of metaphor that were frequent in fiction, the annotation method did not include a specification of the metaphor type or an indication of the source domain. As such, there was no easy way to retrieve different linguistic realizations of a particular source domain or to compare the frequency of linguistic realizations of different source domains in the corpus. Moreover, as the annotations also did not distinguish between novel and conventional linguistic expressions, no specific quantitative evidence for the occurrence of novel metaphors in the corpus can be

given. In subsequent studies such additional information may provide new insights into possible differences between the registers in preferred source domains or differences in the degree of novel metaphor. It may turn out that fiction contains a higher incidence of novel metaphor than the other registers. However, it was noted during the manual annotations that the occurrence of novel metaphor was rare, and usually corresponded to the presence of direct expressions of metaphor or the presence of deliberate and extended personifications.

The psycholinguistic study was of course only concerned with post-comprehension recognition. Moreover, the absence of a priming effect may have been due to the specific nature of the study, as the use of authentic stretches of discourse makes such effects harder to discern due to a considerable amount of “noise” in the data. More carefully constrained and manipulated stimuli may be needed to investigate these effects. Additionally, there may be differences in reading times, which could not be detected using the current pen-and-paper set-up, but which could be revealed when participants read from a computer screen. This would also prevent them from re-reading sentences, though both situations entail a move away from how readers normally read. The present study did, however, provide some interesting starting points for further research. The finding that the default personifications behaved more like the conventional personifications while the personifications-with-metonymy behaved more like the novel personifications suggests that both default personifications and personifications-with-metonymy may be interesting areas for further research. However, since not all of the categories were fully crossed in the study, other influences may have been at work and a more extensive and carefully balanced sample would have to be used before any real conclusions can be drawn. The same is true for the finding that the nature of the source domain influenced the recognizability of the personifications.

Due to its quantitative focus, this thesis has had little room left for more extensive qualitative analyses of particular stretches of text. As a result, this thesis has not presented the kind of qualitative analyses that most analysts in literary fields are used to. Nor has it offered detailed discussions of the use of metaphor in a particular text or by a particular author. Though a comparison was made between the narrative prose and the dialogues in fiction, the patterns of metaphor in the individual texts in the corpus were not compared, though it was established that they contained similar proportions of metaphor-related words. Nevertheless, future studies would most likely benefit from a more balanced approach combining quantitative evidence with more detailed qualitative analyses of stretches of discourse from individual fiction texts. In addition, no attention was paid to potential differences between serious and popular fiction, though several studies have claimed that these are linguistically distinct (Nash 1990; Radway 1984; Van Peer 1986b). On the other hand, Semino and Short (2004) did not find any

significant differences between popular and serious fiction in terms of their speech, writing and thought presentation. It could therefore be an interesting direction for future research to investigate the differences between serious and popular fiction in terms of the frequency and distribution of the different linguistic forms of metaphor.

Although there is clearly a need for further work on metaphor in fiction, both in order to shed more light on some of the specific issues that were raised and to compare the findings of this thesis to those derived from more qualitatively oriented studies, it is hoped that the analyses reported in this thesis have provided a useful contribution to the study of metaphor in fiction and literary texts more generally. This thesis has hopefully shown the value of taking a corpus-based approach to aspects of metaphor in literature, and demonstrated how the adoption of a three-dimensional model of metaphor in combination with explicit identification and analysis methods enables new insights. It should of course be noted that the approach adopted in the *Metaphor in Discourse* project involved a considerable amount of time and resources and employed a team of analysts, an endeavour which can only be realistically undertaken with sufficient funding. Despite all the time and effort that was devoted to the development of the MIPVU procedure, the annotation protocol and the process of annotation, the corpus inevitably contains mistakes and inconsistencies. As MIPVU is applied to more data from different domains of discourse by different analysts, the discussion of the decisions made in MIPVU and the weaknesses that remain will lead to better alternatives and further improvements in the identification of metaphor in natural discourse.

If there is one thing that has become clear in this thesis it is that metaphor in fiction is a fascinating area of research. The analyses have shown that, contrary to expectations, fiction was not the register that contained the highest incidence of metaphor. However, fiction was characterized by the highest incidence of direct expressions of metaphor as well as a high degree of creative variation. As directly expressed metaphors are usually signalled and therefore more likely to be used deliberately, the analyses do suggest that fiction is characterized by a higher incidence of deliberate and creative metaphor than the other registers, though in terms of absolute frequencies, such deliberate and creative uses of metaphor are rare. The bulk of metaphor in fiction is expressed indirectly and relates to conventional patterns of metaphor in general language use. Quantitative evidence was provided that supports the claims that simile and personification are typical of fiction. It was also argued that many of the direct expressions of metaphor in fiction involve comparisons between people and animals and comparisons between different kinds of people, the latter of which appears to be an under-researched phenomenon.

As is clear from the above suggestions, various theoretical and empirical issues remain that have not yet been investigated or that deserve more attention. Addressing these issues is certainly worthwhile, as it may help to fill gaps in the theory and suggest improvements in the practice of analysing metaphor in literary texts. Studies of metaphor in literature have predominantly been qualitative and idiographic, focusing on unique uses in specific genres, texts or authors without much attention to the explicitness, reliability and validity of the employed methodology and without providing quantitative support for their claims. It is hoped that this book serves as a useful basis for future studies combining the best of quantitative and qualitative research.