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Analyzing Image Schemas in Literature

The notion of *image schema* has been enjoying popularity among cognitive literary scholars, sensitizing them to the ways through which language gives rise to gestalt imagery. Yet, critics of a more traditional bent have rightly pointed out that image schemas tend to pop up as an ad hoc construct in the study of narrative and remain too arbitrary. Methodology is at best mentioned in passing and scholars interested in a text-linguistic “how to” easily come away with the impression that it is all a matter of interpretive ingenuity, even alchemy. In addition, the predominance of case studies does not give enough visibility to the broad range of possible applications.

In order to consolidate image schemas as a state-of-the-art tool, this paper takes up the twin task of distinguishing their loci in narratological theory and of clarifying under which conditions their application is appropriate. The main sections survey approaches based on image schema *cohesion* (in passages), *coherence* (across a text), and *higher-level affinities* (between coherent patterns). The relevant topics range from metaphorical themes/motifs, via rich characterization, space and action representations, characterization and actancy, literary embodiment, to megametaphor and plot models. Several of these are new theoretical applications that have emerged from a full-scale analysis of metaphor and imagery in seven short novels within a recent comparative project. My essay begins with a brief definition of image schemas and a critical look at how literary analysis applies them, a point resumed in the concluding discussion of methodology.

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1. Introduction

The notion of image schema is rooted in gestalt psychology (e.g., à la Arnheim) and the phenomenology of the body (à la Merleau-Ponty); it was developed by cognitive linguists from the early 1980s onwards, and has more recently created several spin-offs in neighboring disciplines. Johnson (1987) defines image schemas as non-propositional gestalt representations that stabilize in infancy because perceptual and bodily experience displays recurrent topological patterning. Frequent image schemas are PATH, CONTAINER, ENTITY, LINK, FORCE, BALANCE, CENTER-PERIPHERY, UP-DOWN, PART-WHOLE, SURFACE, CONTACT, SCALE, NEAR-FAR, STRAIGHT, and MULTIPLEX-MASS. These and kindred image-schematic gestalts dynamically structure our perception, action,

and cognition.¹ In perception they appear as dynamic scaffolds for rich images. For instance, in a painting we may perceive visual balance and/or figure/ground relations. Similar percept-structuring functions have been studied in art forms, music, and opera performance (Johnson 2007, Zbikowski 2002, Edwards & Bourbeau 2005). Action patterns display dynamic image-schematic structuring, e.g. when a soccer player preparing for a pass coordinates his own trajectory both with the receiver's and the defense or when a dancer "introjects" the teacher's linguistic instruction "move through a sea of cotton wool" into her muscles. Conceptual functions have been extensively studied by cognitive linguists and span the basis of abstract concepts, force dynamic conceptualizations, the theory of word meanings (e.g., prepositions), meaning construals, and grammar (cf. Oakley 2007). The undoubtedly best known application comes from the analysis of linguistic, gestural, and visual metaphor. Image schema research also has demonstrable merits for comparative approaches, e.g. in cultural linguistics (Palmer 1996).

Furthermore, image schemas explain the interface between the embodied and the conceptual realm as well as the cross-modal features that kinesthetic, tactile, visual and auditory imagery share. Developmental psychology confirms that infants acquire image-schematic knowledge via the body and only later increasingly utilize them for conceptual tasks (Mandler 1992). The protosynthesis of abstract concepts in spatial and sensorimotor experience has been bolstered by experimentally demonstrable activations in on-line language processing (Gibbs 2005). This has made scholars equate image-schematic representations with "embodied" cognition *tout court*, an – as I shall argue – problematic view for understanding the different varieties of reader experience.

In cognitive literary studies the notion of image schema can boast a certain career by now. Besides many applications to poetry – not our focus here – a number of case studies explores image-schematic aspects around which a narrative theme crystallizes in a novel or drama (e.g., Freeman 1993, 1995, Turner 1996, Popova 2002), in most cases based on metaphor analysis. Yet, current scholarship suffers from at least three deficiencies:

- Many analyses expose themselves to the criticism voiced by Downes (1993) of using image schemas rather arbitrarily. Authors often adduce them ad hoc, select text passages for analysis without giving consideration to their representativeness, and treat quite different narrative functions on a par in overarching claims, e.g. about BALANCE being a recurrent story principle.
- It is almost universally overlooked that exploring image-schematic story themes through metaphor analysis is only one possibility among several. Ordinary action descriptions at the literal plane as well as emergent ma-

1 There is strong experimental evidence for the cognitive reality of image schemas in all these fields (Gibbs 2005) as well as convergent evidence in several linguistic methods.

crostructural scaffolds need to be accorded their rightful place in the canon.

- Although embodiment has been rightly identified as a highly interesting issue for analysis, the undifferentiated way that cognitive literary studies have equated image schemas with embodiment makes it hard to pinpoint particularly embodied text passages or deduce anything relevant about a text at large (given the near-ubiquity of image schemas in language).

The present essay is meant to deal with these shortcomings. It will present clear analytical guidelines, make non-metaphoric avenues for analysis visible, and develop a graded notion of embodiment in order to spell out which kinds of text passages are especially prone to bodily simulation by a reader. In addition, the essay calls attention to taxonomically relevant differences that case studies lack the breadth to pinpoint. Guided by the question “*Where in literary texts are image schemas found?*” I will present a bird’s eye view of narrative loci.² My survey will begin with figurative occurrences before moving on to inquire into their role in the “literal” storyworld. The methods that play a role in the various loci will be discussed more comprehensively in the conclusion.

2. Types of metaphors employing image schemas

Before we begin it will be helpful to differentiate the broad category of metaphor somewhat, as image schemas do not play the same cognitive role or even acquire the same degree of importance with every kind of metaphor.

Concerning literary metaphor (cf. Steen & Gibbs 2004, Semino & Steen 2008), the place to look for image schemas are the respective vehicle terms of a metaphor. Vehicles profile one or several concepts from a source domain, in terms of which a given target is conceived. For instance, the target of communication is typically conceived in CONTAINER and CONDUIT source imagery, as in the literary example “she **held out** her mind like a **saucepan**” (from *Turn of the Screw* by Henry James). This image-schematic mini-scene instantiates the source domain of the conceptual metaphor COMMUNICATION IS OBJECT TRANSFER FROM ONE CONTAINER TO ANOTHER. Note that the saucepan mainly serves as a cultural exemplar “carrying” the CONTAINER image schema and providing a basic ontology for the metaphor.

Image schemas are important for metaphor in various ways, depending on the type of metaphor. They can function as structuring devices underlying rich imagery and propositional knowledge, whereas in “pure” image schema metaphors they are the only mapped structure available. The major types from the cognitive linguistic taxonomy of metaphor developed by Lakoff and Turner (1989) can be illustrated through an example. In the following excerpt from Yukio Mishima’s *The Sailor Who Fell from Grace with the Sea* (2006), a Japanese

2 As a disclaimer I should like to state that studies on the literary effects of figure and ground, a general gestalt process, will not be discussed.

adolescent, Noboru, reflects on his and his friends' experiences with their parents (image-schematic metaphors appear in boldface, others in italics):

Noboru was vexed at his *immunity from the germs that infected the others* [his friends], but at the same time he trembled at the **fragility** of his chance good fortune. Some providence he couldn't name had **exempted him** from evil. His purity was as **brittle as a new moon**. His innocence had **sent an intricate net of feelers snaking toward** the world, but when would they **be snapped**? When would the world **lose its vastness** and **lace him into a strait-jacket**? That day, he knew, was not **far** away, and even now he could feel a lunatic courage **welling within** him... (Mishima 2006: 139–140)

This passage alone involves various kinds of metaphors:

1. Conceptual metaphors manifested in conventional expressions: “a lunatic courage **welling within** him” (EMOTION IS A HOT FLUID IN A CONTAINER); “**exempted** from evil” (STATES ARE CONTAINERS).
2. Elaborations of conceptual metaphors that are embedded in unconventional expressions: “had **sent an intricate net of feelers snaking toward** the world, but when would they **be snapped**” (KNOWING IS TOUCHING, COMMUNICATING IS MOVING ON A PATH)
3. One-shot image mappings with rich sensory structure that gets mapped: “His purity was as **brittle as a new moon**” (no conventional basis, rich sensory imagery with underlying crescent and structure image schemas).
4. Image schema metaphors with no further rich conceptual structure (pure image-schemas, often ontologizing a basic concept such as time): “day...**far** away”
5. Some metaphors such as that of “**germs that infected**” above are not clearly image-schematic at all or only when we attribute to them a specific cultural knowledge of infection as PATH-like transmission. The insight here is that mappings of richer knowledge can be “carried” by an image-schematic ontology (cf. Turner 1991 on “Invariance”).

This example illustrates that metaphors are conceptually variegated and that their image-schematic basis plays different roles in each type of metaphor. Moreover, image schemas, in many cases, are not fully contextual explanatory concepts, but need to be complemented with other kinds of knowledge. Regarding methodology, the upshot of this brief taxonomy is that we should always check if the metaphors at hand are typologically commensurable before grouping them into a set for analysis.

3. Metaphoric image schemas in analyzing single passages

As we will see in this and the next section, both, the stylistic analysis of local text passages and the summary analysis of scattered, yet recurrent linguistic

patterns are important in cognitive literary analysis. While the former method examines how image-schematic cues interact in local lattices, the latter method draws together similar image-schematic source domains from across a text for the analysis.

3.1 Rich characterization through image schema composition/pastiche

Literature frequently employs image-schematic metaphors for characterizing a person, describing a setting or a distinctive experience in a unique way. Sometimes single metaphors do the job. But more typically, a unique literary theme emerges through the pastiche-like complementation of image-schematic metaphors within a passage. Take again the Mishima passage from above. Here, the experience of puberty and the reluctance to be a part of the adult world, hence abstract kinds of ideas that Noburu entertains about his life, are expressed in metaphors with image-schematic source domains (OBJECT, FLEXIBILITY-BRITTLENESS, CONTACT/APPROACH, ABRUPT SEPARATION, SHRINKING, FORCE COMPULSION/ENGULFMENT, UP-DOWN/FORCE/SPREAD, NEAR-FAR). Purity as a brittle object, exploration as extending feelers, the snaking motion of these feelers, and their snapping, the vast uncontainedness and the expected narrow containedness constitute image-schematic source domains that are metaphorically mapped on abstract experiences. What is more, some of the image schemas connect in temporal succession with one transforming into the other (“feelers snaking/be snapped”; “vastness/strait jacket”), while others connect thematically (“fragility/brittleness”). Mishima’s purpose in producing the rich image schema pastiche is to characterize a protagonist’s psyche and emotions in a complex way. The emergent conceptualization lets us empathize with Noboru’s complex and unique bodily and/or psychic experience. Note that although all the image schemas are quite basic, authors develop unique characterizations and complex ideas by their mutual interaction. Such interaction effects are a precondition of literary creativity (cf. metaphor composition in Lakoff & Turner 1989).

A similar kind of local metaphor field features independently meaningful metaphors that co-specify each other in a kind of temporal scenario. More than a pastiche, they are integrated imagistically. The following example comes from Henry James’ *Turn of the Screw* describing how the governess and her wards communicate and manage to uphold the taboo of addressing the ghosts’ existence directly:

It was as if, at moments, we were perpetually **coming into sight of subjects** before which we must **stop short, turning suddenly out of alleys** that we perceived to be **blind, closing with a little bang** that *made us* look at each other--for, like all bangs, it was something louder than we had intended--**the doors we had indiscreetly opened. All roads lead to Rome**, and there were times when it might have *struck us* that almost

every branch of study or subject of conversation **skirted forbidden ground** (James 1986: 210).

The basic metaphor that is elaborated in various ways is that ACQUIRING KNOWLEDGE IS ENTERING A SPACE and EXPLORING A TOPIC IS MOVING AHEAD ON A PATH. In the extended passage the PATH and CONTAINER logic is elaborated into a complex image of what happens in temporal succession, with an attempt to go into the space, but stopping, changing direction and choosing new ones. All the metaphors directly hang together in a single metaphoric substrate, thus letting us speak of a single scenario.

A third example comes from Anais Nin's *A Spy in the House of Love* and describes the efforts of the unfaithful heroine Sabina to recompose herself in face of her guilt and her anxiety about getting caught in her playacting:

Just as anxiety **dispersed the strength of the body**, it also gave to the face a wavering, tremulous vagueness, which was not beauty, like that of a **drawing out of focus**. Slowly what she **composed** with the new day was **her own focus**, to **bring together** body and mind. This was made with an effort, as if all the **dissolutions and dispersions** of her self the night before were difficult to **reassemble**. She was like an actress who must **compose** a face, an attitude to meet the day (Nin 2001: 6–7).

The basic scenario here is one of dispersion and recomposition (related to MULTIPLEX-MASS and STRUCTURE image schemas), with Sabina's self being the target domain. This is enriched through the metaphor of focus and zooming in and out, whereby the whole image-schematic scene is perspectivized in a quasi-visual fashion. Here, the dispersion and the focusing images interact to create an interesting entailment, that of the visual act of focusing as *creating* composure. Sabina reconstitutes herself in the same way the focusing eye "pulls" together rays of light. As pegs around which richer meaning is organized image schemas can make readers connect their whole respective knowledge domains when brought into imagistic affinity. Sabina's anxiety and her social playacting are connected as part of a single gestalt configuration.

3.2 Composition of image schemas in key scenes

A more specific literary technique compresses and blends earlier-cued metaphorical elements into a single culminating scene. A nice example comes from Danaher's work on Tolstoy's *The Death of Ivan Ilyitch* (2003). As in many of his works, Tolstoy criticizes falsehood and self-deception in life. The tale is one of a Russian bureaucrat, Ivan, who falls ill, is deserted by everyone except for his loyal manservant Gerasim (who has a natural relationship to death) and his young son, and ultimately dies after having realized how wrong his previous attitudes were. Tolstoy's metaphors relate to that transformational process. Danaher (2003: 453, 458) begins by demonstrating the systematic deployment

of Russian metaphors of truth and falsehood in the text, which are based in the source domains PATH, CONTAINER, and BRIGHT (LIGHT).³ The journey to Ivan's true essence appears in "road of life" imagery; this journey is inward, away from the superficial; and it is towards something bright (appearing in words such as "clearly" or "shining" as well as the "bright" figure of Gerasim). In the culminating death scene all three sets of metaphors that have been cued throughout the text already are amalgamated in a unique blend. A black sack image appears to Ivan Ilyitch that he feels stuck in. He has an urge to go further towards a light at the bottom, but also a deep horror that deters him, until an insight into his past self-deception gives him peace of mind and lets him slip through. Hence, a single rich image incorporates image-schematic aspects of container, path, and light imagery in one and points to the triple metaphoric conceptualizations that truth is FOLLOWING A PATH, TRUTH IS A CONTAINER, AND TRUTH IS LIGHT.

3.3 Image schema mesh in a single passage

In addition to the composition of mutually enriching image schemas we may employ the quite focused search strategy of looking for lattices of *near-identical* image schemas. I call this rather frequent stylistic phenomenon of repetitive local foregrounding "image schema mesh". The underlying assumption is that when words from a single image-schematic source domain cluster in a passage they are particularly likely to impact the reader's cognitive representation. Consider the following lattice of PATH related words in a passage from Joseph Conrad's *Heart of Darkness* that characterizes the enigmatic Mr. Kurtz:

‘He is a prodigy,’ he said at last. ‘He is an **emissary** of pity, and science, and **progress**, and devil knows what else. We want,’ he began to declaim suddenly, ‘for the **guidance** of the **cause** intrusted to us by Europe, so to speak, higher intelligence, wide sympathies, a singleness of **purpose**.’
(Conrad 1995: 47)

The words (even the non-metaphorical ones) clearly reinforce each other image-schematically. Together they create a motif of a conquering personality pushing ahead out into the unknown. How this (and many other local passages of a similar sort) is significant for the story plot is a question that will be addressed in a later section. This kind of analysis greatly benefits from search tools in annotation software, because these allow locating instances of image schema mesh easily.

Briefly taking stock, the cognitive rationale of a cohesion based analytical approach is that adjacent metaphoric vehicle words are most likely to be conceptually processed together and will make readers construct conceptual relations. This conceptual amalgamation can be of a sort that pastiches different

3 I will leave it open whether BRIGHT qualifies as image schema as well.

image-schematic source domains into a complex gestalt, that treats them as stages of a temporal evolution, that repeats them without changes for deeper entrenchment.

4. Analyzing whole texts for metaphor coherence

We now move from cohesion-based to coherence-based analytic strategies. Scholars with a global analytical viewpoint take interest in the systematicity of metaphoric mappings *across a text*, both because recurrent metaphors comprise an effective foregrounding device and because they lead to insights about how authors specifically conceptualize a narrative theme at large.

4.1 Compiling metaphor sets for coherence analysis

The analytical task is to group metaphors for some target domain such as emotion into sets based on similar meanings of their vehicle words – often of an image-schematic sort – and infer the underlying conceptual metaphor. For example, a compilation of FORCE metaphors for emotions reveals that in *Turn of the Screw* Henry James depicts the governess, who is on a crusade to extract from her wards a confession regarding their collusion with two ghosts, as someone who is repeatedly compelled to vent her intense emotions despite frenzied attempts at self-control.

There are directions in which I must not for the present **let myself go**. /and **given way to** a wildness of grief. /--were I to **let myself go** even now--/ I at last **let myself go**. / It was quite in another manner that I, for my part, **let myself go**. /of what, should **we yield an inch**, there would really be to **give way to**. / and **given way to** a wildness of grief. / Why not **break out at her** on the spot / of the **outbreak** in him of the little natural man / I might occasionally excite suspicion by the little **outbreaks** of my sharper passion for them / after my first **outbreak**

Two things stand out here. First, the emotionality theme as such is consistently highlighted because emotion-related metaphors *as such* occur so frequently. Second, all expressions involve the image-schematic source FORCE BLOCKAGE REMOVAL and reflect the same underlying conceptual metaphor EXPRESSING EMOTIONS IS FORCE RELEASE (and more implicitly, EMOTIONS AND RATIONALITY ARE VYING FORCES).⁴ This conceptual metaphor gives the emotion theme a strong flavor of impulsivity, emphasizes the governess' concern with emotion regulation and her resulting dilemma.

More generally, when we analyze metaphor coherence across a text our underlying cognitive assumption is that the recurrent cues make the reader infer a story theme or a crucial protagonist's predicament. As my comparative study

4 Another set of metaphors not listed here emphasizes the BLOCKAGE itself and further supports this.

shows, texts with a high overall number of metaphors may feature 50–100 conceptual metaphor sets of this foregrounded sort, many of which draw on image-schematic ontologies (cf. Kimmel 2008a).

4.2 Can image-schematic story themes be supported through dissimilar metaphors?

Another approach to metaphor coherence takes a broader view of what counts as similar, so as to synthesize in the analysis similar image-schematic sources going with dissimilar target domains. According to some cognitive theorists, writers and playwrights use image schemas to create crystallization points in a novel or drama. Briefly stated, the recurrence of an image schema makes it salient for the reader's macro-model of the work and gives rise to more general narrative themes, motifs and key symbols. This key image schema is somewhat independent of the diverging target domains of the metaphors in which it is found. Thus, Freeman, ventures a summarizing observation for the drama *Macbeth* (1995: 691), saying that

PATH and CONTAINER image-schemata [...] constitute the terms in which we understand not only Macbeth's language, but its central characters, crucial aspects of its various settings, and the sequence and structure of its unitary plot.

Stockwell (2002: 111) notes a similarly general function for another of Shakespeare's dramas:

in Shakespeare's *Richard II* [...] there is a thematically significant recurrence of metaphors which map the rise of Bolingbroke and the fall of Richard using the cognitive model of BALANCE. This includes metaphors of rise and fall, up and down, gravity and lightness, heat and cold, equivalent movement, substitution of position, and others. It is also closely associated with linked metaphors concerning moral worth, power, the political and personal legitimacy, and respect. The mapping POLITICAL FORTUNE IS BALANCE [...] is a thematically-significant megametaphor [...].

Likewise, Freeman (1999: 443) rests his analysis of *Antony and Cleopatra* on a description of the play

as a richly blended amalgam of the CONTAINER, LINKS, and PATH image schemas. Projection from these schemas into Antony and Cleopatra's imagery, plot, and other elements structures the play's progress from Antony's distinctly profiled Roman and military persona through the shapeless liquid of the lovers' passion through evanescent cloud formations to Cleopatra's final sublimation from her physical body into the ether of her nobler elements.

In each of these cases the playwright recurrently circumscribes an aspect of a main theme by inserting the same image schema in various metaphorical contexts. A widely conceived main theme is thus collapsed into an image schema like CONTAINER. However, the significance of a recurrent image schema alone is debatable. Image schemas are no more than source domains that can pair with hugely different target domains (i.e. what the whole metaphor is about). Any slapdash data aggregation may fall prey to what Lakoff and Turner (1989: 128) call the “source domain-only error” by lumping dissimilar targets together for analysis. For example, the “old flame” and “fiery youth” metaphors, which we may – incorrectly – lump together as *fire metaphors*, are manifestations of LOVE IS FIRE and LIFE IS FIRE, respectively. Summary claims like Freeman’s or Stockwell’s therefore have to be closely scrutinized to see what is really coherent (and by which standards). I will now discuss affinities between non-identical metaphors that *are* cognitively plausible.

4.3 Source domains as nodes for story motifs or irony

Although I have cautioned against the *source domain-only fallacy*, under circumstances of high interpretive plausibility we may treat source domains as connective nodes. Inferring such connections can lead to the discovery of literary motifs or complex tropes like irony/ambiguity that are based on the clash of image schemas (cf. Turner 1996: 64). For example, in *Turn of the Screw* a synoptic view of various UP-DOWN related metaphors suggests that a kind of ambiguous motif is created around the image schema. The main protagonist, a deeply troubled governess, is obsessed with protecting her two innocent young wards from their dead former caretakers Ms. Jessel and Mr. Quint. In one realization of DOWN, the ghosts are identified with moral abjectness and the Biblical “fall” by the Puritan governess, who perceives it as her duty to shield the “spiritually lost children” from the corrupting influence of the “depraved Quint/Jessel” (MORAL ABJECTNESS IS DOWN). However, DOWN also characterizes the governess’ permanent oscillation between elation and despondency (DESPONDENCY IS DOWN). One connection lies in the governess’ compulsive belief that by battling “low morals” she can remedy her own “low morale”. An ironic connection can be drawn to a third mapping subtly hinted at in scene descriptions of high towers where Quint, the fallen being, appears (perhaps also related to POWERFUL IS UP). More generally, the value-imbued nature of the UP-DOWN image schema gives rise to a continuous alternation between positively and negatively loaded emotions from the governess’ viewpoint. This, in turn, becomes a major resource for James’ master trope, ambiguity.

4.4 The family resemblance of source domains

Another plausible way of connecting image-schematic metaphors may rest on generic level similarities between the source domains. Image schemas often share a kind of family resemblance that gives rise to image schema sets (Cienki

1997 mentions four, namely forces, entities, processes and links). A family encompasses non-identical image schemas that share some gestalt features, e.g. FORCE, ATTRACTION, BLOCKAGE, BLOCKAGE REMOVAL, ENABLEMENT, ANTAGONISM, and DIVERSION. Although the manner of force that these schemas evoke differs slightly in each case, a common core allows reconstructing similarities, provided that many metaphorical source domains from the family are found and that the targets are sufficiently similar.⁵

Nin's *A Spy in the House of Love* contains a striking generic pattern of the way in which the different emotions of the heroine Sabina are metaphorized, including existential anxiety, being hurt, guilt and shame, seeking comfort, love and passion. Confirming predictions by Kövecses (2000), a survey of the various emotion metaphors shows that most display a FORCE-related logic, albeit of slightly different sorts. A general preoccupation with the force dynamic details spans the descriptions of Sabina's attempts to escape from her existential dilemmas and her emotional coming of age.

NEGATIVE EMOTIONS ARE IMPACTING FORCES

and she sat up to meet its **thrusts**. / you're always so **battered** by the world outside. / *as if in dread of being **attacked**, restless and keen.* / and then been violently **shattered** with the greatest **shock** and pain by her fickleness and frivolities. / **A shaft of pain cut through** the nebulous pattern, / of **blows** and humiliations not yet dissolved. / Some **shock shattered** you and made you distrustful of a single love.

EMOTIONS AND SELF ARE FORCE ANTAGONISTS

his extended love was **unequal** to the power of what was **dragging** her down / about to be **sucked in** by a hidden cyclone.

BEING EMOTIONAL IS BEING MOVED

felt a sudden **restlessness** like that of a ship pulling against its moorings. / expressed in multiple **movements**, wasted, unnecessary, like the **tumult** of wind or water / making for **tumult and motion** / But inevitably, she would grow restive and **tumultuous**, chaotic and disturbed.

5 We may mention in passing that a connection a bit weaker than a manifest family resemblance of image schemas may link two conceptual metaphors. Metaphors may have ostensibly different image-schematic source domains, but still give rise to shared entailments. To quote the classic example by Lakoff and Johnson (1980: 94), AN ARGUMENT IS A CONTAINER ("Your argument does not have much content") and AN ARGUMENT IS A JOURNEY ("We have covered those points") seem connected merely by their entailments. The situation when more surface of a container is created and the argument gets more content is analogous to that when more path is covered and thus more ground created. However, as Lakoff and Johnson suggest, image schemas may play a role in creating this connection by virtue of a logical affinity in an "abstract topological concept". In the example this is based on the gestalt property of increasing SURFACE that both a container and a path share.

The same **irresistible impulse, tension, compulsion** and then depression following the **yielding to the impulse, revulsion**, bitterness, depression, and the **compulsion** once more./ All the **tensions** of pretences ceased. / and not a chaos which **carried** her.

EMOTIONAL PROCESSES ARE FORCE MECHANICS

her own nerves did not **coil and spring** within her /The wild compass whose **fluctuations** she had always obeyed, making for tumult and motion in place of direction, was suddenly **fractured**.

ANXIETIES ARE WEIGHTS

add heavily to the **weights pulling her downward** / she carried **too great a weight** of untold stories / her mood of **weight** and fatigue.

ANXIETIES ARE FORCE CONTOURS

At the same time a strange **wave** of anger appeared which she felt and could not understand. / But inevitably, she would grow restive and **tumultuous**, chaotic and disturbed / The wild compass whose **fluctuations** she had always obeyed, making for **tumult and motion** in place of direction, was suddenly fractured so that she no longer knew even the relief of **ebbs and flows** and dispersions.

ANXIETIES ARE MOVING FORCE AGENTS ON A PATH THAT GET STUCK IN THE BODY

Anxiety had **entered** her body and refused to **run** through it. / The silvery holes of her sieve against sorrow granted her at birth, had **clogged**.

Interpreting all these conceptual metaphor sets as a coherent macro-set is highly plausible because they all involve some FORCE-related source domain and some emotion-related target domain. Even though neither sources nor targets are exactly identical, they clearly give rise to a powerful shared entailment, namely that Sabina is imbalanced, experiencing anxiety and self-conflict amidst the many exciting impressions that impact or move her. The generic force “hydraulic” pattern is recognizable by every reader, creates a strong metaphoric focus on Sabina’s inner torment and, indeed, makes a major contribution to the novel’s genre as an *Entwicklungsroman* with a Freudian slant.

5. Image schemas in the storyworld and beyond

In view of metaphor’s popularity, it is frequently overlooked that image schemas are of much broader significance in story comprehension than figurative language only. When readers imagine “what happens” image schemas come into play as part of the basic spatial, temporal, and causal-intentional conceptualization of what Herman (2003) calls the *storyworld*.

5.1. The basic format of narrativity

Understanding events is inherently image-schematic. Even in their simplest form narrative representations are defined by image schemas. When a path is followed, something is raised, a boundary transgressed, a circle traced, an object split, or two objects merged, when the focus wanders from left to right or from part to whole or “zooms in” from mass to multiplex – each of these proto-narratives has a recognizable gestalt structure. To quote Turner (1996: 28ff), we inherently think in “small spatial stories” whenever we think about events. In storytelling, any typical sentence contains at least one such basic image-schematic event. And, the overall temporal structure of a narrated event itself is like a path followed step by step, a chain of smaller paths (cf. Johnson 1993).⁶ Thus, language as such, figurative *and* literal, involves image-schematic gestalts, from the level of words to that of whole passages. Metaphors, when present, employ essentially the same conceptual tools as the storyworld and simply add a further layer to the gestalt imagining of the events. I will now demonstrate that image schemas are the basis for how readers recognize the action configurations in the story scene at hand, but in all likelihood also apply them to higher-level structuring when developing a macrostructural story.

5.2 The image-schematic structure of scenes

The arguably most prevalent kind of image schema occurs in words and phrases that let us imagine settings, objects, agents, and actions. These are inherent part of any narrative representation that unfolds before the mind’s eye. Settings, objects, agents, and actions are understood as dynamic gestalt configurations. For example, readers may imagine a protagonist as being in a room (CONTAINER) and giving (PATH, FORCE) someone (AGENT, RECIPIENT) an object (ENTITY). Although the reader’s image of the scene often occurs as a rich image, this will always be defined by an image-schematic scaffold that lets us recognize the similarity to other scenes populated with agents, props and settings of different size, color, orientation and other details, but the same action logic. This scene structuring function of image schemas is a kind of imagining that applies even to the simplest events of a single sentence.

By imagining what happens in the storyworld readers create an analogical gestalt structure. In the act of simulating a scene the mind uses a similar kind of image-schematic-structures as in actually perceiving such a scene. Usually, this cognitive function runs parallel to rich imagery we create in reading. The image schemas *provide scaffolding for rich imagery*, as ontological skeletons that contribute specific action affordances to a scene (cf. Glenberg & Robertson 2000). Even when readers do not flesh out the rich details of what the room or a person looks like, image schemas remain obligatory. They must at least have a rough

6 I do not claim that temporal flow is wholly understood in terms of space, but there clearly is something metaphorical to this basic conceptualization of narrative format.

image schema topology in mind constraining the possible actions *in this kind of place and with these kinds of agents*. At this level image-schematic understandings are basic to story comprehension, long before it turns markedly literary. Sometimes, these kinds of spatial representations are elevated to a level of conscious significance, as in the case of typical Sherlock Holmes or Hercule Poirot stories, where the exact layout of a room and objects is crucial to readers who want to “solve the murder”, etc. Yet, affordance structures are crucial to understanding actions and settings of any sort because the reader understands imaginatively “who is able to do what” in a setting.

5.3 Higher-level narrative structuring devices

Image-schematic structure may assist readers in cognizing the emergent “event shape” although it is seldom encoded in any single expression (cf. Johnson 1993: ch. 7, Turner 1996, Kimmel n.d., 2008a, Popova, personal communication). Turner (1996: 18) hypothesizes that we quite generally think of

events in time, which have no spatial shape, as having features of spatial shapes – continuity, extension, discreteness, completion, open-endedness, circularity, part-whole relations, and so on.

Likewise, Turner proposes that causal and accompanying modal structures (i.e. an agent’s ability, obligation, or possibility of performing an action) are generally understood through force image schemas. The metaphorical expressions we use for talking about brief events or for summarizing longer ones make this wide-ranging cognitive claim quite plausible.

Image schemas are a major avenue towards explaining how readers go about the necessary task of conceptualizing time-flow and breakpoints, how scenes, as well as main story goals and their subgoals are interrelated in narrative comprehension.⁷ When readers monitor and update the story “tracks” of intentionality, causation and time (Zwaan et al. 1995), I propose that image schemas create various levels of meso- and macrostructure. We discussed earlier how readers construe actions and interaction in terms of FORCES at the single episode level. Now, two augmentations make this more widely applicable: First, in addition to how a protagonist walks, fights, transfers objects, etc. abstract FORCE causality occurs as well (e.g. fate). Second, between one scene and the next this FORCE impetus may get passed on in a chain, be slowed down or broken. Force thus becomes a connective meso-structure. At this level, protagonist subgoals become LANDMARKS, and ultimate goals PATH END-POINTS. Temporal and hierarchical relations between scenes occur as PARTS AND WHOLES, embedded scenes as NESTING schemas, and episodic breakpoint as INTERVALS on the basic temporality PATH. The topmost level of image schemas holistically

⁷ This possibility has been overlooked, as the research on story macrostructures follows a propositional paradigm.

captures story evolution over time, a PATH, much like a melody or musical score, as variation in intensity. Such image schemas can be sensed by readers, often in their bodies, as an arc of FORCE tension or denouement as reinstated BALANCE schema (Johnson 1993), as electromyography of readers suggests (Malmo 1975). If all these hypotheses are borne out, an entire scaffold of image schemas is active in the background, which readers consistently use and update to follow how the story progresses. This would mean that adult readers dispose of a host of frames or Idealized Cognitive Models that spatialize formal features of narrative through image-schematic logic (Lakoff 1987: 283ff).

All this refers to emergent cognitive structures that are constructed from complex input, but remain difficult to pinpoint in words and phrases. We may certainly take inspiration from linguistic metaphors and transpose their image schemas to the narrative level as hypotheses, but their confirmation largely requires experimental psychology (Kimmel 2008b). Yet, as I shall suggest next, the closest we get to predicting a more emergent level from textual manifestations is by a summary look at tendencies we find in force schemas.

6. Force dynamic analysis

An issue overlooked in the past is that narratology can benefit substantially from the systematic analysis of force dynamic image schemas. These define whether an entity has an inherent tendency towards motion or rest and whether it is stronger than other, for instance vying, forces (Talmy 2000). In literary contexts the theory of force dynamics helps capture character tendencies towards action or rest, being an agent or a recipient, a “mover” or not. When we scale up local force schemas to more general trends the forces of a protagonist are a major way by which readers understand characters, their general interaction tendencies, and their role as a plot engine. Expressions with a force dynamic profile occur in all sorts of storyworld actions as well as many metaphors, of course. In many cases these two kinds of information can be combined for analysis, although I will begin by discussing them separately. The analysis uses explicitly encoded storyworld input to deduce implicit narrative representations.⁸

6.1 Force dynamics and protagonist characterization

First, a force dynamic analysis of actions is enlightening for studying the way authors create protagonist characterization. To provide an illustration, in Le Fanu’s lesbian vampire tale *Carmilla* (2008), the eponymous girl vampire exhibits amazing FORCE in various ways. This image schema describing the main protagonist is quite consistently exploited and begins with her appearance in a carriage “thundering along the road towards us with the speed of a

8 This kind of analysis straddles the fence between image schemas rooted in what protagonists do and more elevated structural representations of time flow and causality.

hurricane”. Even without metaphors, strong forces are striking throughout. As the story progresses, the seemingly lovely and languorous Carmilla, who is hosted by an Englishman and his daughter living in a remote castle, is given to occasional fits of passion when she disparages God, nature and the funeral rites at the burial of one of her girl victims; when she attacks the man who offers to file her teeth in the vilest fashion; and also when her wooing of the second main protagonist, the young Laura, turns overtly aggressive in her passion. Forces thus flash up across various scenes and hint at a yet hidden aspect of Carmilla’s true vampiric nature. In the culminating scene, it turns out that vampires have “the force of the hand” and are so fast that they escape attacks by strong men. Together these storyworld actions create an impression of Carmilla as a dominant, insuperable force. Carmilla and her vampire mother are also characterized as being in full psychological or physiological control over everybody.

Now, force dynamics influence the reader’s understanding of plot structure directly, because Carmilla is the shaper of the plot through her actions (the more subtly manipulative ones included). As she appears on the scene, Carmilla’s passionate nature as well the special treatment she receives due to her languorous melancholy disrupt the initial peaceful, if boring, world at the Styrian “Schloss”. Carmilla’s arrival and subsequent behavior causes a disruption through which the dramatic development is set into motion. As the story progresses all “imbalances” in the plot obey this logic, beginning with Carmilla’s emotional vampirism of Laura; her feasting on village girls; her beginning physical nightly visits to Laura; Laura’s physical decline; and the ultimate discovery of Carmilla’s true vampire nature. The imbalance at the level of the narrative macrostructure is a direct consequence of Carmilla’s force-dynamic actions that can be captured through an analysis of verbs and adverbs. The reader will not only perceive this linguistically accessible level, but at some point will feel that the same forces determine the story’s overall logic.

6.2 Actant roles based on force configurations

I’d now like to show how storyworld forces coalesce with an impressive set of force metaphors to create a complex conceptual model of protagonist interaction. The analysis of force schemas can lead to an understanding of actant roles (Greimas 1966) and interactional configurations between actants that drive the plot forward.⁹ This kind of high-level analysis can combine storyworld imagery, metaphorical imagery of emotions, or other character traits, as long as they have clear force tendencies. In *Carmilla* the anti-heroine is consistently depicted as the AGENT and Laura, her victim, as the PATIENT, the passive recipient of various actions (i.e. the “energy sink” of a force chain). I have argued earlier to

9 I take inspiration from Talmy, who suggests that force dynamics in narrative plot “characterize such relationships as two entities opposing each other, a shift in the balance of strength between the entities, and an eventual overcoming of one entity by the other.” (2000: 439)

the effect that the storyworld imagery gives rise to an implicit master trope that we may gloss as VAMPIRES ARE AN INCONTROVERTIBLE FORCE. Now, force-dynamic metaphors very systematically extend and entrench this. Laura is subject to a powerful metaphorical force by Carmilla in many ways. One is the force of attraction. The metaphor pattern of EMOTIONAL EFFECT OF CARMILLA ON LAURA IS A PHYSICAL FORCE (and occasionally repulsion) makes Laura passive. Laura is “powerfully drawn towards her”, feels “determined” and “overpowered” by her engaging features, is “won over” by Carmilla (thus, by entailment, possessed). Here are the conceptual metaphor patterns I found in the overall analysis:

- THE EMOTIONAL EFFECT OF CARMILLA ON LAURA IS A FORCE
- EMOTIONAL ATTRACTION TOWARDS CARMILLA IS PHYSICAL ATTRACTION / DISGUST IS REPULSION
- SYMPATHY ON LAURA’S PART IS BEING POSSESSED BY FORCE / OBSESSIVE LOVE ON CARMILLA’S PART IS POSSESSING

Next, the actual vampire affliction in the nightly visits to Laura’s bedroom is both literally and metaphorically an act of force penetration.

- EXPERIENCING AFFLICTION IS A WEIGHT/FORCE
- EXPERIENCING AFFLICTION IS A FORCEFUL INGRESSION IN THE PRIVATE QUARTERS (literally)
- EXPERIENCING AFFLICTION IS A FORCEFUL ATTACK BY A DISEASE

There is a set of force metaphors that characterize general superiority and manipulation through the vampires, such as “imposing” promises “fettering” General Spielsdorf, “parrying” attempts to find out something, making them “submit” to their will, and making them “fall victim” to them.

- SUPERIORITY OF THE VAMPIRES IS FORCE SUPERIORITY

Conceptual metaphors of Laura’s percepts of her surroundings are equally instructive, because they reveal that, here too, she is exposed to forceful impressions.

- REALIZATIONS ARE FORCES ACTING ON LAURA
- HIGH ATTENTION IS A QUICK FORCE OR FORCEFUL IMPRESSION ON LAURA

What is amazing here is the high systematicity with which Le Fanu cues the actant roles. Conceptual metaphors of affliction, attraction, realization, and being manipulated reflect a coherent actant configuration and may be legitimately drawn together for analysis. They all share the entailment of Laura being exposed to forces and thus establish her firmly in the patient role. The patterns suggest that she is the Agonist that is at rest, while Carmilla, the stronger Antagonist, moves her and the story with her.

Summing up, the discussed agent-patient pairing reflects an emergent (i.e. higher-level) image-schematic configuration that shapes our understanding of plot. The more general methodological lesson here is that scholars are well advised to pay attention to force image schemas in stories systematically, because these are a good resource for doing a structural analysis.

7. Image schemas and literary embodiment

The fascinating phenomenon of literary embodiment, i.e. the reader's feeling of a vicarious embodied involvement in a story, can be studied through a focus on specific kinds of textual effects. I cannot do full justice to the quite complex role of metaphor here, but will discuss some basics, while also devoting attention to less discussed textual phenomena.

7.1 Contour words and the vicarious experiencing of storyworld events

A suggested new analytic focus for cognitive literary studies concerns the shape of narrative micro-events. A linguistic way to access event shapes is locating what I name "contour" words, i.e. expressions that alert us to the specific manner of an event over time. Some words give rise to a rather detailed imagination of something as extended, punctual, iterative, rising, falling, changing, etc. Verbs, by virtue of their intrinsic lexical aspect or through the used grammatical aspect, or adverbs do this best. Contour words vivify the imagination and add qualitative depth to something for which a more neutral word might also have been used. To provide a simple example, compare "the door was thrown open" with "the door opened". The former has a qualitative richness in the mental imagery that the latter lacks, and it creates a focus on the *manner* of action over time (quick, forceful, accelerating, coming to a sudden halt). Phenomenologically, this richness of quality has a tendency of making the reader simulate the action, rather than processing it more propositionally.

In particular, quite ordinary descriptions of bodily actions or experiences lend themselves to simulation by the reader. Consider the following non-metaphoric examples, again from *Carmilla*:

the horses plunged and **broke** suddenly into a furious canter / in her **trembling** embrace / and breathing so fast that her dress rose and fell with the **tumultuous** respiration.

Other contour words appear within metaphors or personifications:

What was it that, as I reached the bedside and had just begun my little greeting, **struck** me dumb in a moment / I perceived now something of languor and exhaustion **stealing over** her / And when she had spoken such a **rhapsody**.

Probably the most frequent kind of contour word appears in emotion- and inner feeling-related metaphoric expressions. Such metaphors have been, typically, directly motivated by a bodily sensation in the first place that accompanies the feeling:

a little **seesaw** of the right **throbs** and the wrong / the strange, dizzy **lift**
or **swim** / his actually **flushing** with pain.

All these kinds of contour words evoke a rich imagistic conceptualization. Sometimes this is something a protagonist does actively, and in other cases it is an experience that impinges upon the body. In both cases, the experience relates to an internal sense of the experiencing subject (kinesthesia, balance, joint position, deep tissue sense, tactile sense, energy flow, and pain receptors). Such contour expressions specify the manner in which something happens within the bodily substrate.

Why does this involve the reader? When a story protagonist describes subjective feelings in a qualitatively rich manner, this invites vicarious experiencing on part of the reader. Hearing that someone is “flushing with pain” makes the embodied empathy much more intense than when hearing “she had pain”, since we flesh out our proprioceptive imagination of how the pain arrives (namely quickly) and how it feels (namely full, as the water image suggests). Studying contour words thus provides a textual way of predicting the sensorimotor involvement of the reader, a factor contributing to “transport” (Gerrig 1993) into a story and its enjoyment. Their vividness and intensity is also important as a salience-creating device, so that clusters of contour words tend to be identified as key passages.

Overall, contour words constitute an important entry point to a theory of embodied simulation in reading (cf. Esrock 2004). Embodied resonance in the reader may be expected to co-vary with the qualitative richness of dynamic gestalts that a text prompts in our imagination. Contour words analyzed summarily may even provide a measure of an author’s general strategy of involving the reader. Does the author want readers to remain detached, at a more disembodied level of “shallow” (propositional) processing or is full immersion in the story aimed at? Contour words thus illuminate the nexus between image schemas and embodied effects in the reader.

7.2 Other embodiment-generating language

Further embodiment and simulation-related effects can be identified in storyworld imagery, which go beyond event shape only. Scenes of erotically imbued vampirism in *Carmilla* draw the reader into a powerful vicarious sensation of “being there”. Le Fanu mixes both contour words (bold) and other sensory words (italics):

Sometimes there came a sensation as if a hand was **drawn** *softly* along my cheek and neck. Sometimes it was as if *warm* lips kissed me, and **longer and longer** *and more lovingly* as they reached my throat, but there the **caress fixed itself**. My heart **beat faster**, my breathing **rose and fell rapidly and full drawn**; a *sobbing*, that **rose** into a sense of *strangulation*, supervened, and turned into a dreadful **convulsion**, in which my senses left me and I became unconscious (Le Fanu 2008: 57).

The embodiment cues in italics relate to sensorial language focusing on qualities other than manner or temporal contour. Some words, like “strangulation” and “sobbing”, are kinesthetic (in part), whereas others seem more tactile and temperature related (“softly”, “warm”, “lovingly”). Rather than a complex image-schematic gestalt (as in earlier examples) the passage creates a rich multi-sensory image and precisely because of this amalgamation of different senses embodied involvement reaches a peak.

Still other effects stand both at the fuzzy boundary of the category “image schema” and the notion of embodiment as such. This special category concerns rich descriptions of visual and auditory percepts of some scenery, but without an inner, bodily sense:

in the **cold, faint twilight** / to listen, while, in the **fading dusk**, the first birds began to **twitter**, for the possible recurrence of a sound or two.

Expressions like these (the first two of which are metaphorical) also create a simulation of “being there” on part of the reader, even though the imagery is not located inside a body but in an external scene. Whether imagining external sensory impression should be called embodied or not is a matter of definition. Note in any case that many of these expressions, such as “faint” or “cold” are still capable of synaesthetic transfer to other senses and thus share one key attribute of image schemas. The imagery here may, in further course, also acquire a conceptual meaning that adds to its direct imaginative effect (e.g. when dark comes to stand for evil or bright for happy).

7.3 Cross-modal correspondences

A phenomenon with a rather special body-related status pertains to metaphors with a non-kinesthetic sensory source domain. While these may stand at the borderline to image schemas, the same logic applies to them. Sensory metaphors may, again, be analyzed in single-passage clusters or grouped into analytic sets for coherence analysis. What connects the words here are cross-modal matches. Research on synaesthesia shows that the mind naturally connects certain sensory terms, such as big and loud or bright and loud (Popova 2005) and often this is reflected in cross-modal metaphors (“sharp” for sounds, “faint” for vision, “warm” for feelings, etc.) In literary contexts, this opens the

possibility of detecting matches across sensorial categories. Take the following example from *Turn of the Screw*:

It was a **crisp**, clear day, the first of its order for some time; the night had brought a **touch** of frost, and the autumn air, **bright** and **sharp**, made the church bells almost gay (James 1986: 215).

Here “crisp”, “touch”, “bright” and “sharp” all contribute to a cross-modal image schema of something punctual and incisive. The expressions thereby create a mutually reinforcing sensory field. Such passages are stylistically coherent and amplify a sensory/embodied effect.

An example for coherence-based analysis concerns how the children, whom the governess is trying to protect, are consistently depicted by her in two recurrent conceptual metaphor patterns, i.e. the CHILDREN ARE BRIGHT CREATURES and THE CHILDREN ARE SWEET CREATURES. These two naturally connect by cross-modal match, because bright and sweet both occupy the intense, positive pole on their respective sensory scales. Both metaphors depict the children with positive intensity, because both sensory source domains are organized by a scale-like axiology (Krzewowski 1993) with respect to which the children’s attributes match.

7.4 Are all image schemas embodied in the same way by readers?

Having looked at various analytical foci, we may now critically examine the tendency to treat image schemas as uniformly “embodied. Cognitive linguistic orthodoxy (Lakoff & Johnson 1999) seems happy with putting the same embodiment tag on everything. I do not wish to deny the embodiment hypothesis, but would urge that we need a better grasp of different embodied qualities in reading to flesh it out. I have suggested such differentiations in the section on contour words above. Now, concerning metaphor, both general and literature-specific reasons should keep us from treating all metaphors on a par.

Gibbs (2005) has rightly pointed out that embodied protosynthesis of language in infancy is not to be mixed up with sensorimotor activation in actual linguistic usage. What is best corroborated is the claim that image schemas are *developmentally* rooted in the body, while the debate about embodied on-line processing remains open in some respects. Language processing research does also not suggest a monolithic category of embodiment. Instead, embodied imagery can be activated by degrees and some expressions may undergo a more “shallow processing”. Thus, some, but perhaps not all, instances of abstract word processing are accompanied by micromotoric activations strong enough to be measured. Moreover, metaphoric mappings are a more complex issue than image schemas alone. Notwithstanding the fact that, for instance, the CONTAINER image schema *originates* in the proprioceived body-world boundary in infants, it can be *realized* at quite different levels when adults deploy it in CONTAINER-metaphors.

From a literary-phenomenological viewpoint, i.e. concerning what readers experience, we *a fortiori* need a graded notion of embodiment. Both, the degree to which the imagistic activity is felt “within” the body and the degree of an immersive “being in the story” may vary. For example, the expressions “a little **seesaw** of the right **throbs** and the wrong” and “the strange, dizzy **lift or swim**” have a body-internal substrate, while “the ship’s **belly**” is imagined in an external substrate, and “the **body politic**” in abstraction. Of these, only the first two metaphors give the reader the strong feel of “being in the story”, because they let us slip into the protagonist’s body and emotions vicariously. The expressions “ship’s belly” and “body politic” are more disconnected from the reader’s body image-related processes during reading. They lend a different feel to the image schemas. This qualitative difference results from the nature of the target domain. Emotion-, action-, and (to some degree) thought-related metaphorical targets, seem to lead to a particularly rich, vivid, and affect-laden reading. With a target such as anxiety or pain the image schemas in question are fed into the reader’s proprioceptive system, whereby a protagonist’s inner feelings can be mirrored. By contrast, metaphors with exteroceptive targets (most often visual) give rise to a much less “immersive” style of literary embodiment. The reader is more like an observer than a quasi-protagonist here. Metaphors with abstract targets may not even cue images of the storyworld at all, but relate to a realm of thoughts dissociated from it.

Succinctly stated, the imaginative locus of image schemas (i.e. proprioceptive, exteroceptive or abstract substrate) determines the felt embodied quality of reading regarding intensity, vividness, and the associated feeling of “myness”. Affective resonance also tends to be stronger with proprioceptive metaphors, as we have reason to believe that lived emotions are based on body-internal imagery (cf. “somatic markers”, Damasio 1996). I conclude that we can differentiate styles of literary embodiment by examining the basic properties of the target domains (or simple word semantics in non-metaphors).

8. Plot models and megametaphor

8.1 How image schema compounds create and foreground the plot-model

In an earlier section, I talked about narrative structuring devices at an emergent (i.e. non-textual) image-schematic level. It stands to reason that, under certain facilitating circumstances, complex narrative structures can be derived from a textual analysis (cf. Stockwell 2002: ch. 9.). Some authors deploy metaphors and other image schema words systematically so as to foreground the implied plot structure. They bring their readers to interrelate diverse metaphors by exploiting their image-schematic affinity. By affinity I mean that different primary image schemas fit together because they are part of a more complex gestalt (an *ur*-scene, if you will). Many such affinities are naturally rooted in a familiar everyday scene like the experience of a FORCE-impelled OBJECT that moves on

a PATH to break into a CONTAINER. For example, Conrad's *Heart of Darkness* (Kimmel 2005a) amalgamates three affine sets of metaphors into this kind of ur-scene, one related to PATHS, another related to FORCE PENETRATION, and the third related to IN-OUT/CONTAINERS.

- (1) I went a little **farther** [...], then still a little **farther**, till I had gone **so far that I don't know how I'll ever get back**
- (2) fantastic **invasion** / fantastic **intrusion** / tear treasures **out of the bowel of the land** [...] **burglars breaking into a safe**
- (3) **deeper and deeper** into the *Heart of Darkness* / **travelling back** to the earliest beginnings of the world

All these repeatedly used conceptual metaphors cue the reader to foreground the story's manifest event structure, an invasive, irreversible journey into the Congo. The expressions evoke (a) path, which they describe (b) as being covered by applying force, and (c) as leading into some kind of inner-realm or depth. The PATH, FORCE, CONTAINER (IN-OUT) image schemas naturally go together to create this rich scene. Although the metaphor source domains are of a different kind, they naturally amalgamate in the reading mind. The cognitive prerequisite for this is that the image schemas can be superimposed to create compound structures (cf. Kimmel 2005b), something we already saw in the earlier examples for image schema composition in a passage. It is to be expected that readers create the compound image schema for the basic space-, time-, and progress-related storyworld representations because of the extremely frequent textual meshing of these image schemas, and because they all relate to approximately the same target concept, i.e. "Marlow's journey".

More generally, superimposable image-schematic source domains can make readers predicate divergent metaphors on a single emergent plot representation. A heightened sensitivity for image-schematic affinities can become a key heuristic for the literary scholar who wants to detect complex narrative structures.

8.2 The image-schematic basis of megametaphor

The plot representation we have just examined may, in due course, also facilitate a reading of the journey-based event structure as a megametaphor for a transformation of the self.

A megametaphor is an implicit large-scale mapping onto a target domain that is recurrently hinted at, creating a deeper-level meaning the text "really is about". Megametaphors are neither linguistically signalled nor tied to one specific expression that creates semantic tension with its context, as in other metaphors. The text or text passage in question works as a proper literal description, with the sole difference that the reader slowly comes to attribute a second, hidden layer of meaning to it. This layer remains "in the eye of the beholder", and will be inferred only (a) by readers who read for deeper

meanings, (b) in the presence of subtle cues deployed over a stretch of text and (c) when these are strongly suggestive of personal current concerns or some conventional cultural frame. When readers adduce the hidden target they usually project some background knowledge into the subtle anchor points that the text itself offers. As I will show now, the aforementioned compound image schemas that readers routinely build of the plot structure constitute such anchor points.

In the *Heart of Darkness* the image-schematic structure of the plot, the invasion into an alien, yet strangely familiar space, may be understood as making implicit reference to an entrenched cultural model of the self and creates the megametaphoric mapping THE JOURNEY IS A SELF-TRANSFORMATION. Marlow, the main protagonist on his riverboat trip, undergoes an experience of initiation into “dark” archaic knowledge and transformation of his soul. Although the text spells this transformation out in some places, these local effects are greatly amplified by how the reader may decode the significance of the journey between an outer European sphere standing for rationality, enlightenment and self-control, and an inner African sphere, standing for that dark, irrational and passionate knowledge. This megametaphoric reading of the journey is likely because all readers are familiar with the image-schematic model of the self as an epistemic space with an embodied center, a maximum reach and a boundary (Lakoff & Johnson 1999). Conrad uses this model and employs repeated cues throughout the text to intimate that the journey does something to the self. Sometimes expressions are used that can be understood literally, but also metaphorically. For instance, „I went a little **farther** [...], then still a little **farther**, till I had gone **so far that I don't know how I'll ever get back**“ clearly implies the possibility of self loss. In effect, Conrad creates a model of an extended epistemic self-space going beyond what is culturally familiar, in which a de-centering movement away from the origin of security to more essential, yet dangerous and archaically irrational knowledge occurs. Reaching beyond that which is familiar and feels safe also entails the transgression of a moral barrier.

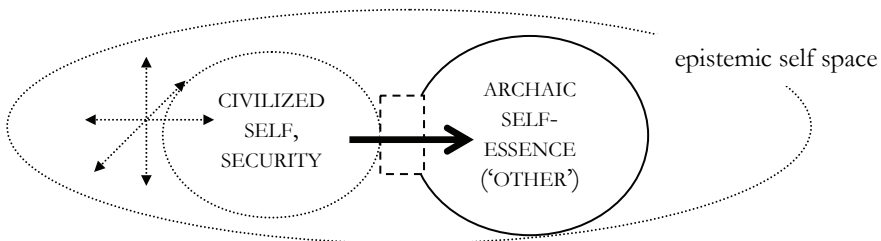


Figure 1.

The logic of the journey, the megametaphoric source domain, clearly corresponds to the conventional self model, i.e. the implicit target domain the text hints at. Europe maps onto the known, safe self, the gradual journey onto the

gradual self transformation through Africa, and the deep African wilderness on an archaic outer-space of the unknown self, beyond the usual epistemic reach. To grasp the megametaphor THE JOURNEY IS A SELF-TRANSFORMATION readers must iconically project the image-schematic elements of the story's event skeleton (CONTAINERS, PATH, BARRIER, PENETRATION, etc) onto the self model. Based on this, further key aspects fall into place. Since the epistemic self model implies an axially centered (=sane, in Freudian terms Superego) self, the effected movement to the "Other" (=archaic, Id) may be at the same time understood as de-centering and as enlargement of the self horizon. This is precisely the message Conrad aims at, pointing to the existence of an eerie, yet, real archaic self beyond the cultivated self-image.

A crucial point to bear in mind is that megametaphor may occur purely in the mind of the reader without being cued in a textually traceable way. In other examples that I won't go into here (e.g. Werth 1999) macro-effects that are image-schematic need not rely on traceable image schemas. In the present case, however, the image-schematic cue words of a PATH, FORCE, or CONTAINER type were the stylistic basis of authorial innuendo and their joint role in the narrative event structure was what made them commensurable. Hence, a study of image-schematic affinities across a text may nudge the literary scholar towards the recognition of an implied megametaphor.

9. Conclusion

Based on the study of several novels, I have raised awareness for the fact that image schemas, besides occurring in various kinds of metaphors (e.g. those creating thematic effects), are so fundamental to narration that they also cut across images of the unfolding storyworld ("What does X do?"), narrative structuring devices readers use to scaffold the story event's meso- and macro-structure, and word forms that specify event "shape" or produce a strong visceral resonance.

9.1 Taking stock

The surveyed analytic modes range from focused stylistic ones to more synthesizing ones. The analysis of cohesive text passages throws into relief literary techniques that use image-schematic affinities between words as a substrate for conceptual amalgamation. Here, image-schematic elements, most often as parts of metaphors, recur or interlock and creatively blend to create a unique conceptual effect. Alternatively, by compiling sets of expressions across a text, and thus disregarding their individual context somewhat, the scholar can explore coherence patterns. For example, several expressions that are manifestations of one conceptual metaphor are grouped based on similarity (or antithetical relations in irony). There is also a third, more advanced option. Once one has completed a basic survey of image schemas in a text, higher-level affinities between them can become a key to complex work-specific literary

effects, e.g. after the fashion of Danaher (2003) and Kimmel (2005). This strategy is one of an interpretively informed search for image schemas that may create gestalt compounds in the reader’s mind (as we saw with megametaphor, the textual data may be augmented by adducing plausible reader expectations from cultural frames, which help readers detect affinities.) One methodological dimension thus concerns whether the analyzed data are localizable in a text passage (*cohesion-based analysis*) or whether we compile data from across a text (*coherence based analysis*) and perhaps further interrelate the latter (*higher-level analysis*). Another important dimension we need to be aware of is whether we look for similar image schemas or allow them to be complementary (or antithetical, in some cases). By placing these two dimensions in a synoptic table we may distinguish four kinds of analysis:

	Similarity based	Complementarity/antithesis-based
Local cohesion analysis	<ul style="list-style-type: none"> - Image schema mesh (from metaphor) 	<ul style="list-style-type: none"> - Image schema composition (from metaphor) - Cross-modal matches (from synaesthetic metaphor) - Scene affordances [encoded in some cases]
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> Finding embodied passages (from contour-words) </div>	
Global coherence analysis	<ul style="list-style-type: none"> - Conceptual metaphor-based story themes - Force dynamic characterization (story-world, sometimes metaphor) 	<ul style="list-style-type: none"> - Conceptual metaphor-based analysis of irony or ambiguity - Plot-model affinities - Megametaphor - Key scene blends (several metaphors)
	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> Force dynamic actancy models (storyworld and metaphors) </div>	

Figure 2.

It will be noted that two categories appear both in the left and right columns. Embodiment cues may *either* be repetitive or complementary in the way manner of motion is specified. Somewhat differently, force dynamic actancy analysis is inherently *both* based on the repetition of the same, as far as patterns for one protagonist are concerned, and on complementation between the protagonists’ individual patterns.

Finally, not all image schemas readers think by need be textually reflected. Emergent aspects of the event structure, e.g. causal chains, temporal break-points or nested episodes, lack direct anchors in specific imagistic words and phrases. In these cases, a structural narrative analysis is required rather than a

linguistic one to arrive at testable hypotheses. Validating purely emergent structures requires experimental research such as the FORCE-PATH representations of a protagonist's global story goal studied by Kimmel (2008b) (only actancy seems to be a kind of intermediate case, as it reaches into structural narrative categories, yet apparently remains amenable to analysis through text-linguistic clues).

9.2 Lessons for cognitive literary studies

Several methodological lessons should be heeded to apply image schemas to literary analysis. First, interpreting image schemas from different kinds of metaphors as evidence for a single story theme requires a well-reflected rationale. It is not recommendable that scholars simply go foraging for image schemas independently of their context and aggregate them, at least not without a careful discussion. Likewise, it is risky to conflate examples when they fulfill different narrative functions. For both of the previous reasons, we need to be wary of broad and, upon inspection, near-vacuous claims that the novel so-and-so is characterized by a PATH, CONTAINER or BALANCE image schema. Due to the ubiquity of image schemas in language, one would expect these to occur in *every* novel or drama at various levels, so that the specific way that an image schema is textually foregrounded and its narrative function have to be explicated for saying something meaningful about literary cognition.

It is highly plausible that the now demonstrable linguistic embodiment effects spill over to literature in some way. When cognitive literary studies equate image schemas with embodiment *tout court* they are not necessarily wrong, they are simply being too uninformative. What I criticize is the abuse of the catchword embodiment, carrying with it vague implications of the sort that texts with many image-schematic metaphors are “embodied” simply because their language is made from gestalts. Literary analysis should focus on the “how” of embodiment and account for its different phenomenal qualities. From a phenomenological viewpoint, not all perceptually-grounded imagery is embodied in the same way. Some image-schematic cues are more prone to an immersive kind of reading than others. Whether image schemas are situated in the body or in distal entities will have repercussions on immersion, affect, imagistic vividness, strength of micromotoric action simulation and identification potential with a story protagonist. To address *kinds of* embodied reader response and specify what different text passages or texts do differently. I have proposed two methodological avenues. We can (a) focus on the richness of manner of motion implied in a word, usually a verb or adverb, and (b) examine metaphoric target domain properties of metaphors for their relation with the reader's on-line body schema processes (proprioceptive-affective vs. exterocep-

tive/abstract).¹⁰ These and other qualitative predictions as to which bodily state accompanies which sort of textual imagery cue (cf. Esrock 2001) are a much needed starting point for further reader response experiments..

I did not have the space here to go into the merits of a full-scale text annotation with state-of-the art coding tools (cf. Kimmel 2008a). Suffice it to say that software-assisted tagging safeguards against an impressionistic data selection and allows systematic checks of quantitative prevalence. When scholars select text passages for analysis they should give explicit consideration to their representativeness and provide a comprehensive overview of their place among other patterns. Choosing passages that seem subjectively striking runs the risk of overlooking many frequent patterns. By contrast, full-scale coding allows a systematic search for “hot spots” of imagery in the text and making the most of coherence-based research by including *all* relevant patterns. The application of sound coding methods – the standard in the qualitative social sciences – will also strengthen the position of literary research vis-à-vis cognitive psychology, as the textual research paradigm is inherently vulnerable to the criticism of not addressing actual cognitive reader response. Putative reconstructions of thematic structures in literature and drama should at least be based on *demonstrable* systematicity of patterns (which is not to say that a careful argumentation for interpretive plausibility is not equally important).¹¹

Finally, what I hope the paper has achieved on the way is to make a case for the value of comparative projects of several long texts. Only by virtue of this was it possible to find the reported range of phenomena and draw the necessary distinctions between them. This also allows comparing genre-related trends or authorial strategies in the use of image schemas vs. rich imagery, embodied style vs. detached style, and other issues (Kimmel 2008a, forthcoming).

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References

Cienki, A. (1997). Some Properties and Groupings of Image Schemas. In M. Verspoor, K. D. Lee & E. Sweetser (Eds.), *Lexical and Syntactical Constructions and the Construction of Meaning* (pp. 3–15). Amsterdam: John Benjamins.

10 We also might have to distinguish action affordances from affective affordances in image schemas. All of this is cross-cut by the distinction between subconscious processing vs. conscious literary appreciation.

11 Ultimately, what the textual approach can achieve in terms of cognitive theory is to furnish hypotheses that psychologists need to test separately by designing experiments on text comprehension or doing other reader response studies. However, we need the textual approach as irreducible part of research, because of its contextually situated complexity that gets lost invariably in experimental reduction of data.

- Conrad, J. (1995). *Heart of Darkness*. London: Penguin
- Danaher, D. (2003). A Cognitive Approach to Metaphor in Prose: Truth and Falsehood in Leo Tolstoy's "The Death of Ivan Ilich". *Poetics Today* 24 (3), 439–469.
- Downes, W. (1993). Reading the language itself: some methodological problems in D.C. Freeman's 'According to my bond': King Lear and recognition. *Language and Literature* 2 (2), 121–128.
- Edwards, G. & Bourbeau, M. L. (2005). Image schemata - a guiding principle for multi-modal expression in performance design. *International Journal of Performance Arts and Digital Media* 1 (3), 189–206.
- Esrock, E. (2004). Embodying Literature. *Journal of Consciousness Studies* 11 (5-6), 79–89.
- Freeman, D. (1993). 'According to My Bond': King Lear and Re-Cognition. *Language and Literature* 2(1), 1–18.
- Freeman, D. (1995). 'Catch[ing] the Nearest Way': Macbeth and Cognitive Metaphor. *Journal of Pragmatics*, 24, 689–708.
- Freeman, D. (1999). "The rack dislimns": Schema and Metaphorical Pattern in Antony and Cleopatra. *Poetics Today* 20 (3), 443–460.
- Gerrig, R. J. (1993). *Experiencing narrative worlds: on the psychological activities of reading*. New Haven: Yale University Press.
- Gibbs, R. W. (2005). *Embodiment*. Cambridge: Cambridge University Press.
- Glenberg, A. & Robertson, D. (2000). Symbol Grounding and Meaning: A Comparison of High-Dimensional and Embodied Theories of Meaning. *Journal of Memory and Language* 43, 379–401.
- Greimas, A. J. (1966). *Sémantique Structurale*. Paris: Larousse.
- Herman, D. (2003). *Narrative theory and the cognitive sciences*. Stanford, CA: CSLI Publications.
- James, H. (1986 [1907]). *Turn of the Screw and The Aspern Papers*. London: Penguin.
- Johnson, M. (1987). *The body in the mind: the bodily basis of meaning, imagination, and reason*. Chicago: University of Chicago Press.
- Johnson, M. (1993). *Moral imagination: implications of cognitive science for ethics*. Chicago: University of Chicago Press 1993.
- Johnson, M. (2007). *The meaning of the body: aesthetics of human understanding*. Chicago: University of Chicago Press.
- Kimmel, M. (2005). From Metaphor to the "Mental Sketchpad": Literary Macrostructure and Compound Image Schemas in Heart of Darkness. *Metaphor & Symbol* 20 (3), 199–238.
- Kimmel, M. (2008a). Metaphors and software-assisted cognitive stylistics. In S. Zyngier, M. Bortolussi, A. Chesnokova & J. Auracher (Eds.), *Directions in Empirical Literary Studies* (pp. 193–210). Amsterdam: John Benjamins
- Kimmel, M. (2008b). Image schemas in narrative macrostructure: combining cognitive linguistic with psycholinguistic approaches. In W. van Peer & J. Auracher (Eds.), *New Beginnings in Literary Studies* (pp. 158–184). Newcastle: Cambridge Scholars.
- Kimmel, M. (forthcoming). Metaphor sets in Turn of the Screw - what conceptual metaphors reveal about narrative functions. In M. Fludernik (Ed.), *Literary Metaphor After the Cognitive Revolution*. Oxford: Oxford University Press.
- Kimmel, M. (n.d.). *The scope of image schemas in narrative and event structure: Towards a typology of functions*. Unpublished manuscript, Vienna.
- Kövecses, Z. (2000). *Metaphor and emotion: language, culture, and body in human feeling*. New York: Cambridge University Press.

- Krzeszowski, T. P. (1993). The Axiological Parameter in Preconceptual Image Schemata. In R. A. Geiger & B. Rudzka-Ostyn (Eds.), *Conceptualizations and Mental Processing in Language* (pp. 307–330). Berlin: Mouton de Gruyter.
- Lakoff, G. (1987). *Women, fire, and dangerous things: what categories reveal about the mind*. Chicago: University of Chicago Press.
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Lakoff, G. & Johnson, M. (1999). *Philosophy in the flesh: the embodied mind and its challenge to Western thought*. New York: Basic Books.
- Lakoff, G. & Turner, M. (1989). *More than cool reason: a field guide to poetic metaphor*. Chicago: University of Chicago Press.
- Le Fanu, J. S. (2008 [1872]). *Carmilla*. New York: Cosimo.
- Malmö, R. (1975). *On emotions, needs, and our archaic brain*. New York: Holt, Rinehart & Winston.
- Mandler, J. M. (1992). How to build a baby: II. Conceptual primitives. *Psychological Review* 99, 587–604.
- Mishima, Y. (2006 [1963]). *The Sailor Who Fell from Grace with the Sea*. London: Vintage.
- Nin, A. (2001 [1954]). *A Spy in the House of Love*. London: Penguin.
- Oakley, T. (2007). Image Schema. In D. Geeraerts & H. Cuyckens (Eds.), *The Handbook of Cognitive Linguistics* (pp. 214–235). New York: Oxford University Press.
- Palmer, G. B. (1996). *Toward a theory of cultural linguistics*. Austin: University of Texas Press.
- Popova, Y. (2002). The Figure in the Carpet: Discovery of Re-Cognition? In E. Semino & J. Culpeper (Eds.), *Cognitive Stylistics* (pp. 49–72). Amsterdam/Philadelphia: John Benjamins.
- Popova, Y. (2005). Image schemas and verbal synaesthesia. In B. Hampe (Ed.), *From Perception to Meaning. Image Schemas in Cognitive Linguistics* (pp. 395–420). Berlin: Mouton de Gruyter.
- Steen, G. & Gibbs, R.W. (2004). Questions about metaphor in literature. *European Journal of English Studies* 8 (4), 337–354.
- Semino, E. & Steen, G. (2008). Metaphor in literature, *The Cambridge Handbook of Metaphor and Thought* (pp. 232–242). Cambridge: Cambridge University Press.
- Stockwell, P. (2002). *Cognitive poetics: an introduction*. London/New York: Routledge.
- Talmy, L. (2000). *Toward a cognitive semantics*. Cambridge, MA: MIT Press.
- Turner, M. (1991). *Reading minds: the study of English in the age of cognitive science*. Princeton, N.J.: Princeton University Press.
- Turner, M. (1996). *The literary mind*. New York: Oxford University Press.
- Werth, P. (1999). *Text worlds: representing conceptual space in discourse*. Harlow: Longman.
- Zbikowski, L. M. (2002). *Conceptualizing music: cognitive structure, theory, and analysis*. Oxford: Oxford University Press.
- Zwaan, R., Langston, M., & Graesser, A. (1995). The Construction of Situation Models in Narrative Comprehension: An Event-indexing Model. *Psychological Science* 6, 292–297.