

1 **The cognitive poetics of literary resonance**

2
3 PETER STOCKWELL*

4 *University of Nottingham*

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12 *Abstract*

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14 *The application of cognitive science to literary scholarship in the form of a*
15 *cognitive poetics offers the opportunity for accounting for many features of*
16 *literary reading that have been rendered only in vague or impressionistic*
17 *terms in the past. In this paper, an argument for cognitive poetics is made,*
18 *with a focus on the affective and experiential phenomenon of resonance.*
19 *This is modelled through cognitivist work on the field of attention and per-*
20 *ception, to give a particularly literary-angled approach. The argument is*
21 *exemplified with reference to a Shakespeare sonnet and then further demon-*
22 *strated in a poem by Dylan Thomas, where the notion of a lacuna is devel-*
23 *oped to account for the phenomenon of “felt absence”. The paper concludes*
24 *with observations on the role of cognitive poetics in relation to cognitive*
25 *science, literary criticism, and in its own right.*

26
27 *Keywords*

28 *attention, cognitive poetics, lacuna, literature, negation, poetry, resonance,*
29 *Shakespeare, stylistics, Thomas (Dylan)*

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32 **1. Cognitive poetics for literary studies and linguistics**

33 We are in the middle of a genuine revolution in literary studies: a revolu-
34 tion because it renders almost every aspect of the discipline questionable,
35 and genuine because it is greater than the numerous false self-generated
36 crises that have defined literary study for the past half-century. Until re-
37 cently, the “cognitive turn” (Steen 1994) in arts, humanities and social
38 science research has been slow to reach into literary scholarship, where
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41 * Correspondence address: School of English Studies, The University of Nottingham, Uni-
42 versity Park, Nottingham, NG7 2RD, UK. E-mail: peter.stockwell@nottingham.ac.uk.

1 the “linguistic turn” which dominated twentieth century cultural study is
2 still regarded by some as novel and dangerous. However, it is clear that
3 early polemic (Currie 2004; Hogan 2003; Turner 1991, 1996) is now being
4 realised, as the distinguished German philosopher and literary scholar
5 Harald Fricke has observed:

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7
8 [W]e should not expect literary theory to yield anything fundamentally new in its
9 own field: we will continue paraphrasing Aristotle’s basic insights. I can see only
10 one possibility for moving beyond what has long since been known: interdisci-
11 plinary engagement with the advancement of knowledge in other disciplines, at
12 present above all a new field that has emerged only recently and consists of the
13 philosophy of mind, psychological cognitivism, the affective sciences, cognitive
14 linguistics, and neurological brain research—a *cognitive turn* to follow the linguis-
15 tic one.

16 If I were a young scholar starting my career now, I would probably embrace this
17 transdisciplinary field and set myself the aim of developing literary theory into a
18 *cognitive poetics*.

(Fricke 2007: 193)

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20
21 Cognitive poetics (see Stockwell 2002a; Tsur 1992) draws on cognitive
22 science and applies its insights to literary reading and the organisation of
23 the literary work. Though the primary focus is in the literary field, there
24 are many useful outcomes of cognitive poetics for scholars in linguistics
25 and psychology more generally. Firstly, any account of language must
26 include a description of the uses of language in its most prestigious form,
27 as literature (indeed, as Literature). Secondly, a properly conducted cog-
28 nitive poetic exploration of a literary text tends to treat the work in its
29 entirety, including its cultural significance, setting and context, and this
30 holistic approach has value in complementing the typical uses of literary
31 sentences or short excerpts in the hands of cognitive psychologists. Related-
32 edly, a consideration of literary reading with a due regard for the nuances
33 of (sensible) critical theory offers a necessary comparator for empirical
34 studies that are conducted in artificial, laboratory or test conditions.

35 Thirdly, a cognitive poetic account of prestigious texts is unavoidably
36 diachronic, since almost all canonical literature originates in the great
37 swathe of the past that is not the near-past contemporary; this allows the
38 issue of universal and persistent cognitive constraints to be examined.
39 Finally, even setting aside the cultural value of the literary experience,
40 the detailed application of cognitive scientific principles and findings to a
41 diverse range of texts (of any sort) can only be a valuable proving proce-
42 dure for cognitivists.

1 Where there is a payoff for cognitive science in literary analysis, there
2 are also of course benefits for literary studies itself. Cognitive poetics
3 offers a disciplinary methodology and principle to a fractured field more
4 interested in problematising for its own sake than in posing theoretical
5 solutions. It offers an ecological connection between art and artifice on
6 the one hand and natural reading and the human situation of the em-
7 bodied mind on the other. It offers an accommodation of artistic sensibil-
8 ity and scientific rationalism where this damaging division has persisted
9 for too long. And it offers a humanistic perspective on the communicative
10 arts, asserting the human continuities between authors and readers across
11 the ages and across cultures.

12 In its European manifestation, cognitive poetics has tended to arise
13 from a tradition of *stylistics*, an approach which has applied the insights
14 of the linguistic turn to literary studies (see Carter and Stockwell 2008).
15 Adapting this rational use of applied linguistics with a cognitive turn
16 is a natural development of the tradition, and it also means that cogni-
17 tive poetics tends to pay particular attention to textuality and linguis-
18 tic detail. Close attention to the language of literature is, scandalously,
19 something that has largely been missing from literary studies for half a
20 century.

21 Cognitive poetics has been regarded as interdisciplinary (importing the
22 methods of one field into another), multidisciplinary (crossing the meth-
23 odological boundaries of several fields) and transdisciplinary (adapting
24 the principles of several different disciplines and producing a unique new
25 blend). Often its adaptations can cut across traditional disciplinary cate-
26 gories so surprisingly that it can appear unprincipled at first glance. How-
27 ever, revolutionary activities always tend to look rather anarchic initially,
28 until they become the paradigm. In the longer term, cognitive poetics of-
29 fers a reconnection of scholarly exploration and the everyday experiences
30 of natural readers.

31 This paper aims to account for an aspect of natural readers' intuitive
32 sense that a literary text has *resonance*. Briefly, this notion refers to the
33 readerly feeling that certain powerful literary texts leave a long-lasting
34 and ineffable sense of significance. Firstly, I set the notion within a gen-
35 eral theory of attention and resonance, and then focus in the rest of the
36 paper on one of the main generators of resonance in the form of atten-
37 tional figures which gradually fade from the foreground. This process is
38 termed *neglect*, and the variable degrees of neglect are the key to a sense
39 of resonance. In order to illustrate the notion in detail, I examine the spe-
40 cific effects of negation as a form of neglect firstly in a sonnet by Shake-
41 speare and finally in a poem by Dylan Thomas that is generally and pop-
42 ularly regarded as powerful and resonant but difficult.

1 **2. A model of literary resonance**

2

3 The notion of resonance is commonly encountered in non-scholarly read-
 4 ers' comments about their own experiences of literary reading. Texts reso-
 5 nate if they persist in the memory long after the actual physical reading
 6 has taken place. Resonance is a feeling of the affective power of an en-
 7 counter with a piece of literature. It is vague and subjective, it is both psy-
 8 chological and socially-mediated, and it is a metaphor whose target is in-
 9 tangible and whose source is impressionistically understood: for all these
 10 reasons, it is a difficult concept to pin down, and it is a concept that is
 11 avoided in scholarly discussions. This makes it an intriguing and attrac-
 12 tive notion for cognitive poetic exploration (see further Stockwell 2009
 13 for more detail).

14 Some experiences of reading literature linger in the mind long after the
 15 physical text is put down. Some phrases and passages exert great power,
 16 blending their semantic significance with their aesthetic organisation.
 17 Where the feeling is ever discussed, it is couched in impressionistic terms
 18 like these, with the literary critic aiming not at a plain description but at a
 19 poetic re-enactment of the phenomenon itself. Kathy Krajco (2008), writ-
 20 ing about literary resonance on a composition-guide website, asserts that
 21 "resonance is a prolonged response [. . .]. Resonance in writing [. . .is] an
 22 aura of significance". Most people's usage of the term, like this, draws
 23 on its source in music and mechanics. Resonance in a physical body is
 24 the oscillation of the body such that a sympathetic oscillation occurs in a
 25 similar nearby structure. A tuning fork and musical instruments with res-
 26 onant strings such as the Indian sitar, the Persian lute, or the Norwegian
 27 hardanger violin exhibit resonance: secondary strings sound out when a
 28 specific frequency is played, or multiples of the frequency, producing
 29 overtones.

30 In mechanics, resonance is measured by degree as *intensity*. It is re-
 31 duced by *damping*, where a separate object with a different oscillating fre-
 32 quency interferes in the resonating system, and the speed of the damping
 33 effect is measured by the *decay*. A long drawn out decay, where damping
 34 is inefficient, produces a persistent *echo*. In everyday discourse, people
 35 have little analytical sense of this source domain, but the fact that the
 36 mapping is being made means that the analytical terms of the metaphor
 37 offer a useful structure for an investigation of this vague and ineffable
 38 concept.

39 My starting point is cognitive psychological work on *attention*, the
 40 study of how sensory inputs are rendered into foregrounded and back-
 41 grounded levels of significance. Though most theories of attention draw
 42 mainly on visual field dynamics to account for significance and meaning-

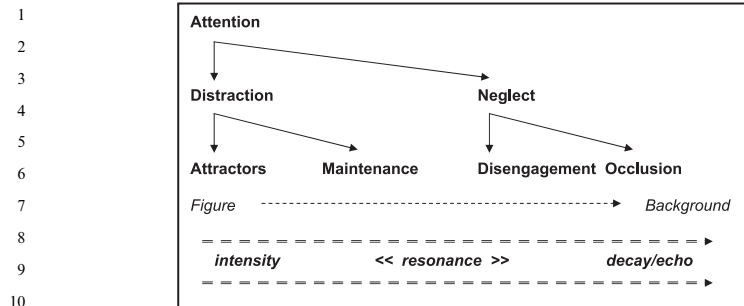


Figure 1. A general model of attention-resonance (adapted from Stockwell 2009)

fulness (see Styles 2006 for a detailed survey), it seems to me that the mechanisms for describing the semantic significance of attention are the same for experiential texture, the aesthetic sense of reading. (This extension of physical embodiment into higher-level abstract thought is a fundamental principle in cognitive science). The conceptual space generated by reading a literary work is a ‘cluttered array’ (Spelke 1990) in cognitive perceptual terms. It consists of colours, edges, forms and textures that are resolved into attended gestalt objects. Since there is almost always more than one object vying for attention, an interpretative configuration is imposed to make sense of the experience. This interpretation adjusts as the experience progresses, as certain elements in the space distract the reader’s attention and others become relatively neglected. Figure 1 sets out a general theory of attention and resonance.

Those figures that distract the reader’s attention can be termed *attractors*. Note that an attractor is a conceptual effect rather than a specific linguistic feature, though as we will see below, it is possible to set out some of the stylistic patterns that are attractive, in this sense. An attractor can be newly introduced, or it can be revived in working memory by stylistic invocation or anaphoric co-reference. An attractor can be *maintained* either positively by sustaining the focus or by various non-shift devices.

Elements which are either no longer the focus of attention, were never prominent features, or have been deliberately backgrounded can be said to be relatively *neglected*. For example, John le Carré’s (1999) novel *Single & Single* begins with a scene in which Mr Alfred Winser, a lawyer, is held at gunpoint and then executed. The opening chapter is very strongly focalised through Winser’s viewpoint. However (and this is typical of le Carré’s openings in general), though the event sets the plot in motion, Mr Winser is barely mentioned again. The strong attractor of Winser and his death gradually fades from memory by neglect, but the brutal

1 impact of the opening is felt long after the novel has got under way. The
2 stylistic manner of neglect is the key to resonance. A previous attractor
3 can fade from attention simply by lack of maintenance (so the reader
4 gradually *disengages* from it, as in the le Carré novel). Alternatively, the
5 attractor can be explicitly negated out of attention and *occluded* by a re-
6 placement figure. This then becomes the new attractor in focus and the
7 diagram (Figure 1) starts again from the left hand side.

8 Clearly a scale of figure and background is implicit in this scheme,
9 which is felt as a scale of resonance, from a striking initial present-
10 moment intensity through to decay or echo tailing off and persisting into
11 a rich sense of textual echo. *Fig. 1* presents the context of my general
12 theory of resonance; in this paper, I am particularly interested in account-
13 ing for the felt effect of that aspect of neglect that can be categorised as
14 *occlusion* in literary reading. (Other aspects of the general theory are dis-
15 cussed in Stockwell 2002b, 2003, 2009: ch.2).

16 In stylistic terms, good attractors tend to be referred objects that have a
17 unified and coherent structure and identity, textualised as noun phrases,
18 and maintained by co-reference, by repeated naming or pronominalisa-
19 tion, by elegant synonym variation, or by verb-chaining. Objects are also
20 likely to be good attractors if the verbs to which they are attached are
21 active and positive, both in semantic content and syntactic form. Note
22 that an attractor is not in itself a purely linguistic feature, but a concep-
23 tual one: as we will see below, a linguistic feature such as topicality can
24 produce a strong attractor, but so too can a lexical item that denotes
25 brightness. Furthermore, the denotation of closeness (literal foreground-
26 ing) makes a good attractor, and closeness has direct analogues in de-
27 noted volume (near objects are perceptually bigger than distant ones),
28 noisiness, brightness and heat. Familiar and relatable items (such as hu-
29 mans) are readily resolved into attractors, and in general there is an em-
30 pathy scale (after Langacker 1991: 305–29; Stockwell 2002a: 61), of the
31 following form: abstractions > landscape objects > immovable objects >
32 human-scale objects > machines > plants > animals > groups > ill-
33 defined individuals > specific persons (hearing > speaking). The last ele-
34 ments in this scale are closer to the centre of a radial prototype of a per-
35 son, and later elements are likely to make better attractors than earlier
36 elements. Earlier elements can take on attractive and person-like qualities
37 by stylistic devices like personification and anthropomorphisation (see
38 further Stockwell 2009: ch.4). Lastly, motion and spatial relationships
39 are also matters of attentional change. Carstensen (2007: 8) describes
40 attentional change as being a *shift* (which has the effect for the viewer of
41 apparent motion), or a *zoom* (which renders apparent change in size), or a
42 *state change* (in which sudden appearance or newness is the major feature).

1 Taking these observations and other research (see Emmott et al 2006,
2 2007; Sanford et al 2006; Stockwell 2003), we can produce a list of the
3 typical features of good attractors. It is a mark of the new cognitive
4 poetic perspective that this list cuts across traditional grammatical cate-
5 gories to include linguistic forms towards the beginning and conceptual,
6 experiential items towards the end:

- 7 – *newness*
- 8 – (currency: the present moment of reading is more attractive than the
9 previous moment)
- 10 – *agency*
- 11 – (noun phrases in active position are better attractors than in passive
12 position)
- 13 – *topicality*
- 14 – (subject position confers attraction over object position)
- 15 – *empathetic recognisability*
- 16 – (human speaker > human hearer > animal > object > abstraction)
- 17 – *definiteness*
- 18 – (definite ('the man') > specific indefinite ('a certain man') > non-
19 specific indefinite
- 20 – ('any man')
- 21 – *activeness*
- 22 – (verbs denoting action, violence, passion, wilfulness, motivation or
23 strength)
- 24 – *brightness*
- 25 – (lightness or vivid colours being denoted over dimness or drabness)
- 26 – *fullness*
- 27 – (richness, density, intensity or nutrition being denoted)
- 28 – *largeness*
- 29 – (large objects being denoted, or a very long elaborated noun phrase
30 used to denote)
- 31 – *height*
- 32 – (objects that are above others, are higher than the perceiver, or which
33 dominate)
- 34 – *noisiness*
- 35 – (denoted phenomenon which are audially voluminous)
- 36 – *aesthetic distance from the norm*
- 37 – (beautiful or ugly referents, dangerous referents, alien objects de-
38 noted, dissonance).

39
40 It is astonishing, once you start looking, how many literary texts
41 achieve their principal effects by the aligned co-ordination and rich iconic
42 texture of these features. Elsewhere I have presented detailed analyses

1 based on earlier versions of this scheme for the surrealist writing of Hugh
 2 Sykes Davies and André Breton, the sonnets of John Milton, poetry by
 3 W.B. Yeats, Robert Browning, and Percy Shelley, the prose fiction of
 4 Thomas Hardy and several sonnets by William Shakespeare (see Stock-
 5 well 2002a, 2002b, 2003, 2009). In several of these, I observed a common
 6 phenomenon whereby one dimension of resonant force (brightness, in
 7 many of these cases) is paralleled by other dimensions operating to the
 8 same polarity. So, for example in a sonnet by Milton in which he dreams
 9 of his dead wife returning to him, the text mentions words that denote in-
 10 creasing levels of brightness at exactly the same time as the ghostly wife
 11 takes on agency, empathetic identification, noisiness and denoted activity
 12 as forward motion towards the dreaming poet (Stockwell 2002b). The at-
 13 tractor of the ghost-wife is placed strongly in the reader's attention not
 14 only by the simultaneity of these features, but also by the fact that they
 15 are *aligned*. That is, where a feature has polarity (motion and stasis, noise
 16 and quiet, brightness and dimness, for example), the equivalent poles co-
 17 occur (motion, noise and brightness). Even where one or two accompany-
 18 ing elements in the close co-text are not in themselves aligned with these
 19 scales, the force of the attractor phrases is often so deeply intense that
 20 other parts of the text become coloured by the same perceptual quality.
 21 This is analogous to the halo or aura effect that a bright white object con-
 22 fers on other light objects nearby, in visual terms.

23

24

25 **2. Attractor alignment and negation**

26

26 The manipulation of the physical and conceptual analogues of object-
 27 perception, space and movement seems to be a long-lasting and perhaps
 28 universal feature of literary composition. For a quick illustration, con-
 29 sider this sonnet by Shakespeare.

30

31 *Sonnet 71*

32

32 1 No longer mourn for me when I am dead
 33 2 Than you shall hear the surly sullen bell
 34 3 Give warning to the world that I am fled
 35 4 From this vile world with vilest worms to dwell:
 36 5 Nay, if you read this line, remember not
 37 6 The hand that writ it, for I love you so,
 38 7 That I in your sweet thoughts would be forgot,
 39 8 If thinking on me then should make you woe.
 40 9 O! if, I say, you look upon this verse,
 41 10 When I perhaps compounded am with clay,
 42 11 Do not so much as my poor name rehearse;

1 12 But let your love even with my life decay;
2 13 Lest the wise world should look into your moan,
3 14 And mock you with me after I am gone.

4
5 This is one of many sonnets by Shakespeare in which negation features
6 prominently, and here it functions as one of the main factors of occluding
7 neglect. Other negational sonnets most famously include “My mistress’
8 eyes are nothing like the sun” (Sonnet 130) and “Let me not to the mar-
9 riage of true minds” (Sonnet 116, see Stockwell 2009: ch.2 for a detailed
10 analysis of the latter). Sonnet 71 is a poem which enacts the very contrary
11 of its apparent message: there is an opposition between its aesthetic effect
12 and its propositional content. In brief, the poem asserts itself as an act of
13 persuasion for the addressee to forget the writer after death, and yet the
14 text itself and its powerful persisting memory serve as a resonant mem-
15 orial of the writer.

16 The sonnet aligns several attractor types, principally action-passivity
17 between writer and addressee; motion-stasis between writer and ad-
18 dressee; the noisiness of the bell and voice with the implicit contrary qui-
19 etness of not mourning, writing and looking; and closeness and distance
20 with their analogues of size. The first and second elements of these pairs
21 are polarised and aligned qualitatively. So, for example, the addressee is
22 attached to processes denoting non-action (“mourn, hear, read, remem-
23 ber, thinking, look, rehearse, let”) by contrast with the bell giving warn-
24 ing, the writer who has fled, the hand that writes, the writer who loves
25 and is compounded, and the wise world which looks and mocks. In sev-
26 eral of these (“love you” l.6, “mock you” l.14), the addressee is also the
27 grammatical recipient of the action chain. There is an overall move from
28 activeness to passiveness across the poem, captured in the decreasing
29 activity of the main imperative verb forms attached to the addressee
30 (“mourn, remember, rehearse, let”) and then into nominalisation (“your
31 moan” l.13) and finally the recipient of action (“mock you” l.14). The ad-
32 dressee is mainly a hearer, and only speaks indistinctly (mourning and
33 moaning), whereas the bell is shifted along the empathy scale by surly
34 and sullen personification to give a warning, the speaker writes and says,
35 and the collective wise world mocks.

36 In line with convention, but still aligned here poetically with the other
37 poles, life is here and death is away somewhere else. This is expressed spa-
38 tially (“fled from this . . . to . . .” ll.3–4, “into your moan . . . I am gone”
39 ll.13–14), deictically (“this vile world” l.4, “this line” l.5, “this verse”
40 l.9) and in relative sizes (large things like the “vile world”, and composite
41 things “in your sweet thoughts” (l.7) are here, while small things like
42 “worms” (l.4) and the diminishing “decay” (l.12) are over there). Lastly,

1 a curious aura effect works on the preposition “with” as a result of the
 2 surrounding consistency of attractor-alignments. Ordinarily, “with”
 3 would profile the moment of combination in an image-schema, which
 4 might normally be regarded as contributing to an increase in size. How-
 5 ever, in this sonnet, each “with” occurs before the aligned small things
 6 (“with vilest worms” 1.4, “with my life decay” 1.12, and “with me after I
 7 am gone” 1.14), and so, it seems to me, “with” becomes aligned with di-
 8 minishment too.

9 Since several attractor features are aligned, the sonnet has freedom to
 10 exploit both main forms of ongoing attentional change: shift and zoom.
 11 According to Carstensen (2007: 8), attention is caught most obviously by
 12 a “state change”: that is, the appearance of a new attractor in the percep-
 13 tual field (*newness*, in my feature list above). Once the field is established,
 14 however, attention is moved around either by being shifted—this involves
 15 distraction from one figural attractor to another—or zoomed—that is,
 16 focused inward with a greater granularity or intensity. Distraction and
 17 neglect from one attractor to another is achieved by the sonnet toggling
 18 from addressee to writer throughout the poem except for the very last
 19 line. There are even lines where the addressee is sandwiched between the
 20 writer (“I [in your sweet thoughts] would be forgot” 1.7, “I say, [you look]
 21 upon this verse” 1.9) so that the effect is an ongoing and irresistible focus
 22 on the writer that the direct reference and imperative form are only able
 23 to distract temporarily. Attention is zoomed in the grammatical structure
 24 of each sentence (taking a sentence as the three sets of four lines, exclud-
 25 ing the final rhyming couplet): the addressee generally forms the initial
 26 attractor in the first clause with the writer as a subsequent distraction
 27 (“for me” 1.1, “the hand” 1.6, “this verse” 1.9), but the long echoing tail
 28 sustains the focus on the writer. Iconically, the size of the string of words
 29 that forms these tails is larger than the initial words denoting the ad-
 30 dressee, and there is no evading the fact that the focus, in spite of poten-
 31 tial distractions, keeps returning to the writer.

32 Of course, what complicates all this are the negations that permeate the
 33 poem. These are the main cues for readerly neglect. The best cognitive
 34 linguistic explanation of negation in general, for me, comes from text-
 35 world theory (Gavins 2007; Werth 1999). A negation (like a metaphor, a
 36 modalisation, a deictic temporal or spatial jump, and reported speech and
 37 thought) creates a mental world-switch from the current text world into a
 38 world with a different ontological status. The hearer/reader’s relationship
 39 to this embedded switched world is also experientially different. In order
 40 to process a negation, the reader must imagine—however temporarily or
 41 transiently—another world in which the state of affairs following the ne-
 42 gation does exist; this sub-world is then tagged as being in a negational

1 relationship with the text world. The crucial point here is that the reader
2 has to hold the negated state in mind in order to negate it. (Lakoff's
3 (2002, 2006) iconic phrase 'Don't think of an elephant' exemplifies the
4 effect).

5 In the sonnet, there are straight verb-negations ("remember not" 1.5),
6 negative exclamation ("Nay" 1.5), existential negation ("dead" 1.1, "for-
7 got" 1.7, "gone" 1.14) and qualitatively negative lexis ("surly" 1.2, "vilest"
8 1.4, "decay" 1.12). The figure in many cases is presented first, and then
9 taken away ("me > when I am dead" 1.1, "I > am fled" 1.3, "remem-
10 ber > not" 1.5, "I > would be forgot" 1.7). The effect throughout is that
11 the objects being invoked for forgetting are of course being placed into
12 the conceptual field and then cut out of it, leaving a sense that they are
13 still somehow around. The only part of the poem without a grammatical
14 negation is the final couplet (ll.13–14). By this point, both speaker and
15 hearer are combined ("you with me") and rendered into the background
16 by the occlusion of the new, large, speaking, personified and poetically
17 alliteratively marked attractor of the "wise world". The couplet, though,
18 begins with a negational world-switching marker, "Lest", that renders
19 this final grounding relative to the sonnet-text as a whole. The clever con-
20 clusion can only be that the sonnet will outlive both forgetting and death,
21 and the achievement of the writer will include the reader as well.

22

23 **3. Resonance and lacunae**

24

25 Negation, in literature and probably in general, creates a conceptual *la-*
26 *cuna*. This is a tangible gap, a sense that there is not simply a space but
27 something missing that was previously occupying the space. Lacunae, as
28 in the negations of Sonnet 71, are the resonant effects of an attentional
29 neglect that is textually recent in the reading process. The technique can
30 be used for the sort of witty sleight-of-pen apparent in the Shakespearean
31 sonnets, or to create a sense of ghostliness and unease in gothic fiction, or
32 to create a discomfiting sense of incompleteness in surrealist writing,
33 and no doubt many other related effects. It seems to me that the phenom-
34 enon is particularly common in literary works where ambivalence, sug-
35 gestion, subtlety, and other tonal sensations are prominent.

36 The work of Carstensen (2007) can assist us further here. His approach
37 to attention identifies gestalt shapes as *blobs* (if perceived singularly) or
38 *groups of blobs* if perceived as a connected or continuous collection. A
39 group of blobs can be attentionally zoomed to the granularity of an in-
40 dividual blob, of course. Blobs are positive, if figures, or negative, if part
41 of the bounded background: concepts like 'dent' or 'fissure' are nega-
42 tive blobs (*lacunae* in my literary terms), since they can be the focus of

1 attention even defined by not being something else in the immediate sur-
 2 roundings. Following Carstensen's model, positive blobs have edges by
 3 definition, but lacunae *only* have edges, and the edges "belong" to the
 4 lacuna, not the background. Peterson and Enns (2005) offer evidence to
 5 show that the ground side of an edge is not processed, whereas the figure
 6 side is processed with the figure itself. Furthermore, figures and the nature
 7 of their edges (defined, or irregular, bright, or soft, and so on) are more
 8 likely to be recalled from memory on subsequent encounters than
 9 grounds: in other words, they have resonance.

10 In order to illustrate the concepts presented in this paper (my cognitive
 11 linguistic motivation), and also to offer an interpretative analysis of a
 12 poem (my literary critical motivation), I would like to sketch out how
 13 the organisation of attractors and lacunae operate in the following poem
 14 by Dylan Thomas (in order to provide a piece of cognitive poetics). The
 15 poem was composed when Thomas was 22, and first published in the
 16 socialist literary magazine *New English Weekly* in Spring 1933.

17 *And death shall have no dominion*
 18
 19 1 And death shall have no dominion.
 20 2 Dead men naked they shall be one
 21 3 With the man in the wind and the west moon;
 22 4 When their bones are picked clean and the clean bones gone,
 23 5 They shall have stars at elbow and foot;
 24 6 Though they go mad they shall be sane,
 25 7 Though they sink through the sea they shall rise again;
 26 8 Though lovers be lost love shall not;
 27 9 And death shall have no dominion.
 28
 29 10 And death shall have no dominion.
 30 11 Under the windings of the sea
 31 12 They lying long shall not die windily;
 32 13 Twisting on racks when sinews give way,
 33 14 Strapped to a wheel, yet they shall not break;
 34 15 Faith in their hands shall snap in two,
 35 16 And the unicorn evils run them through;
 36 17 Split all ends up they shan't crack;
 37 18 And death shall have no dominion.
 38
 39 19 And death shall have no dominion.
 40 20 No more may gulls cry at their ears
 41 21 Or waves break loud on the seashores;
 42 22 Where blew a flower may a flower no more
 43 23 Lift its head to the blows of the rain;

1 24 Though they be mad and dead as nails,
2 25 Heads of the characters hammer through daisies;
3 26 Break in the sun till the sun breaks down,
4 27 And death shall have no dominion.

5
6 The poem is written in sprung verse, a form recognised explicitly only
7 in the first half of the twentieth-century (ascribed to the poet Gerard
8 Manley Hopkins), though it claims to match children's rhyme, folk-song
9 and older Celtic and Anglo-Saxon poetry. The metre is designed to cap-
10 ture the rhythm of ordinary English speech: instead of a regular foot of a
11 fixed number of stressed and unstressed syllables, the poem has the same
12 number of strong stresses (here, three) in each line, with a variable num-
13 ber of other, less stressed or unstressed syllables. (Incidentally this view of
14 metrics as a graded rather than binary pattern of stress accords better
15 with a cognitive phonological view based on graded prototypicality
16 judgements). The only line which it is difficult and non-natural to read
17 with three strong stresses is, 'Split all ends up they shan't crack' 1.17,
18 which sounds more natural with four or even five strong stresses. It is
19 also the only line that contracts 'shall not', and it is a pivotal transition-
20 ary line in the poem (as we will see below).

21 There are numerous lacunae throughout the poem (the felt effects of at-
22 tentional neglect), generated by negation, metaphor, modal "shall", and
23 the alternating conjunction "though". Negation is the prominent feature,
24 the repeating line "And death shall have no dominion" combining with
25 the modal to create the sense that death has dominion now, even if that
26 will change in the future. Almost every line invokes an image that is im-
27 mediately revoked: men who were alive (1.2), bones with flesh on them
28 (1.4), bones piled before they were gone (1.4), lovers before they were lost
29 (1.8), and gulls crying, and waves breaking, and flowers standing up in the
30 rain and the sun (all in the final stanza). These images of the present are
31 all placed into consciousness only contrastively by being denied in the
32 future.

33 As in the Shakespeare sonnet, there are several different types of nega-
34 tion featured in the poem. There are a few examples of grammatical nega-
35 tion, firstly in the title line of course, and the next in the line "Though
36 lovers be lost love shall not" 1.8, where the ellipted verb is itself thus also
37 lost to the negation. The effect of these grammatical negations, though, is
38 to create lacunae in the shape of death's dominion, love lost, dying wind-
39 ily, breaking, cracking, and so on. There are also negations in the seman-
40 tic value of the lexis: "picked clean . . . gone" 1.4, "give way" 1.13, "snap
41 in two" 1.15, and "breaks down" 1.26 all evoke the removal of an object
42 from the attentional field, or its fracturing into smaller parts (a blob

1 attentionally zoomed so as to be rendered as a group of blobs, in Carsten-
 2 sen's (2007) terms). Correspondingly, there is a great deal of qualitatively
 3 negative lexis: "death, naked, mad, sink, lost, twisting, break, snap,
 4 crack, dead", and more. Most of these, I argue, are the contrary marked
 5 semantic forms of basic terms: death is not living, in normal terms; naked
 6 is clothes-less, mad is not sane; sinking is a move away from a position of
 7 rest; things are twisted by not being in their normal shape, and so on.
 8 There are lacuna effects in all of these.

9 By also triggering world-switches, the metaphors act like negations
 10 (non-literals) in creating lacuna-shaped figures in which there is a "man
 11 in the wind" 1.3, and a body with "stars at elbow and foot" 1.5 and
 12 "heads [that] hammer through daisies" 1.25. These metaphors are visible
 13 (both source and target domains are realised stylistically: Stockwell 1994),
 14 but there are also invisible metaphors where the crying gulls and the sea
 15 and flowers might be read as symbols of life, or struggle, or the physical
 16 and tangible realm, or some other mapping. The relative open-endedness
 17 and multivalence of invisible metaphors tend to occur towards the end of
 18 the poem. Repeated throughout the poem, the modal "shall" creates a la-
 19 cuna by punching a hole out of the implied present reference moment in
 20 order to switch to the future. "Though" works similarly, by creating a
 21 preparation for an alternate world-switch, for example, in "Though they
 22 sink through the sea they shall rise again" 1.7. Here, the figural image of
 23 bodies sinking is immediately occluded by the reverse trajectory of rising
 24 again, and the reader knows that the first attractor is going to be fleeting
 25 because of that initial "though". In addition, the conventional bad/good
 26 mapping onto down/up is at work here, so the positive height in the sec-
 27 ond part of the line ("rise") works successfully as the new occluding
 28 attractor.

29 This up/down scaling is one of the features that are aligned in the
 30 poem, along a polarity that seems to coincide immediately and conven-
 31 tionally in the first stanza with life/death. The perspective from the begin-
 32 ning is upward, to the wind, the moon and the stars. The fleeting descents
 33 into madness and the sea are quickly replaced by a return to upstanding
 34 sanity and rising again. All of this is aligned with motion: there is a great
 35 deal of movement in the first stanza, but the established aligned polarities
 36 so far create an aura effect around the motion attractor, so that positive
 37 motion is aligned with the negative poles already established. They "go
 38 mad" but the opposite ("be sane") is articulated as stasis. Motion paths
 39 are profiled as frozen moments: the point "when their bones are picked
 40 clean" 1.4, or when "lovers be lost" 1.8. Note that the archaic "be" form
 41 here also marks out stasis more prominently than an unremarkable "are"
 42 would.

1 In the list of good textual attractors earlier in this paper, several aspects
2 are correlates of motion: active verb forms, topical and subjective action,
3 wilful action in a scene, and even fullness, proximity and noisiness are
4 often consequences of the relative motion of the observer and the figure
5 against a ground. Spatial relations are a matter of attentional change,
6 whether zoom or shift between figural objects, because seeing one object
7 in relation to another involves looking first at one *and then* at the other.
8 Since attentional change necessarily involves this sequentiality and thus a
9 time-dimension, even stationary described objects have an apparent at-
10 tentional motion in the reading process. In other words, reading involves
11 the dynamic apparent or actual motion of figures across a ground. Irreg-
12 ular or ill-defined objects (that is, those whose edges are indeterminate be-
13 cause they are irregular, unfamiliar or in the process of alteration) are
14 rendered easier to delineate by their motion across an occluded back-
15 ground (Smith et al. 2003). Motion also contributes strongly towards
16 depth perception and the richness of a visual field.

17 In the poem, the alignment of the motion attractor is not simple,
18 though, since the stanza begins with what looks like positive motion
19 aligned with after-life. (This positivity is more conventional). The clause
20 “Dead men naked they shall be one / With the man in the wind” (ll.2–3)
21 points to a common humanity after death is stripped of life, but there is a
22 tangible sense of movement here in the shift to the future through the
23 modal, in the profiling of the trajectory underlying “with”, and in the de-
24 notational value of “wind”. The conceptualisation of the whole clause
25 also represents a clustering zoom of attention from “dead men” first to
26 “one”, and then “they” who are then “gone”. There is a fluctuating insta-
27 bility in the perspective here.

28 The sense of fluctuation and uncertainty is prominent across the poem
29 too. The prevalence of lacunae by negations and world-switches fills the
30 work with tangible absences. There are also uncertainties in the reading
31 through potential ambiguities and ambivalences, which can be construed
32 in alternating ways. The “sun” at the end can be read literally as an em-
33 blem of the material universe, or aloud as “the Son” to gesture towards a
34 Christian redemption (especially after the crucifixion allusions in “Lift its
35 head to the blows . . . dead as nails” ll.23–4). “Windily” (l.12) can be read
36 as an echo of the “wind” (l.3) in the first stanza, a conventional emblem
37 of the spirit (this is how Thomas (2004) himself read it aloud in a de-
38 clamatory recording made in the 1950s). However, the text itself might
39 encourage a reader to read “windily” to match the vowel in “die” and
40 “lying” immediately preceding it, to echo “the windings of the sea” in
41 the previous line 11: “windily” in this articulation prefigures “twisting”
42 in the next line. And of course there is always the minor possibility that

1 “lying” is not physical rest but abstract untruth. Even the “characters” in
 2 the final stanza might be print-characters (heads being hammered) rather
 3 than people.

4 Overall, the poem is usually taken as a powerful assertion of resurrec-
 5 tive affirmation (this is certainly the Christian tone of most readings
 6 which appear online in discussions, blogs and book groups). The biblical
 7 resonance in much of the phrasing assists this reading: the prophetic tone
 8 of “shall”, the archaism of “be”, the gesture to crucifixion (“blows” and
 9 “nails”) and resurrection in “rise again”, the reference to “Faith” and the
 10 title which echoes Romans 6: 9 (“Death hath no more dominion”) are all
 11 unmistakable pointers. A reader of a literary sensibility might even hear
 12 echoes of John Donne’s “Death be not proud”, with its final triumphant
 13 line, “Death, thou shalt die!” or hear especially in a declaimed version the
 14 typical patterns of the *hywl*, the delivery of a Welsh sermon.

15 However, religion too can be read as a lacuna in the poem. On each
 16 occasion, these indicators are defeated or confused by various means. In-
 17 stead of a reader re-aligning the polarity of motion as I have described
 18 above as an aura effect, it is entirely possible that the mismatches of the
 19 first stanza are simply felt as confusions. Overall the poem seems to begin
 20 in the first stanza with resurrection, but the second stanza then non-
 21 sequentially describes the torture before death, and the final stanza
 22 without apparent continuity presents a landscape empty of people. The
 23 general sense of the first stanza is motion and the second is stasis, but
 24 the initial shift from physical to abstract (“lovers” to “love”) is reversed:
 25 racks and sinews, straps and wheels, the abstraction of “Faith” rendered
 26 concrete and physically snapped in two. Even the “unicorn” (l.16, itself a
 27 shift to a non-Christian mythological domain) does not do the running
 28 through, but is switched to render “evils” animate and wilful. The three
 29 stanzas do not fall easily into the three elemental domains of earth, sea
 30 and sky, as you might expect in a neatly lined-up text; instead they are
 31 scattered across the poem. The fracturing line 17 “Split all ends up they
 32 shan’t crack” follows the break in faith. This line is disjunctive also in its
 33 contraction of “shall” and its more colloquial “all ends up”.

34 The final stanza, then, is full of absent noise (the lacuna of “No more
 35 may gulls cry” l.20). Placing the negational element (“No more”) initially
 36 here locates it even further away from the “waves break loud” l.21, so
 37 that the noise of the latter has an even stronger lacuna edge and tangible
 38 sense. The final stanza turns animals (“gulls”), plants (“flowers”) and the
 39 weather (“rain”) into lacunae, and displaces people (“ears” and “heads of
 40 the characters”) altogether. Even the sun is rendered into a machine, that
 41 “breaks down”, with only an echo from “mad” of a mental breakdown
 42 and a lacuna-invocation of a person and a mind. Even without knowing

1 about Thomas' religious agnosticism, and in the light of all these conflict-
2 ing echoes and confusion, it is possible to read the recurring line "And
3 death shall have no dominion" not as redemptive but as despairing and
4 hopeless: after the physical world is gone and only abstractions remain,
5 death (and life) will have no dominion because there is no dominion left
6 to have.

7 This despairing reading, though, also seems uneasy, because the same
8 balanced confusions apply to the certainty of despair too. In fact, the po-
9 em's insistence on creating and maintaining lacunae is sustained through-
10 out and right to the end. Just when one perspective emerges that would
11 allow a consistent construal of phrases, then the poem moves to occlude
12 and neglect it with a balancing redirection. The poem, rather, is in a state
13 of suspension: even the title begins in the middle of a prior process, with
14 "And" pointing to the immediate but omitted past, "shall" then pointing
15 to the future, and the possessing verb "have" about to invoke a positive
16 attribute which is then revoked by negation. This maintenance of suspen-
17 sion is a feature throughout the poem: each stanza potentially occludes
18 the memory of the title, only for the title phrase to be repeated over and
19 over again. The cyclical nature of the universe is also invoked in the
20 phases of the moon, by life following death, by wheels, and by the ebb
21 and flow of tides, caused by the moon which begins the poem, and ending
22 with the death of the sun. The range of the perspective overall is geologi-
23 cal and astronomical. The final stanza on the seashore emphasises the
24 perspective of the reading as being on the edge, just as the lacunae that
25 are prominent in the poem are defined only as edges.

26 The cycles and fracturing, the unease and discomfort, and the blend of
27 fear and anticipation are all revolutionary, and it is important at this
28 point to remember that Thomas, like many British writers and thinkers
29 in the inter-war years, was a revolutionary socialist. Even without this
30 biographical context, there are textual echoes alongside the biblical: "the
31 wind and the west" (l.3) might recall Shelley's celebration of transforming
32 revolution in "Ode to the West Wind", written at the turn of the eigh-
33 teenth century when the wind of revolution was western and American.
34 The flowers, sense of yellowness ("sun" and "daisies", ll.22-6), and their
35 personification might bring to mind Wordsworth's famous dancing daffo-
36 dils, a poem also taken by some as a gesture to the revolutionary crowds
37 of eighteenth-century France. The west moon is a dark moon (a lacuna),
38 and the (red) star was prominent in the 1920s as the symbol adopted from
39 Marx and Engels by the Red Army soviet communists. The middle stanza
40 describes a physical struggle, the struggle of labour against the torture of
41 the ruling class (dominating rule is the most prominent sense of "domin-
42 ion", after all). There are no individuals in the poem, only collectives and

1 common purpose, “men” and “lovers”, “heads” and “characters”,
 2 “they” are always plural. The common language cadences of sprung
 3 rhythm take on a political significance in this reading, as does the swift
 4 shift to colloquial register in the fractured, revolutionary line 17 at the
 5 end of the second stanza. Lastly, the choice of “shall” denotes not reli-
 6 gious prophecy but a socialist inevitability of change and the coming rev-
 7 olution that will sweep all away.

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4. Literary criticism and language cognition

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The Dylan Thomas poem seems to be simultaneously assertive and de-
 structive, and its main affective organising feature is the ambivalent tan-
 gible absence provided by attentional lacunae. These are the main literary
 and readerly effect of the occlusion form of neglect (see *Fig. 1*). The poem
 is celebrated as a powerful statement; readers’ comments about it empha-
 sise its resonance in their lives and the world today. By far the predomi-
 nant reading of the poem by natural readers in online fora and blogs is
 the redemptive one, mainly though not exclusively Christian. The con-
 trary reading that I set out above—the despairing and nihilistic reading
 —is much rarer. The third alternative analysis is a historiographically-
 located reading that would be preferred, I think, by academic readers.
 All three global interpretations are justifiable on the basis of possible
 local construals of the texture of the poem, as I hope I have shown.
 Applying general cognitive scientific principles allows me to delineate
 these three possibilities clearly; it allows me to understand the detailed
 mechanics of interpretations that often occur below conscious awareness;
 it provides a currency and discipline for analysing literature that bring an
 external validity; and it allows me to distinguish possible readings from
 eccentric ones that are not text-driven. It is possible, of course, for fourth
 and more interpretations to be attached to the poem, but it seems to me
 that it would be extremely difficult for any interpretation to ignore or
 miss the fact that the lacuna effects of the stylistic negations dominate
 any reading of the poem. All readings must be judged valid only if they
 can be explained in terms that are cognitively plausible. This is the chal-
 lenge for literary scholarship.

The poem has been canonised both informally and by literary criticism
 in edited discussions, anthologies and teaching. What I hope to have
 shown in this paper is the basis for these judgements of value, presented
 in a way which is in accordance with cognitive poetic practice. I have
 focused on lacunae as specific examples of a general theory of how at-
 tentional neglect by occlusion can be linked to a sense of powerful reso-
 nance, as “felt absence” and echo. Cognitive poetics picks a way through

1 its source disciplines and the blend can sometimes create insights and con-
2 clusions that seem alien to those sources. It seems to me, though, that
3 there is a great value not only in the products of cognitive poetic explora-
4 tion, but in the manner of the investigation itself. No doubt better and
5 other models of attention will develop in cognitive science, and a more
6 evidential base for the phenomenon of resonance might emerge that is at
7 odds with what I have presented here. The test, in this case, will be if a
8 literary reading, honestly held and articulated clearly, cannot be ac-
9 counted for using existing cognitive theory. This then is the challenge for
10 cognitive science.

11 Of course there is a contradiction between the two challenges I have
12 just set out. The only valid interpretations are those which are cognitively
13 plausible, and cognitive science is an evolving discipline so we do not
14 comprehensively yet know whether a new mode in cognition could ex-
15 plain an eccentric reading. However, this paradox lies at the heart of
16 every form of human exploration, especially when the ground for dis-
17 covery is bound up with consciousness and awareness. Resolving the na-
18 ture of this paradox is the challenge for cognitive poetics.

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