

Chain and choice in filmic narrative

An analysis of multimodal narrative construction in *The Fountain**

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In this paper, we show how the intersection of chains of multimodal cohesive ties with choices of relations among sequences of filmic units provides a strong foundation for constructing filmic narrative. Until now bridging the gap between narrative concerns and fine-grained analysis of complex multimodal artefacts such as films has been difficult: fine-grained analyses tend to loose themselves in the wealth of detail revealed and high-level narrative analyses are often pulled towards subjective interpretations. Our definition and use of the constructs of multimodal filmic cohesion and of logical sequential filmic relations establishes functional analytic categories anchored both below, in the fine-grained detail of film, and above, in the range of interpretations that they delimit. We propose this as one way in which we can move towards a more empirically-grounded notion of transmedial narration.

1. Introduction

In this self-proclaimed age of the ‘visual’, one of the most prominent forms in which narratives of all kinds are produced and consumed is as films. It is therefore unsurprising that a broad range of constructs and approaches from narratology is now also finding application to the study of film (Chatman 1978, Branigan 1984, Black 1986, Grimm 1996, Schlickers 1997, Lothe 2000, Ryan 2005, Kuhn 2009). One component of the transmedial notion of narrative that this requires is to assume that film can, and perhaps should, be seen as a kind of ‘discourse’ or ‘text’. Since texts can, obviously, carry narratives, assuming film also to be such an entity would provide a ready explanation of how they too can function as a

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narratival medium. For this explanatory move to work, however, it is necessary to achieve a notion of ‘text’ that is sufficiently well articulated to support its application transmedially.

This kind of approach, although relatively natural to researchers whose starting point is language (cf. van Leeuwen 1985, Thibault 2000, Baldry and Thibault 2006), has not had an easy time within film studies. In the 1970s and 1980s there were several prominent proposals made within film theory for the adaptation of ideas inherited from linguistically-influenced semiotics – most influentially, but not exclusively, in the work of Christian Metz (e.g., Metz 1974). These approaches were received extremely critically and there remain, to this day, grave doubts as to the efficacy and relevance of language-based notions for any furthering of our understanding of film. These doubts concern not only accounts of film that explicitly proclaim their linguistic origins (e.g., Buckland 1991b, Colin 1995) but also accounts whose linguistic contacts are largely backgrounded, as is often the case in modern narratology (cf., e.g., the critique in Bordwell 2004).

In certain respects, this has had paradoxical results. The notion of ‘text’ is a powerful one and, given the highly structured and conventionalised nature of filmic expression, the idea of ‘film-as-text’ has proven difficult to resist. In many current introductions to film studies, therefore, it is commonly taken for granted that film is, in some sense, a text. But the connection to linguistic views of text has largely been broken. Film is taken as a text only in some analogical fashion that no longer encourages an exchange of results between the filmic text and the verbal. In this paper, similarly to the approach taken by Janney (this volume), we return to this issue and attempt a clarification relying on a specifically linguistic perspective on the phenomenon of textuality. However, before any application of linguistic constructs to film, we also consider it necessary to take seriously the criticisms that have been raised previously and, where possible, to address them. This will allow us to identify the particular kinds of linguistically-derived analyses that may sensibly be adapted for film since this cannot be done freely for all linguistically-derived models. It is precisely such inappropriate attempts at transfer that have in the past contributed most to justified critiques.

In the, sometimes quite heated, discussions in this area, several constructs have played a reoccurring role. In particular, we will focus here on the notions of ‘semiotic codes’, ‘inference’, ‘discourse’, and ‘syntax’. Our goal subsequently will be to illustrate how some of the tools that we have developed for analysing film can serve as a bridge between the film-as-viewed, i.e., what actually appears on screen, and narrative interpretation. For this bridge to function, it is necessary first to divide the work of interpretation appropriately. And for this, a clear understanding of the relations between semiotic codes, inference, discourse and syntax is of considerable importance. We will suggest that the connections usually drawn in fact

distort ‘textuality’ to the point where it cannot apply to film – thereby validating the criticisms that have been brought against semiotic and linguistic approaches. However, these distortions also render the weakened notion of textuality that results equally inapplicable to *verbal discourse*. A general overhaul of the conceptual area is therefore long overdue.

The reconstrual we suggest can be sketched in three stages. Our first step is to untangle the problematic dichotomy typically drawn between semiotic codes and inference – a dichotomy which itself rests on a further inappropriate implicit alignment of semiotic code and syntax. It is relatively common in work on film to see proponents lining themselves up as being ‘for’ one (e.g., inference) and ‘against’ the other (e.g., semiotic codes):

I am not a code/semantic theorist. Indeed, throughout my career as a film theorist, I have always explicitly stressed the importance of inference over decoding as a model for many aspects of cinematic comprehension. (Carroll 1996: 331)

Echoes of this orientation are in fact found throughout modern approaches to multimodal artefacts of all kinds. Indeed, the same problem arises even among those who are happy to accept notions of ‘code’ for what it can provide, but who then go on to delimit just what one can expect from such an approach. Monaco, for example, informs us:

Yet while the code system of semiotics goes a long towards making possible a more precise description of how film does what it does, it is limited in that it more or less insists that we reduce film, like language, to basic discrete units that can be quantified. ... [Semiotics] describes the language, or system of communication, of film very well. But it does not easily describe the artistic activity of film.

(Monaco 2000: 64)

The notion of ‘semiotic code’ adopted here is one which is most analogous to ‘syntax’ – it is conceived as a collection of ‘rules’. This is itself aligned with an overwhelmingly *static* conception of semiotic resources as illustrated in the following:

The problem with the Saussuro-Hjemslevian orientation is that it provides no perspective either on the dynamism and the creativity of the sign and the meaning process or on the *interpretation* regularities and rules of *inference*.

(Parret 1983: 32; also cited in Buckland (1991a))

As long as ‘semiotic code’ is placed alongside static, non-inferential semiotic resources analogous to syntax in this way, then the following resounding condemnation from Bordwell is entirely appropriate:

Despite three decades of work in film semiotics . . . those who claim that cinema is an ensemble of ‘codes’ or ‘discourses’ have not yet provided a defense

of why we should consider the film medium . . . as plausibly analogous to language. (Bordwell 1996: 18)

Film is, indeed, nothing like a semiotic code modelled on the static view appropriate for linguistic syntax; but, as we shall see, neither is language.

The second step in our reconstrual considers the nature of linguistic discourse and its relationship to inference. Here again there has been a tendency to rely too much on views of syntax: Currie (1995), for example, spends considerable ink arguing that discourse is not like a logical combination of propositions (the static syntactic view) and so must occupy a completely different realm in which inference is the order of the day. This perspective is also echoed, although in a considerably more sophisticated fashion, in influential linguistic approaches such as Relevance Theory (Sperber and Wilson 1995). In this account, semantic representations are derived largely automatically following a semiotic code, but only in order to serve as a starting point for the real process of inferential interpretation (Sperber and Wilson 1995: 175–176). This again draws the distinction between coded, non-inferential mechanisms, and a further process of inferential interpretation.

This is more or less the position taken by, for example, Bordwell with respect to film (Bordwell 1985; 2007), or Fludernik (2001) and Currie (2010) with respect to verbal narrative. The principal work of interpretation, for both film and text, is in the performance of inference. While this is no doubt part of the story – in order to interpret discourse, there must be inference – important issues concerning the nature of this inference remain to be clarified. Sperber and Wilson's position on this is very clear:

Inferential communication involves the application, not of special-purpose decoding rules, but of general-purpose inference rules, which apply to any conceptually represented information. (Sperber and Wilson 1995: 176)

Cognitive approaches similarly assign inference to the general problem-solving skills of an interpreting cognitive agent. Strongly pragmatic or contextual approaches to language and avowedly non-codal approaches to film then share a position in which: (a) inference takes over the ‘significant’ work and (b) that inference is not influenced by the specificity of the semiotic code involved. Only then does it become possible to position oneself explicitly towards a pragmatic orientation *instead of*, or *in opposition to*, notions of semantics and semiotic codes. We shall argue that in fact we need both: semiotic codes and inference belong together. The question is precisely *which kinds* of inference belong *where*.

The final step in our reconstrual then returns us to discourse and dynamism, and to the, in our opinion, incorrect assumption that semiotic codes are only a matter of static rules and non-inference. In particular, we realign semiotic code

with discourse and dynamism rather than with the inherently contradictory pairing of discourse and staticity. To do this, we build directly on more recent views of discourse organisation and interpretation developed in both formal and functional linguistic work on discourse representation and discourse semantics. The essential idea, adopted from Asher and Lascarides (2003), is that it is beneficial for accounts of discourse to distinguish different layers of discourse interpretation intervening between sentence semantics and fully contextualised interpretation. Each layer is then made only as ‘powerful’ as necessary to get its immediate job done.

We prefer this to earlier models, in which fully context-aware inference starts at an as early stage in interpretation as possible, because such approaches fail to explain how an unconstrained process of general inference gives rise to the very focused and intersubjectively verifiable interpretations that interpreters reliably form when confronted with particular constructions and patterns of discourse development. In theory, many interpretations should be possible depending on context but, in practice, it appears that the form of the discourse and the fine-grained linguistic properties of the utterances constituting that discourse offer precise instructions for which paths of inference are to be followed and which not. We then see these ‘instructions’ themselves as a semiotic code, but one which relies crucially on its own distinctive processes of dynamic inference. This is the level of *discourse semantics*, a resource that, on the one hand, allows particular meanings to be imposed on an unfolding discourse and, on the other, directly controls when and how appeal is to be made to world knowledge and context.

For verbal language, this level of organisation has now received considerable attention from both formal (cf. Kamp and Reyle 1993, Asher and Lascarides 2003) and functional (cf. Martin 1992) perspectives. Asher and Lascarides describe, for example, how this level can be formalised within a logic of its own which is strictly less powerful (and hence more constrained and amenable to efficient processing) than the generic inference mechanisms assumed for contextual knowledge in general. Martin, in a complementary approach, sets out several functional regions of the discourse semantics layer, detailing in each case the range of semiotic alternatives provided. Our proposals for film illustrated below build on both of these foundations. Our argument will be that for film, just as for language, a level of constraining discourse semantics is appropriate and necessary for mediating between the details of a film-as-seen and the range of interpretations that may sensibly be built for that film (for further discussion of this for semiotic modes in general, see: Bateman 2010).

This general architecture for textual meaning has several beneficial properties that mesh well with the requirements of film. We mention two here before proceeding to our illustrative analyses below.

First, one frequently observed difficulty with researching film with a methodology similar to empirical linguistic analysis is the sheer quantity of information that is made available. Attempts to build on precise transcriptions of what a film is presenting to the viewer generally founder because there is little systematic basis for deciding which aspects of the data might be significant and which not. Selection has to be made with respect to the interpretation being made and this opens up the possibility of only examining data that supports the intended interpretation. Such partial selections have a much reduced claim to empirical adequacy and rely considerably on the skill and experience of the analyst. Explicit accounts of discourse semantics, on the other hand, allow us to characterise which aspects are to be attended to for the purpose of building discourse interpretations and which can be ignored. The analytic tools that we introduce therefore perform precisely this role of pre-structuring our access to filmic material so as to focus on the cues being mobilised for filmic discourse construction. It is in this sense that we see these tools as a bridge between filmic material and contextualised narrative interpretation.

Second, it is now commonly accepted that there is no direct one-to-one relationship between the details of filmic form and their contextualised interpretation. Any particular filmic device can be taken up and used in a variety of ways: a fade-to-black must not indicate a punctuation point between scenes, a glance off screen followed by an object must not indicate an object gazed at, a view from above must not indicate power relationships, and so on. As Branigan phrases it:

Every process of signification is a *formal play of differences*. . . . An important consequence of [this belief] is that there are no inherent meanings. For example, a dissolve in film does not inherently signify a short lapse of narrative time; in a particular *system*, however, a dissolve may mean just that. . . . In addition, the meaning is not unique – other physical properties may be replaced by another device . . . precisely because it is system, not material form, which determines meaning.

(Branigan 1984: 29)

Similar positions are voiced with respect to film by Bordwell (2004), Wulff (1999: 40), M\"oller (1978), Mitry (1963) and many more, and are increasingly finding adherents within narratology for textual narratives also (Fludernik 2001: 102–103).

Although this may sometimes be thought to establish a further difference between language and film, actually the opposite is the case. Within verbal texts there are also few linguistic properties that lead unequivocally to particular discourse interpretations. The kind of meaning attribution at work has been shown to be essentially *abductive* and *defeasible* in the sense of Peirce (cf. Wirth 2005). Abduction is the logical basis of the discourse semantics proposed by Asher and Lascarides (2003) and also helps establish the distinction between ‘static syntactic’ interpretation and ‘dynamic discourse’ interpretation that we introduced above. However,

whereas we now have quite detailed proposals for the workings of the discourse semantics of verbal language, for film this remains broadly unexplored territory.

The remainder of this paper will therefore be concerned with precisely this area of filmic discourse semantics. We will show that well developed linguistic views of discourse can now provide a finely differentiating analytic framework for film also – as long as those views are extended appropriately for the specificities of the filmic semiotic mode(s). This will demonstrate the kind of analysis that a combination of modern discourse interpretation mechanisms from linguistics and approaches to film makes possible. Our analysis will address one specific film using some of the descriptive and theoretical tools that a discourse-semantics based view of film provides. We will see how meanings can be tracked through time as they develop and how an explicit rendition of the discourse mechanisms allows us to show quite precisely how meaning-in-context is constructed *semiotically*. We see this as ontologically prior to any cognitive interpretation in that it describes just what kinds of interpretation might be pursued and why.

Our detailed discourse semantic analysis revolves around several scenes from Darren Aronofsky's *The Fountain* (2006).¹ The film's complex and multiple layers involve three parallel storylines revolving around a man (played by Hugh Jackman) searching for a cure for his wife's terminal brain tumor. Past and future narratives interweave with the present: Rachel Weisz stars as both the man's beloved and the Queen of Spain, and Jackman is a Spanish conquistador in search of the Fountain of Youth, a modern-day scientist, and a futuristic astronaut trying to hold on to eternal life and love. *The Fountain* has already received substantial attention due to its unusual narrative structure and the discussion often focuses on how the form and structures of the storylines reflect the complexity of symbolic questions raised in the film. For instance, in an interview with SEED magazine (November 21, 2006), the director mentions that '*The Fountain* is about the biggest questions that people have been asking since we started asking questions: Why are we alive? Why are we born? What happens when you die?' and that the story construction of this film is inspired by how ideas can interconnect like a Russian doll, with one fitting inside the other. We will argue in our analysis that, despite the film's apparent complexity, the viewer is nevertheless guided by the discourse semantics so as to construct a narrative unfolding that avoids and restricts disorientation, while simultaneously opening up a relatively precise range of preferred interpretations.

1. All images and timings used in this paper are taken from the two DVD special edition version of the film, released by Arthaus and Kinowelt in 2007. The film itself is a Warner Brothers, Regency and Epsilon Motion Pictures presentation, written and directed by Darren Aronofsky, with story by Darren Aronofsky and Ari Handel.

2. Methods of analysis

“Never trust the teller. Trust the tale.” – D.H. Lawrence

The theoretical framework that we adopt for supporting the application of principles developed originally for language to film is that of socio-functional semiotics (Martin 1992, van Leeuwen 2005). Within this view formal units of film analysis, such as the ‘shot’ are seen as *realising* narrative but are not narrative units themselves. ‘Realisation’ is the semiotic relationship that holds between strata, which is often characterised as a relationship of co-patterning – that is, patterns at a more abstract level of description (higher stratum, such as discourse) regularly occur together with patterns at less abstract levels of description (lower strata, such as filmic devices and structural sequences). This relationship can vary across distinct text types (genres) as well as across the unfolding of an individual text, and so provides precisely the kind of flexibility that is required for film. It is this provision of several distinct strata related formally by realisation that allows us to start bridging the gap between the formal devices employed in a film and their contextualised interpretation.

To introduce our methods, we focus on one short segment from the beginning of the film consisting of just 12 shots; the sequence is shown in Figure 1. To provide some context for the discussion, we describe here very briefly just what is shown without analysis. The sequence follows the first real shot of the film (i.e., the first story-related shot following lead-in logo sequences), which shows a slow zooming-in close-up of a piece of parchment or similar material on which a hand is just finishing writing a rendition of a verse from Genesis with an old fashioned ink pen (which can also be heard, scratching its way across the paper): “Therefore, the Lord God banished Adam and Eve from the Garden of Eden and placed a flaming sword to protect the tree of life. Genesis 3.24” The film’s narrative will revolve crucially around this ‘tree of life’ and so this already establishes some of the key elements that reoccur.

When this handwritten text no longer fits entirely within the frame due to the ongoing zoom-in, there is a slow cross-fade with the first shot of our sequence, shot 2, which is itself a contrasting zoom-out from a circular pattern that gradually reveals itself to be the central segment of an ornate golden cross flanked by two candles forming an altar. Shot 3 follows with a hard-cut showing what will turn out to be the main male character of the film, first looking down and then suddenly up. Shot 4 is another hard-cut to the back of one or more figures standing before two candles. The figure in the centre looks down and makes to take something out of a pocket, which shot 5 then shows. The main character raises what has been taken out of the pocket to his nose and breathes in deeply (shot 6); this action

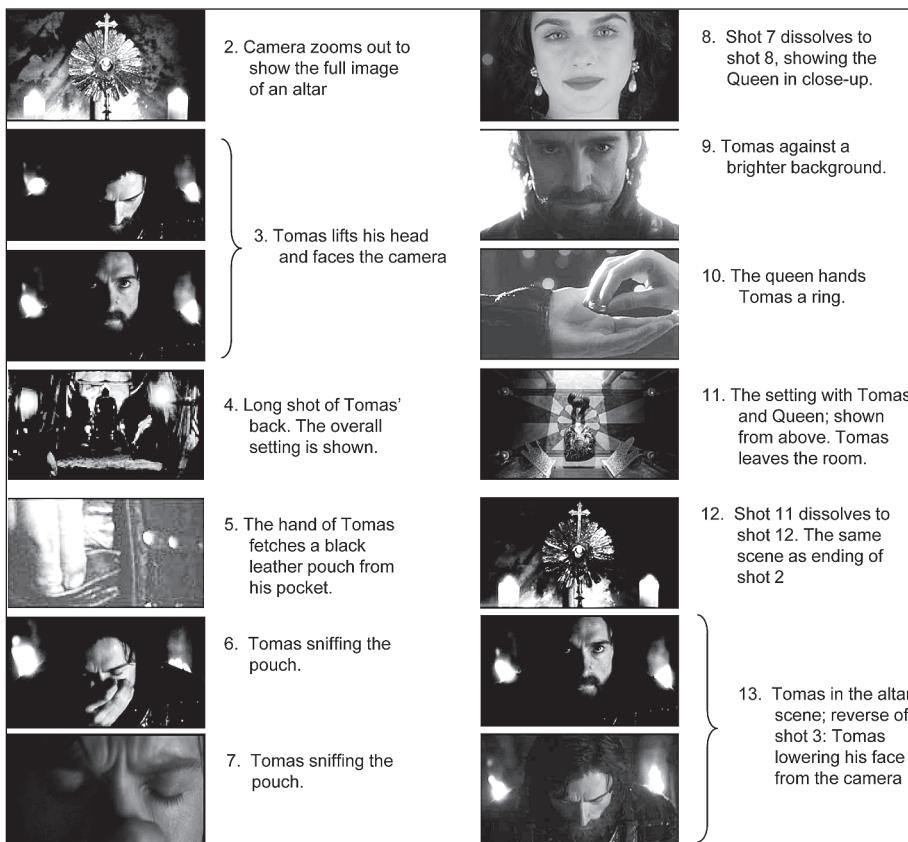


Figure 1. Example sequence selected from Darren Aronofsky's *The Fountain* (2006): shots 2–12 from the film (0:0:50–0:1:50, all times approximate)

is accentuated by a cut-in to shot 7, which then dissolves to shot 8, a close-up of the main female character's face. Shot 9 shows a matching close-up of the main male character, now against a brighter background and in shot 10 a ring is exchanged. Shot 11 shows a view vertically down on the male character leaving the female character. This then cross-fades back to the same image of the alter shown in shot 2 and then on to the main male character in a reversed repeat of shot 3. Atmospheric music runs continuously from the cross-fade into shot 2 until the end of this sequence, when some punctuating slow drum beats occur. Naturalistic sound runs throughout; background jungle noises accompany the shots around the altar. Finally, following this sequence, the viewer sees the main character taking a ring out of the pouch that he took from his pocket. He looks at it and finishes his prayers with the words "let us finish it". The film then begins in earnest.

2.1 Identification: Cohesive reference in film

The first discourse semantic method we call upon to unravel how viewers are guided to particular ways of comprehending film narratives and then kept within particular specifiable interpretative constraints is the framework of *filmic identification* (Tseng 2009). This analytical method is used for uncovering the workings of one particular kind of *cohesion*, and provides a mechanism for bringing together narrative elements such as characters, objects and settings throughout a film. Cohesion itself goes back to original proposals by Halliday and Hasan (1976) for describing verbal texture; it essentially relies on a classification of the ways in which textual elements can depend upon previously presented elements in a text in order to construct 'chains' of textually related elements. Cohesion is often appealed to as a mechanism for relating information drawn from distinct semiotic modalities (cf. Royce 2007) and has also occasionally been suggested for the analysis of film, for example by Palmer (1989), Bordwell (2006) and Janney (this volume).

The approach to filmic cohesion followed here, however, draws more particularly on a multimodally extended version of Martin's *identification* discourse semantic system as developed for language text (Martin 1992: Chapter 3). According to Martin, the choices of the identification system in natural language realise the identity tracking of people, places and things throughout a text; and the structures of identification, namely, how relevant people, places and things are actually tracked highlights the unity of any specific text. Whereas Martin sees this resource as a component of discourse semantics for language, Tseng (2009) takes this further and develops an identification system specifically for film. As we shall see, filmic identification provides a powerful discourse semantics for examining cohesive ties between film elements within and across images. In this way we are able to capture not only the intuition that this is an area of semi-otic work shared across language and film but also the ways in which it is necessary to differentiate between the two modes.

The mechanisms of filmic identification describe the resources that realise the presentation of filmic people, places and things (characters, settings and objects) and the resources that track the reappearance of these narrative elements as a film unfolds. These resources are presented in Figure 2, modelled as a *system network*. Such networks are used in systemic functional linguistics to show the abstract paradigmatic 'choices' available for language users drawn from the meaning potential of their language (Halliday and Matthiessen 2004). The filmic system in Figure 2 correspondingly shows the functional potential for cuing identities of characters, objects and settings throughout a film. In these networks, contrasting options are brought together into *systems*: for instance, in the system

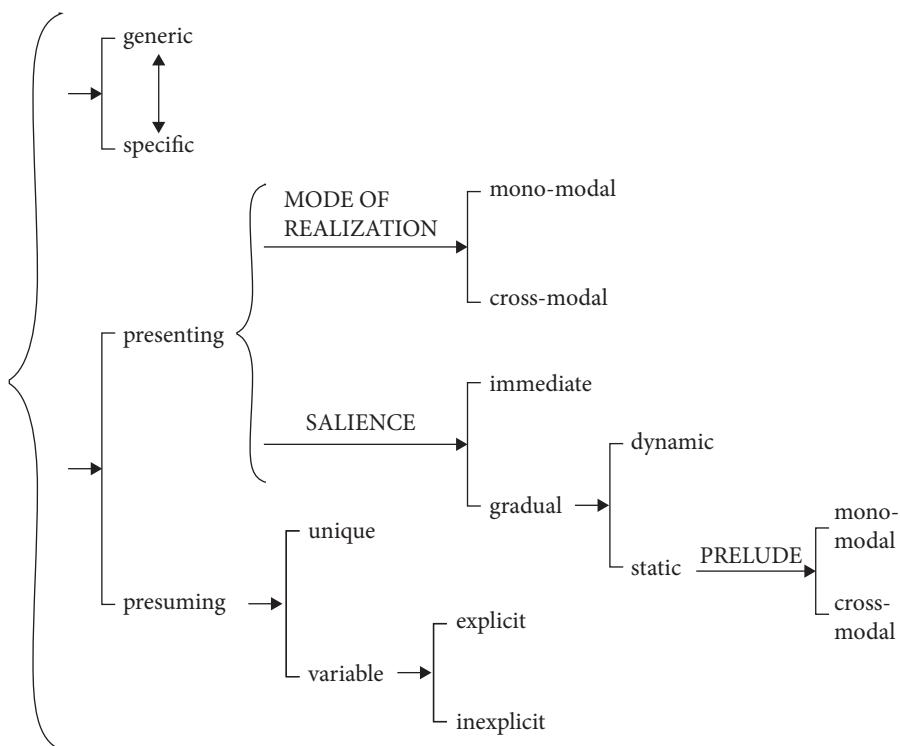


Figure 2. The filmic identification system developed in Tseng (2009)

of [presenting/presuming] only one of the two features may be selected at a time. The networks can also employ *simultaneously* available systems represented by grouping systems together with a right-facing curly bracket. In Figure 2, for example, choices need to be made from the features presented by *both* the two systems [generic/specific] and [presenting/presuming]; analogously, one option from each of the systems of MODE OF REALIZATION and SALIENCE needs to be selected, thereby giving rise to sometimes quite extensive cross-classification.

We now illustrate the operation of this network of cohesion options in film by considering the presentation of the main character, Tomas, in the sequence extract shown in Figure 1.

After shot 2 presents the setting as ‘a room with an altar’, the identity of Tomas is *presented* for the first time and thus in shot 3 it is appropriate to choose the feature [presenting] from the system [presenting/presuming] to capture this; this is the character’s first appearance and so no presumption of prior presentation is made. As the network in the figure shows, certain feature selections then also lead on to finer classifications; in particular, the [presenting] option leads on to two

further dependent choices, one from the dependent system MODE OF REALIZATION with the options [mono-modal/cross-modal] and one from the SALIENCE system.

In the present case, Tomas is presented only visually, and so the realization selected under MODE OF REALIZATION is [mono-modal]. For the SALIENCE system, the fact that in shot 3 the character is initially shown *looking down* means that a viewer cannot identify the person uniquely at first. The salience of the presentation is accordingly constructed following the option [gradual]. In gradual presentations a character may be placed in the background at the outset of the presentation and then be *gradually* foregrounded through camera movement or by the character approaching the camera; alternatively, the gradual presentation of a character can also start by revealing some physical parts of characters/objects before their identities are fully and explicitly shown. This is the case here since later in the shot the character looks up, revealing his face. Accordingly, the features selected are [gradual] and [static], since the character is not picked out from a background by movement.

Preludes of the kind used here – i.e., first showing the head and only later the face – are often deployed so as to leave the viewer in doubt about the identity of the character presented for some time. In the present case, however, the uncertainty is dispelled almost instantly within the confines of this single brief shot. The final effect of the unfolding of shot 3 is therefore actually more akin to selecting the feature [*immediate* salience]. Unfortunately, a detailed discussion of fine-grained ‘transitional’ effects of this kind would take us too far afield and so we will have to ignore this for present purposes.

Finally, in addition to the two systems dependent on [presenting], a choice must also be made from the system of [generic/specific]: the two features available here refer to the degree of generality of identities of characters, objects and settings. This system is modelled as a continuum rather than as contrasting options – realizing generic and specific identities in film is not an either/or choice, but a continuum of relative degrees of generality, varying from ‘the most general characters, objects and settings’ to ‘specific individual identities’. This generality of identities can be manipulated in film by several strategies. For instance, a character showing certain visual attributes that represent specific social types that contrast with the ‘background’ assumed in some film is regarded as less generic than any character without such social cultural cues: an example would be the scarf worn by Muslim women when seen in a German or English context. Moreover, a generic character, although unnamed or unlabeled in the narrative, can be gradually ‘specified’ when he or she repeatedly appears and is recognized by viewers as a certain specific character. The present case is quite interesting in this respect. The main character’s name is not specified throughout the extract and so he is not specifically identified

verbally. Nevertheless, the high salience attributed to him (close-up, centred in the image, appearing to act and respond to the immediate environment) speak for his identification as some specific individual with which the film will be concerned rather than a generic person being shown for illustrative purposes.

The overall discourse strategy describing the main character's first presentation is accordingly given by collecting together all the features selected from the network for this appearance of this filmic element. In the present case this gives us an identification strategy of *presenting* a character with [*quite specific* identity] by means of a [*mono-modal* realization] with [*immediate* salience]. Descriptions for this kind can be constructed in a similar way for all the narrative elements that might appear. The network of Figure 2 is therefore intended to capture the range of possible identification strategies supported by film, while the actual features selected in any segment characterise the individual film in relation to the background offered by the potential as a whole.

This analysis then forms the basis for a further step that goes considerably further towards revealing useful patterns within a film. This involves combining the cohesive strategies adopted across a filmic segment for each of the individual elements identified in order to construct *cohesive chains*. Cohesive chains are formed whenever particular elements are placed repeatedly in sequences of cohesive ties over the unfolding of a text. Whereas any element in a textual artefact typically enters into a large number of cohesive links with other elements, it has been observed in work on language texts that a particularly strong textual role is played by the cohesive chains rather than the individual elements (cf. Hasan 1984). Since the chains we are focusing on here are concerned with tracking identification strategies, we term them more specifically *identity chains*. Tseng (2009) applies and develops the technique of constructing such identity chains further for film; we illustrate the application of this technique as follows.

Within the extract under analysis five prominent narrative elements of character, object and setting can be identified: two settings, one including Tomas at the altar and one containing both Tomas and the Queen 'somewhere else', the Queen herself, and the ring (and its pouch). Each of these participates in a cohesive chain made up of a sequence of cohesive relations of the kind used to classify Tomas' appearance above and this shows their contribution to the unfolding text. Other narrative elements that may potentially have been relevant simply due to their presence in shot (e.g., the frame-like object to the right of shot 4) fall away at this point because they do not participate in chains. Focusing on chains thus allows the analysis to be 'self-selecting' in that a strong position is taken on just what is being constructed *textually* to be significant for the discourse and what is not. This serves a crucial function in allowing 'image elements' to emerge rather than trying in advance to define what elements an image may contain and which not.

The cohesive chain for the main character (which we will now be able to identify as the main character precisely because of his reoccurrence in cohesive chains) then continues as follows. In subsequent shots where this character appears, we can identify options taken up in the identification system that relate primarily to his identity being tracked as *presumed* in the visual mode. In shots 6, 7, 9 and 13, the choices realising identity tracking along the Tomas chain are accordingly: (1) [*specific* identity] from the system of [generic/specific], subsequently growing stronger because of repetition and the ongoing following of his actions, and (2) [*explicit* reappearance] under the [unique/variable] and [explicit/inexplicit] systems because, first, his identity is not considered a [unique] identity that needs to be widely-known in the viewer's culture and, second, the reappearance of this man's identity, whether verbally or visually, is realised *explicitly* with his face shown frontally. In contrast, in shots 4, 5, 10 and 11 the character is tracked with the two choices: (1) [*specific* identity] from the system of [generic/specific] as before, and (2) [*inexplicit* reappearance] from the [unique/variable] and [explicit/inexplicit] systems – because, again, Tomas does not have a culturally *unique* identity and because in these shots, Tomas' identity is realised through viewers' recognition of his physical parts cued by continuity editing rather than by his frontal image. This is shown graphically in the left-hand chain of Figure 3; maintenance of filmic identity chains is shown using arrows that link successive elements back to previous elements of the same chain and which are labelled to indicate which features from the identification network were employed. We can readily see, therefore, that Tomas is the dominant identity in this sequence because he is tracked in almost every shot with either [explicit] or [inexplicit] reappearance.

The second chain displayed in Figure 3 gives the corresponding identity tracking information for the setting at an altar. This is introduced in the visual mode in shot 2, presented with [gradual salience] because the full image of the altar is actually slowly revealed with a camera zoom-out. The following links from shot 3 to shot 6 point back to the first link because the viewers are signalled by the continuity editing (particularly by the establishing shot in shot 4) that the setting of these shots is the same, i.e., where Tomas is standing at the altar. The image of the altar in shot 12 re-establishes the chain: the [*explicit* reappearance] of the altar cues the return of the setting from the inserted setting with the Queen.

The other three main narrative elements of this extract, the 'ring/pouch', the second setting including both Tomas and the Queen, and 'the Queen' are chained in Figure 4. The element of 'ring/pouch' is presented visually as some general object fetched by Tomas from his pocket in shot 5. Its reappearance in shot 6 and 7 is cued through match-on-action, i.e. through Tomas' continuous action across shot 5 and shot 6. In shot 10, the link of the chain is realised as a ring rather than the pouch but still connects back to the previous links as an [*explicit* reappearance].

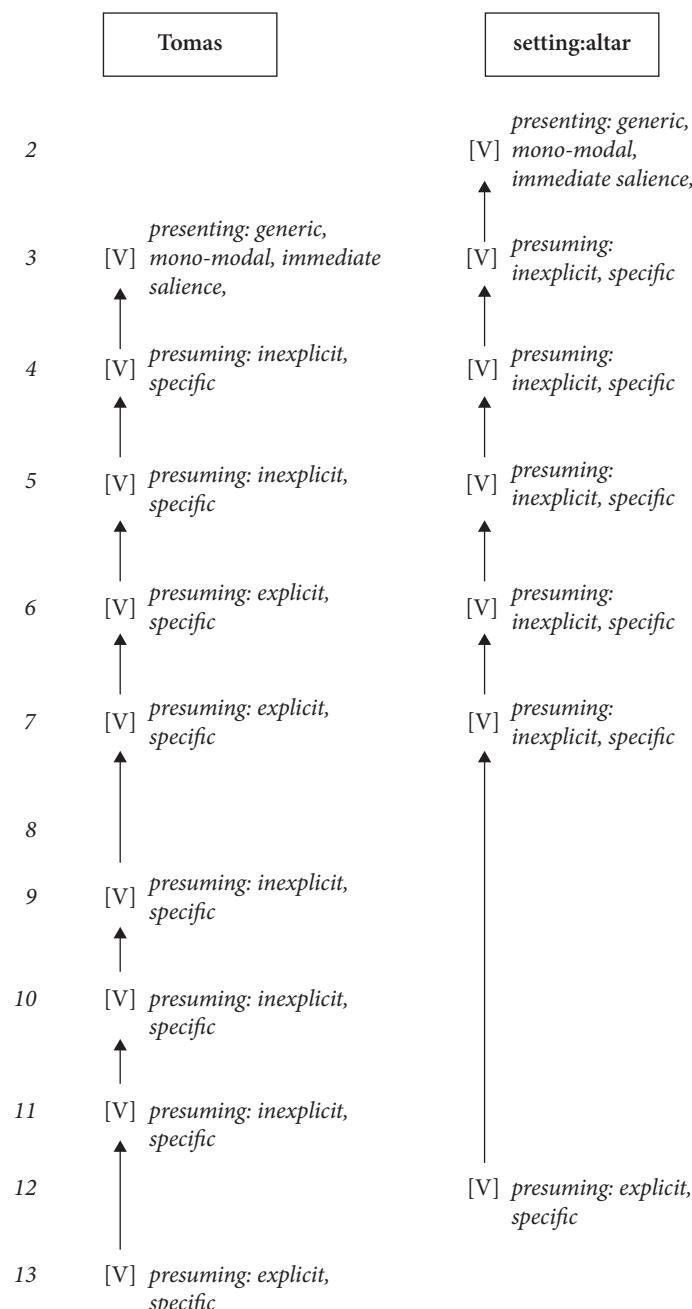


Figure 3. Identity chains of *Tomas* and *setting at the altar* isolated from the beginning sequence of *The Fountain*. Transcription conventions: [v] = visual mode, numbers on the left give the shot number, italic text: the choices instantiated from the identification system

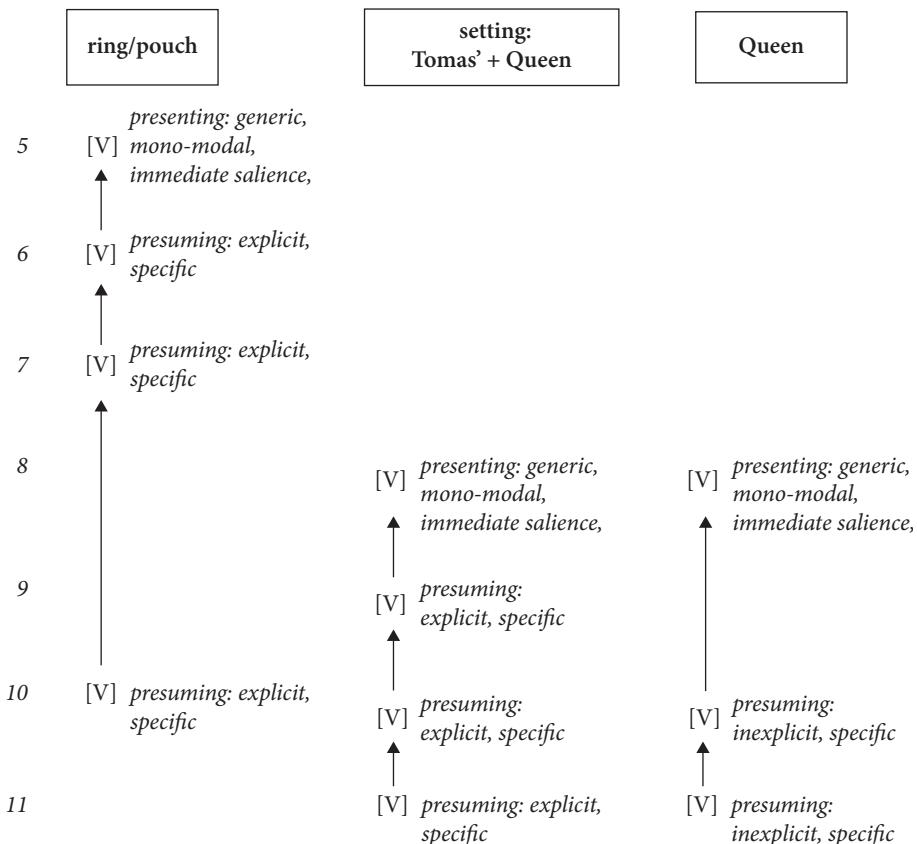


Figure 4. Identity chains of *ring/its pouch*, *setting with Tomas and the Queen*, and *Queen* from the beginning sequence of *The Fountain*. Transcription conventions as in Figure 3

The relation used for building cohesive chains of this kind can therefore deviate from strict identity – in particular, the cohesive tie in this case is similar to the linguistic notion of *meronymy*, i.e., the part-whole relationship of the ring and its ‘container’.² The exact relation between the ring and the pouch is only explicitly shown in a later shot when Tomas is seen uncovering the pouch and taking the ring out from inside it; nevertheless, this beginning extract already strongly suggests that the pouch Tomas has in hand is related in some way to the Queen by virtue of its use as a trigger in the dissolve to the Queen.

2. Another possible relationship is analogous to *hyponymy*, the class-subclass relation. For the full treatment of establishing cohesive relations of meronymy and hyponymy in film, see Tseng (2008) and Tseng (2009: Chapter 4).

Finally, the shortest chain, that of the Queen, is presented with a close shot of her face and thus with [immediate salience]. Her identity is tracked again in shot 9 and 10. Here the choice instantiated from the system is [inexplicit reappearance] because she is not seen frontally. Nevertheless, the strategy of continuity editing from shot 7 to shot 10 suggests that the one who interacts with Tomas in this setting remains the same person.

This introduces the instantiation of choices from the filmic identification system and how those choices give rise to patterns of cohesive identity chains operating over a film sequence. The chains come to serve a role analogous to narrative or textual ‘participants’, ‘settings’, etc. while *relations between* chains anchor them into more abstract narrative configurations. These abstract narrative configurations are robust constructions that go beyond particular variations in shots and sequencing. Thus, in the present case, we see the chains identified and their interactions constructing a narrative event of the following form, more or less regardless of the temporal ordering employed and the shots presented:

[At the altar] [Tomas] holds the [pouch/ring] which has been given to him
[at some other time and place] by the [Queen].

Each of the elements here are then available for gathering further relationships and properties when brought into interaction with other cohesive chains as the film proceeds. In Section 3 below we will consider in closer detail the contribution of this style of analysis in effectively bringing to the fore how specific kinds of cohesive devices are mobilised to guide and constrain viewers’ narrative comprehension and interpretation as a film unfolds.

2.2 Logical relations between shots: Paradigmatic organisation

The analysis of the previous section can be described as *element-based* in that it provides criteria for isolating and relating individual elements within shots and sequences of shots. It is also useful, however, to characterise relations *between* shots – indeed, this is the more traditional area of filmic description falling within accounts of *montage* (cf. Reisz and Millar 1968, Monaco 2000). To approach this aspect of filmic organisation from the perspectives offered by discourse semantics, we build here on the often noted similarity between inter-shot filmic relations on the one hand and inter-clausal discourse relations or linguistic connectives on the other (cf., e.g., van Leeuwen 1991, Janney this volume). More specifically, we draw on the resources of the discourse semantics stratum concerned with *conjunctive relations* (van Leeuwen 1991, Martin 1992). The basic framework is again, analogously to the discussion in the previous subsection, a particular extension of those

resources for the specificities of film; the extension is motivated in detail in Bateman (2007).

For the purposes of the current paper we focus on a small set of distinctions offered by the full network of discourse semantic relations of filmic conjunctive relations. In particular, we use distinctions concerned with spatio-temporal continuity and with whether a second shot is anchored or focalised to the perception of some character shown in the shot preceding – as, for example, when a dream or perception of a character shown in the first shot appears in the second shot. In analogy to the treatment of such relations within systemic-functional grammar (Halliday and Matthiessen 2004), we term this inter-shot relation [projecting]; there are clear overlaps here with, for example, Branigan's (1984) extensive treatment of 'point-of-view' sequences. Space precludes a full presentation of the structural consequences of these semantic distinctions – full details are again provided in Bateman (2007).

Applying these distinctions to the illustrative *The Fountain* fragment discussed so far allows us to draw out the following properties. First, we check for each successive pair of shots which relations may hold. This decision should be made as far as possible on the basis of the visual material presented within the shots being analysed and the manner of the transition between shots. Focusing attention in this way allows us to be quite specific about the uncertainties and interpretative possibilities that a film sequence opens up for its viewers. Considering the collected import of the shots 2–7, we have the progressive construction of a spatio-temporally continuous scene. In the shift from shot 7 to shot 8, however, the film gives a strong indication of projection: the cut-in from shot 6 to shot 7 focuses attention on the experiencing subject and the dissolve between shot 7 and 8 to a completely different colour tonality without the jungle sounds accompanying shots 1–7 all converge on a shift in plane of 'reality' of some kind. Here, there is no information about the spatio-temporal relationships across the transition. Finally, shot 11 again by means of a dissolve takes us back to a known scene and the viewer is signalled that the inserted projection sequence has ended.

In the analysis below we will focus particularly on the distinction between projecting and non-projecting sequences and the extent to which *The Fountain* mobilises this resource for shifting between its various storylines.

3. Complex narrative construction in *The Fountain*: Analysis and resolution

In this section, we apply the analytic methods now introduced to describe precisely how one of the main narrative effects of *The Fountain* is achieved. As already

mentioned, the film unfolds in three widely different spatial-temporal settings, or 'diegetic planes':

1. an ancient story of Spanish conquistador Tomas (Jackman), Queen Isabel (Weisz) and the discovery of the Tree of Life hidden amidst some Mayan pyramids,
2. a contemporary story of Dr. Tom Creo (Jackman) and his wife Izzy (Weisz) with her dying from a brain tumor and his frantically conducting experiments on lab monkeys trying to find a cure based on preparations made from samples from a tree from Guatemala,
3. a futuristic story with a space traveller (Jackman) flying in a bubble containing a large dying tree that he needs to save towards a nebula in the constellation of Orion.

Although these individual 'stories' might have been maintained separately, each with a certain internal consistence and purpose, one of the primary structuring effects of the film is instead to present them as essentially intertwined and inter-related. This serves the narrative purpose of showing differing facets of individual characters, particularly those of the main character, and how those facets inter-relate and contribute to individual change. The director refers to the overall story as one man's past, present and future and so the story events are interwoven in a fashion which highlights the close interconnectedness of the man's experiences in the three times portrayed.

There are many ways in which the communication of such a structuring might be attempted. For example, the film could simply cut from one strand to the other and rely on the viewer picking up cues of similarity and parallels; many films of course work in this way. *The Fountain* takes a different approach, however, and employs more explicitly filmic strategies for constructing these inter-relationships. These strategies manipulate cohesive chains and discourse relations in order to assert connections in a particularly clear fashion. To show this, our analysis will focus mainly on three transitions across the three different storylines that occur early in the film: the first example realises the film's first transition from the setting of the past to the future, while the other two concern transitions from the future to modern time. The film relies heavily on repeated elements, motifs and sequences of various kinds and, as we shall see, our latter two examples closely parallel one another.

A central aim of our analysis will be to illustrate that the analytic methods we have now presented help explain just how it is that viewers are kept safely within particular paths of narrative interpretation despite the, sometimes quite abrupt, changes across levels. More specifically, we will see how the tight narrative link, and even continuity, between the different strands is clearly signalled to viewers

even though the logical relationships that can be recovered between scenes are quite underspecified.

3.1 Transition 1: From the past to the future

The first example is transcribed in Figure 5. It takes place when the conquistador from old Spain is fighting with a Mayan priest. Shot 1 is an establishing shot showing the priest on the left side of the frame waving a flaming sword (cf. “a flaming sword flashing back and forth”, Genesis 3:24, *New International Version*) at the conquistador, who is shown on the right side of the frame. Shot 2 is a close-up of the priest continuing the action of the previous shot, swinging the flaming sword from left to right in front of him so that eventually the entire frame is taken up by the flame. Transition between the diegetic planes is then realised in the dissolve to shot 3, which reveals coming out of the white screen what could be a reverse-shot with respect to shot 2 showing a man’s face. As the transition occurs, the man screams. He is then shown screaming in shot 4 via a cut-out; this action therefore clearly continues his experience in the previous setting. Finally, in shot 5 the man is seen sitting in space, looking down and checking his own body and position.

The cohesion analysis for the segment follows the principles set out in Section 2 above; the cohesive chains constructed are displayed in Figure 6. Four dominant chains are established: Mayan priest, Tomas, the first setting in the Mayan jungle and the second setting in space. The Tomas chain is, however, now split into two since he occurs in two manifestations: as the conquistador and a shaven

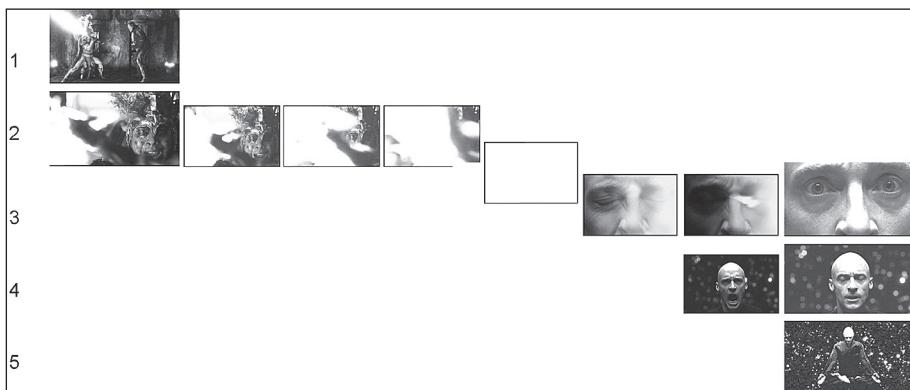


Figure 5 Transcription of the first plane transition in *The Fountain* (approx. 0:06:30–0:07:10) from the first narrative strand in ancient time to the third strand set in space. Successive shots are shown vertically; successive frames within shots horizontally

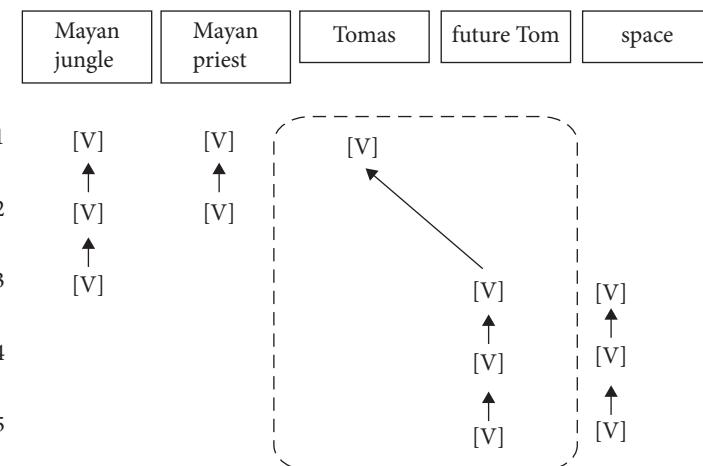


Figure 6. Cohesive chains established from the extract in Figure 5

monk-like figure which may not be immediately recognisable to all viewers as being the same person. The chain pattern shows exactly which element connects the two scenes: the chain of Tomas functions as a bridge carrying viewers across the two settings. We begin with the chain bundle ‘Mayan jungle’–‘Mayan priest’–‘Tomas’ and end with the chain bundle ‘future Tom’–‘space’. Particularly important here is the realisational mode of the Tomas-Tom chain: the chain is established throughout in the visual mode, suggesting this character’s continued involvement in all the actions and settings perceivable by viewers in the extract.

The role of the Tomas-Tom cohesive chain as a bridge across realms is clarified further by the discourse semantic relation analysis. The logical relations between the shots in the extract are relatively clear, although at this point in the film not too informative about what is occurring; the clear spatial discontinuity does not allow the viewer any chance of an unambiguous classification. The relations among shots 1–2 and among shots 3–5 are all similar: there is continuity of both time and space and visual dependency, sometimes moving closer in, sometimes further out. Across the transition 2–3 itself more interpretative work must be expended. Visual continuity is broken through contrasts in setting, colour tones, and sound just as was the case in the [projecting] relationship from Tomas to the Queen in shots 7–8 of our first example discussed above (Figure 1). In addition, however, there are equally clearly some structural elements that carry the viewer over the break in a rather different way.

First, as described, we have the cohesive chain of ‘Tomas-Tom’ binding together the scenes textually. Second, we have a typical feature of continuity editing for dialogic scenes (including fights), whereby after an establishing shot (analogous

to shot 1) individual shots of the protagonists follow in alternation. This is also respected in the current sequence with the ‘minor’ complication that a complete change of locale intervenes. We thus have a compelling combination of deployed resources: continuity by dialogic alternation and sound bridges on the one hand, and distinctions of visual information on the other. Although shot 3 by itself could be interpreted in terms of its discourse semantic relation as a continuation of shot 2 with the change in colour serving as heightened emphasis or some other filmic comment, any such construal is rejected by shot 4, which shows the radically different spatio-temporal locale. Here there are essentially just two possibilities. Either the temporal relationship is immediately succeeding and the character has just died at the hands of the Mayan priest, or the temporal relationship is unknown and we are again faced with a [projecting] relationship because the exhibited continuity in experience of the character shows that he was aware of both strands. What kind of projection this might be is, however, left unspecified: vivid memory, bad dream, premonition are all possible at this stage.

The logical and cohesive relations combined therefore provide resources by which viewers are guided from the first plane to the third plane. The chain pattern shows the cohesive devices mobilised to achieve this, while the discourse semantic relations show the ongoing process of interpretation and re-interpretation. In particular, viewers are explicitly guided to the following abstract narrative construction: ‘a man enters the future, or some other plane of existence, from an ongoing event elsewhere that he was hallucinating, experiencing, remembering, etc.’

3.2 Transitions 2 and 3: From the future to the present

With the sequence just discussed, the film has brought together the past and the space bubble in an indefinite manner. What is most strongly suggested is that the two planes stand in some kind of projection relationship: that is, the Mayan time is somehow reflected as a mental event of the main character, depicted shaven-headed and in monk’s attire in the space bubble scene. However, neither of these planes provides the central focus and motivation of the film and so the next task for the narrative is to connect appropriately to the second plane, that of the modern-day story and the core of the film.

This proceeds in several stages, all of which contribute to an increasing integration across the three storylines. First, a new character is introduced relying extensively on the cohesive resource of gradual presentation. This gradual presentation sets up an extended prelude in the formal cohesion sense introduced above that progressively raises viewers’ expectations concerning the centrality of that character. At 0:8:20 a female voice from off says “Finish it!”, to which the space traveller visibly reacts. The audio quality of the voice is quiet and close preserving the

possibility that the source of the voice is not actually present. In the next shot, however, a woman is presented in close-up from behind and in silhouette looking back towards the space traveller. The camera starts with a close-up on her hand, clearly showing a ring (thus already providing a potential connection with the ring/pouch cohesive chain of the previous extract), and moves up to her shoulder, revealing a distinctive white coat on the way. The status of the woman for the narrative remains at this point uncertain: she may be another inhabitant of the space bubble or a pure fabrication of the space traveller. The unnaturalness of the initial voice suggests the latter, while a rack focus shift from the space traveller to the woman's hand in close-up suggests something of their equal existence in the scene. In terms of cohesion, we have for the woman participant a chain that is so far presented only as a prelude including her voice and some physical parts: these do not yet reveal the identity of the character but prepare the way for her full presentation.

This then comes at around 09:30, after the space traveller has carried out some further actions on his own. Presentation is continued as before with a "Finish it" from off, to which the traveller again reacts. The next shot is a long shot showing the woman standing near the central tree of the space bubble and the space traveller some distance away looking back towards her. She is too distant to be identified at this point and so this also contributes to the cohesive prelude. The shot also serves as a traditional establishing shot, however, setting up two figures in a potentially dialogic situation. A dialogue does then indeed follow and provides the second transitional scene across storylines. We call this scene transition 2 and show the individual shots constituting the scene in the left-hand column of Figure 7.

The quality of the interaction in this scene takes a very different turn compared to the previous voices in the space bubble. All utterances are now presented with appropriately naturalistic sound suggesting an actual dialogue. In shot 1 of the transition the space traveller turns his head back towards the camera and asks "What are you doing here?"; an over-the-shoulder view in shot 2 indicates unambiguously that the addressee is the woman in the white coat preluded previously, whose clothing now stands in considerable contrast to the setting of the space bubble. In shot 3, the next shot of the alternating dialogue, the space traveller responds to the woman's "Take a walk with me" of shot 2 but is shown in a completely different setting, that of a normal modern-day room. Shot 4 of the alternation shows the woman in a normal shot/reverse-shot configuration but she has also now shifted to the modern-day setting. The dialogue continues for two more shots before, in shot 7, reverting to the setting of the space bubble. Shot 8 contrasts directly with shot 2, showing that the woman is no longer there. This reinforces an interpretation of the entire exchange having been only in the space traveller's mind.

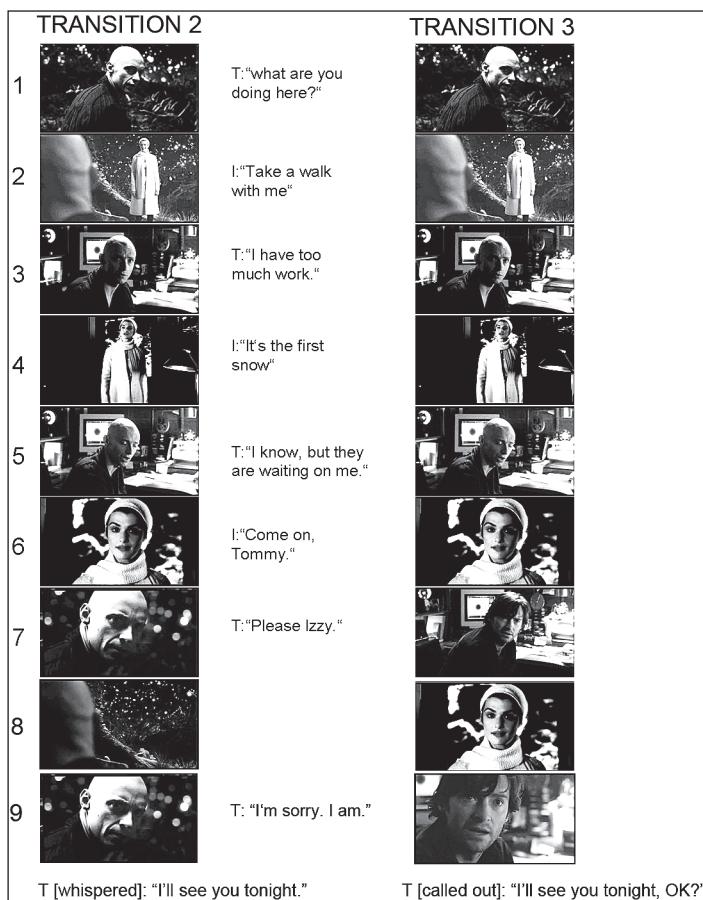


Figure 7. Comparison of the first two scene transitions in *The Fountain* relate the third narrative strand set in space to the second strand set in modern times

In shot 9, however, the traveller continues the dialogue, saying that he is sorry, and following the sequence whispers “I’ll see you tonight”, which has no place within the current storyline.

This transitional scene does considerable narrative work. The characters are identified as named individuals for the first time and the boundaries between settings are considerably weakened. The cohesive chains that can be drawn out of the scene are shown in Figure 8. The scene establishes four primary chains: ‘the setting in the space bubble’, ‘future Tom’, ‘Izzy’ and ‘the room in modern times’; also, for ease of comparison, we add a placeholder for one further chain, ‘modern Tom’, that will be activated in transition 3. In the chains shown here we can see that a considerable part of the tracking of the two main participants is realised *cross-modally*.

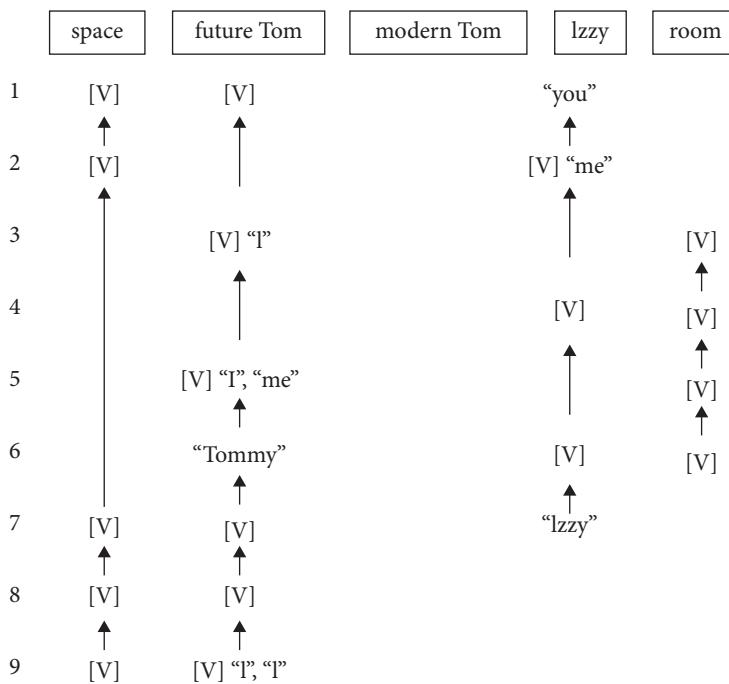


Figure 8. Cohesive chains established from transition 2 in Figure 7

Cross-modal referencing is an important aspect of the filmic identification framework that distinguishes it sharply from the language system. For example in transition 2, although the identities of the two main characters, Tom and Izzy, are presented mostly in the visual mode (specified as [v] in Figure 8 as usual), in some shots they are also realised in the spoken text when they are named by the other person or by themselves. Hence, we can see following Izzy's cohesive chain in Figure 8 that in shot 2 her identity is simultaneously realised as [v] and "me". This means that she is cross-modally tracked in the visual mode as well as in the verbal by her own utterance: "take a walk with me". Elements functioning in cohesive chains may therefore be presented simultaneously or successively in several modes and so cohesive chains in general also offer a method for examining and comparing degrees of cross-modal filmic coherence (Tseng 2008).

Following transition 2, the story continues within the space bubble with several further appearances of Izzy. At 0:11:58, she is shown in a hospital bed floating within the space bubble; at around 0:12:45 she appears in her white coat again, and at 0:13:05 there is a full naturalistic colour insert of her running around a modern-day house with the camera following (the only time she is shown not dressed in white, indicating a completely different time to that covered by the film). Each of

the woman's appearances is accompanied with the same voice-off audio prelude "Finish it!", now strongly cued as Izzy's voice. This extensive cohesive chain for Izzy establishes her as the main preoccupation of the space traveller, regardless of whether her status is real or imagined.

Thus, to summarise the narrative strategies so far, bridging between the strands of the story begins by inserting Izzy, who in many respects defines the focus of the film, into the context of the space bubble well before she takes on her primary role, which is entirely situated in the modern-day storyline. She is presented as both audio and visual prelude and also very clearly as a perception of the future Tom by means of many contrasting pairs of point-of-view shots where she is present in one and not present in the other (cf. shots 2 and 8 in transition 2). She is accordingly presented as a projection, most likely a memory of the space traveller, perhaps analogously to the relationship suggested to the Mayan sequence. Interesting, however, is the simultaneous *weakening* of a projection interpretation that the film constructs. For example, shot 3 of transition 2, in which the first shift to the contemporary storyline is shown, is not at all structured as a projection of the main character; he is simply shown occupying the new setting. This is captured clearly in the interactions between cohesive chains (cf. Figure 8). In shots 1–2, there is an interaction between the Izzy and Tom chains on the one hand and the space bubble setting on the other; in shots 3–6 the interaction is with the modern setting. The dialogic interaction continues without break across the entire sequence. In many respects, therefore, we could describe the construction of transition 2 as enacting a 'failed' attempt to effect a transition from the space bubble back to modern-day time. There has been a reaching out of the characters, one from the space bubble and one from the current day, to engage in dialogue, and the setting was briefly changed to the contemporary storyline, but this quickly dissolves.

At approximately 0:13:30, however, the next transitional scene begins; this is shown in the right-hand column of Figure 7. We label this scene transition 3. The interaction here exactly parallels that of transition 2 until shot 7. Here, in contrast to the previous situation, instead of showing the space traveller in the contemporary room setting, we see instead, in an otherwise exact match, the first appearance of the other incarnation of the main character, Dr. Tom Creo, a contemporary research scientist. This is a very distinctive move, given that we have not seen this character before and he appears in the middle of an established dialogic alternation in the place of the other incarnation. The next shot takes this deviation further in a reverse shot back to Izzy rather than having her disappear as before. The origin of the space traveller's final statement from transition 2, "I'll see you tonight" now becomes clear as he calls after Izzy as she goes off to walk in the snow on her own. The setting then stays with the contemporary storyline as the main

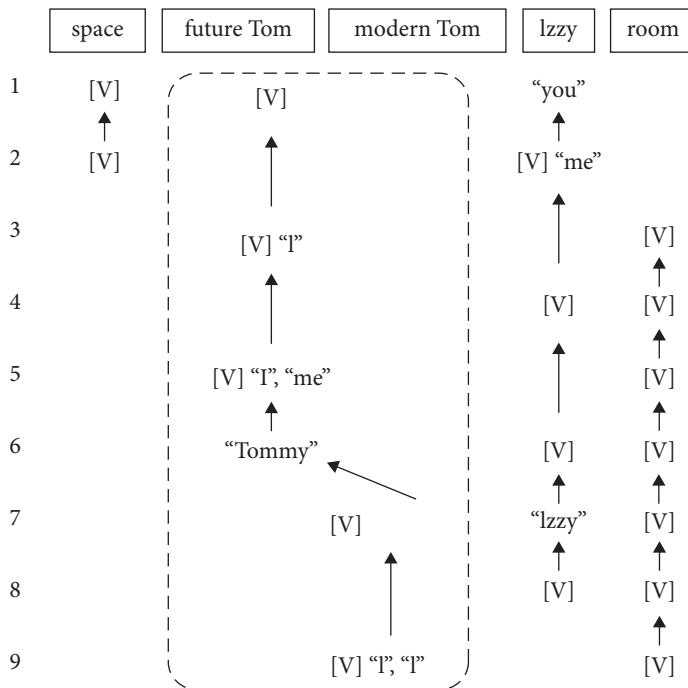


Figure 9. Cohesive chains established from transition 3 in Figure 7

details of the wife's condition and the increasingly frantic attempts of the scientist, modern-day Tom, to find a cure are portrayed. The cohesion analysis for transition 3 is shown in the diagram in Figure 9, where we now see the additional chain of 'modern Tom' in operation.

Because of the close parallelism between transition 2 and 3, the cohesive chains of the two scenes resemble each other closely up until shot 6. Following shot 6, however, we have a pattern similar to the cohesive chains motivated for transition 1 in Figure 6 above where the main character serves as a bridge between storylines. Similarly to this first example, Tom's identity realisation in the visual mode and audio modes across the two settings here strongly suggests his action/existence in an ongoing event spread over those settings.

A comparison of the chain interactions of the first three transition scenes therefore shows an interesting progression. In transition 1, the chain interaction shows a clear division between the narrative configurations 'Tomas in Mayan jungle' and 'future Tom in space' with an identity link between the two Tom incarnations most likely rendering a projection. In transition 2, the division is more fragmented: shots 1-2 construct a dialogic interaction 'future Tom and Izzy in space', shots 3-6 construct a dialogic interaction 'future Tom and Izzy in the present day',

and shots 7–9 construct a return to the beginning situation: ‘future Tom alone in space’. Taken together shots 1–9 may still be readable as a projection, although now expressed somewhat indirectly. Finally in transition 3, the film establishes a new development: shots 1–2 construct a dialogic interaction ‘future Tom and Izzy in space’ as before, shots 3–6 construct a dialogic interaction ‘future Tom and Izzy in the present day’, also as before, but shots 7–9 shift completely to enact ‘modern Tom and Izzy in the present day’, the main storyline of the film.

Transition 3 therefore succeeds in moving between storylines in a way that transition 2 did not. And, along the way, the cohesive chains introduced have cemented identity relationships that hold across the storylines and for the rest of the film. The identity of the single Izzy chain is uncontested throughout. The identity of the main character is constructed textually from the three components Tomas–space traveller (future Tom)– modern Tom. Moreover, the boundaries between the locales have been established as permeable. There is, then, following transition 3, little textual indication of the continuing action portrayed being a projection of the space traveller. The inter-relationships are suggested to be much tighter and ‘mutual’: just whether one is a projection of the other is problematised. The temporal relationships between the storylines are also placed in doubt: transition 3 in particular constructs a much stronger simultaneity than the futuristic space setting would initially suggest.

With this narrational work done, the film is free subsequently to draw on the parallelism between future Tom and modern Tom and the events in the space bubble and contemporary events as needed. This typically occurs on occasions of stress faced by modern Tom. The transitions themselves are then often signalled minimally – by the middle of the film with little more than a hard-cut with matches on action, shape, etc. The logical conjunctive relations signalled therefore remain underspecified temporally, spatially and in terms of their projective status. Nevertheless, the film’s seeming complexity and lack of logical cues across scenes are more than compensated by the rich cohesive ties that function as narrative bridges across the various spatial-temporal settings. In many respects, these scene transitions come to suggest the hallucination or imagination of one man, even though no camera cues for projection are mobilised. The difference between story worlds is realised instead through cohesive chains interacting across scenes.

Finally, these ties also provide a basis upon which the film can multiply information from different settings by combining cohesive chains and their interactions. Thus, when Izzy dies, the tree in the space bubble dies; when modern Tom tattoos a ring on his figure, that ring is shown as one of many on the hand and arm of the space traveller; the ‘hairs’ in the tree in the space bubble echo the hairs on the back of Izzy’s neck; and so on. The overall effect is then very much of single identity chains for the main character and the tree of life/Izzy, interacting within

distinct but related settings. All of these connections are strongly signalled by the realisations of the corresponding cohesive chains deployed throughout the film. The ways of presenting and tracking narrative elements articulated therefore actually establish a robust path for the viewers' interpretation of a man's coherent, ongoing and continuous experiences across three different facets of his existence.

4. Conclusion: Transmedial narrativity *via* discourse

We have argued that detailed filmic analyses drawing on techniques adapted from discourse semantic treatments of verbal texts can be equally effective in tracking the narrative construction of film. We have shown by a combined cohesion and discourse relation analysis that the surface complexity of *The Fountain*'s development is actually bolstered by a dense web of cohesive ties that serve to carry the viewer along during the narrative comprehension process. The viewer is provided with ample clues through explicitly signalled cohesive chains to maintain surface interpretability and to avoid disorientation. Bordwell has described the process of film interpretation in the following terms:

[The cues in the narrative film are organised in such a way as] to encourage the spectator to execute story construction activities. The film presents cues, patterns and gaps that shape the viewer's application of schemata and the testing of hypotheses. (Bordwell 1985: 33)

We have suggested here that the cues provided by cohesive chains actually go further, leading the viewer quite directly to particular connections and interpretations. We have also set out how cues based on the filmic material can be abstracted to provide information more directly relevant for narrative construction. This is the central role of discourse semantics: it is then not the cues directly that guide hypothesis generation and testing but their participation, for example, in cohesive chains that, in turn, give rise to possible interpretations.

Our discussion here can in some respects be seen as continuing a description and classification of approaches to film begun by Buckland (1991a). Buckland uses the semantics/pragmatics distinction from linguistics to characterise several broadly semiotic approaches to film from the 1980s. One significant group of these theories adopts the inclusive notion of context, typical for cognitive approaches and related to the inference-based views set out in our introduction above. This is to place its focus on "the spectator's generation of inferences in relation to the 'cues' in the film" (Buckland 1991a: 272). It is, however, striking how little progress has been made since Buckland's characterisation in precisely this area. Detailed accounts of just how the process of inference proceeds remain descriptive: highly

detailed accounts of the manner of cues, structural and otherwise have been, and continue to be, given (e.g., Kanzog 1991, Bordwell 2007) but the general insights achieved for film as a whole have remained fragmentary.

From our perspective the reason for this is clear – without the enabling power of *discourse* there is no bridge between the observations of filmic cues in technical devices and structure on the one hand and filmic interpretation on the other. The missing account of the process of discourse interpretation cannot be jumped over; to re-use and critique the title of Buckland's article, one still cannot talk of a 'semantics-pragmatics interface' for film as one can for language: there is no interface, merely a gap. It is then more than time to take up Colin's closing remarks from an article of 1989 where, after attempting to apply generative linguistic notions to film, he concludes:

In contrast to the generative theory – which . . . 'lacks a consideration of discourse' – a 'generative semiology' of film must have as its object to account for film as discourse.
(Colin 1989a: 166)

At that time, it was not known how one could proceed further with this: discourse semantics was too exploratory for export from language to other semiotic modes and accounts of dynamic discourse interpretation were in their infancy. Now it is time to re-make this connection and, in this paper, we have suggested some of the analytic methods by which this might be achieved.

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