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The establishment of interpretative expectations in film

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In this paper we show that some notions from the textual organisation of verbal texts appear also to give insights to the organisation of films. In particular, the beginnings of films are suggested to operate as indicators of those films' 'method of development' and so serve to set up expectations for guiding hypotheses and selective attention during film viewing. By means of a small exploratory study, we demonstrate that film beginnings exhibit differing organisational features that correlate with the overall narrative strategies pursued in the films as a whole. These features may then function as useful indicators for viewers concerning just what interpretative challenges they will face later in the film.

Keywords: film, text organisation, filmic discourse, thematic structure, film beginnings, interpretation

1. Introduction: Macro-themes and film

It is a commonplace that one of the open problems in dealing with strongly multimodal artefacts such as film is their reliance on combinations of very different information channels – channels traditionally listed in the case of film as spoken language, written language, visual image, music and ambient sound. This becomes even more challenging when we move further away from a sensory-based view of the information contributions and consider instead, or in addition, the multitude of semiotic modes potentially involved, such as gesture, proxemics, colour schemes, clothing, spatial relationships, and many more (Metz, 1974; Monaco, 2009). Given this, it is clear that viewers must be being quite selective in their allocation of attention: the dynamic unfolding of audiovisual representations in real-time would otherwise overwhelm the viewer rather than giving rise to the broadly similar responses to film actually observed. That selectivity should play a role here is in line with results in perceptual psychology that indicate that

“perception is selective: we attend to objects that bear salient meaning for certain goals” (Gibson, 1979), a notion which has now also been applied in psychologically-oriented approaches to film (Anderson, 1996; Persson, 2003; Smith, Levin, & Cutting, 2012; Wuss, 2009). Moreover, because of the nature of film as a designed artefact, there is good evidence to believe that the perceptual guidance that films exhibit is in many respects intended: that is, film makers explicitly construct films precisely so that the attention of viewers is directed along paths that contribute to desired affects.

A further research question that must be raised is just how this selection and guidance of attention comes about. Naturally the audiovisual properties of the filmic material being experienced can guide attention in various ways – Smith and Henderson (2008), for example, show how various aspects of movement attract viewers’ attention at a very early stage in processing. The role of particular distinctive combinations of properties for heightening suspense or emotional affect has also been considered (Carroll, 2008; Grodal, 1999). Both facets build on a long assumed connection between film perception and natural perception (cf. Münsterberg, 1916). While by no means denying that this connection plays a significant role when interpreting film, the phenomenon that will be explored in this article is rather different. We will suggest that films not only combine contributions to meaning analogous to sensory perception in the real world but that this combination is itself strongly guided by further mechanisms that are reminiscent of aspects of discourse organisation revealed in the study of natural language texts. These two perspectives on the mechanisms involved in film interpretation and understanding have been characterized in Bateman and Schmidt (2012, p. 142) in terms of two contrasting families of ‘codes’: the *reality codes*, which build on film’s audiovisual iconic nature as perceptually real and bring to bear all the potential interpretative practices available in the interpretation of real-life events, and the *representation codes*, which are specific to artefacts which employ textual structuring for pro-actively shaping and guiding audience response and interpretation.

The former family of codes has naturally been given most attention by researchers concerned with psychological processes and the cognitive modelling of film; indeed, as Smith et al. (2012) make clear, the connection drawn between film and natural perception has been cited as one of the principal motivations for psychologists to concern themselves with film at all. In this paper, however, we will suggest that the other family of codes, although often overlooked, is also highly relevant for explaining viewers’ responses to films. It is not only the moment-by-moment assessment of a perceptual input that is significant, but also the entire scaffold of potential interpretations constituting textual organisation that must be considered.

To support this position, we will consequently consider attention guidance in film as having more in common with linguistic information structuring, particularly structuring at the text level, than is generally assumed. More specifically, we will compare the *beginnings* of films with the textual construction of *macro-themes* discussed by Martin (1992) – a possibility also suggested, for example, by Baldry and Thibault (2006, p. 188). Macro-themes, and thematic organisation in general, is seen within the functional approach of Martin as a general property of texts, regardless of text genre and usage: it is one of the means available to all genres by which particular communicative functions may be structured to be supportive of their uptake by hearers and readers. Analogously, and as we will see below, the beginnings of films have similarly been considered in terms that range across all film genres and types of filmic artefact. We can then also explore them as a potential site of functional discrimination that may operate for films in general.

According to the account that Martin develops, texts are organised into hierarchically nested thematic blocks. The ‘beginning’ of each such block is made up of a corresponding theme. Themes at higher levels ‘predict’, i.e., make expected for recipients, the kinds of themes that will be taken up at lower levels. Crucially, this organisation is a *textual* organisation rather than a content one: thematic organisation provides a “scaffold” that indicates the textual *method of development* that a text will follow (Fries, 1995; Ghadessy, 1995). As an example, we might consider a segment of text beginning “There were already attempts to find a new passage to India and China in the fifteenth century.” The unmarked new information of this sentence includes the temporal extent *in the fifteenth century* and so this ‘predicts’ that one likely method of development for the text following might concern the indicated attempts organised by their time of occurrence. This *temporal* method of development can then be carried out with sentences such as: “In 1488, ...”, “In 1497, ...”, etc. The leftmost elements in these sentences constitute temporal grammatical themes in the sense of Hallidayan systemic-functional grammatical analysis (Halliday, 1967; Halliday & Matthiessen, 2004).

Within Martin’s account, individual sentences have their themes predicted by higher level ‘hyper-themes’, each of which predicts an entire sequence of thematic selections within the individual sentences of the thematic block. Hyper-themes may in turn be predicted by higher-level hyper-themes, continuing until we reach the ‘text as a whole’. Martin designates the thematic material of this last, most encompassing level, the *macro-theme*. It corresponds, according to Martin, to the ‘topic paragraph’ of traditional composition but, in addition to the presentation of any content material that might be classified as the topic, also serves the crucial *textual* function of predicting a range of methods of development that will be used by the text for its textual organisation. In effect, the macro-theme, hyper-theme and theme organisation establish a scaffold of expectations that help the

text's recipient negotiate the complex textual structures being constructed. This signposting function is most pronounced in more complex, written language, since it is there that there is most need for guidance concerning how a text is going to develop – there is little opportunity in written text to interrupt and reorient oneself as to where the text producer is attempting to go.

Transferring this kind of organisation back to the situation with film is suggestive for several reasons. Given the broader range of material available for signalling structural relationships in film, one logical hypothesis is that this might be put to good effect, particularly at the beginnings of films, for establishing a scaffold of expectations for recipients concerning how the film is going to unfold subsequently. These expectations could then be used to pre-structure interpretations and to serve as a convenient source of guidance concerning where attention should be paid, thus marking a bridge, or cross-over point, between the textual organisation provided by the representation codes and the operation of the perceptual system.

A special role for the beginnings of films has often been suggested in film theory. As Bordwell, for example, states:

The sequential nature of narrative makes the initial portions of a text crucial for the establishment of hypotheses. A character initially described as virtuous will tend to be considered so even in the face of some contrary evidence; the initial hypotheses will be qualified but not demolished unless very strong evidence is brought forward. (Bordwell, 1985, p. 38)

This function of the initial portions of a film is also often seen in terms of psychological processes such as the primacy effect and priming. This is presumed to charge the material which is first encountered with a particular salience for providing a frame for interpretation for what follows (cf. Luchins & Luchins, 1962).

The broadest and most detailed account of film beginnings to date is that set out by Hartmann (2009). Hartmann identifies several perspectives that have been taken on film beginnings and provides extensive discussion and examples, each offering different insights on the functions being performed for viewers when a film begins. These perspectives include: the 'point of attack' for the exposition, i.e., that particular event, moment, etc. chosen to lead into the narrative; an exemplary microcosm reflecting the world of the film; a point of equilibrium/disturbance leading into the narrative arc as set out by Propp (1968) and subsequently suggested as a standard model for film screenplays by Vogler (1998); a densely coded matrix of connections symptomatic for the rest of the film and so functional for the viewers' subsequent comprehension processes; a textual prelude, similar in role to preludes or overtures in music; the 'threshold' between everyday reality and the world of the film; 'instructions for use' or training material for how to

interpret the film; and, finally, the place where a 'communication contract' is made between producer and audience on what they are to expect.

Several of these perspectives clearly overlap with the functions suggested for macro-themes. Just as macro-themes set out expectations for methods of development, the use of film beginnings as 'training material' or the dense establishment of the techniques to be employed for the remainder of some film similarly establish clear predictions of what kind of development strategies that film will employ and so may help direct the interpretative hypotheses that viewers entertain. Moreover, early on in film semiotics, theorists such as Metz (1974) and Heath (1975) suggested that each film, as an aesthetic artefact, creates its own 'system' as well as deploying semiotic codes established external to the film. Building on this, Bordwell (1985, p. 38), Hartmann (2009, p. 106) and others suggest that it is in precisely this respect that film beginnings may come to play a central narrative function. This is echoed very closely in the role claimed for macro-themes above: film beginnings as macro-themes may then also be taken as providing guidance into the filmic system of each individual film just as in text they provide guidance and predictions concerning the development of each individual text.

One of the motivations for accepting macro-theme/hyper-theme analyses for natural language texts, however, is that it is possible to find repercussions of this textual structure in the actual linguistic forms and structures that are selected. Unless there were some identifiable consequences in the observed linguistic material, there would be no grounds for assuming that macro-themes represent a significant linguistic abstraction. In language, this works particularly through the deployment of marked themes and other textual constructions as suggested in our example of preposed spatial prepositional phrases above. The question raises itself, therefore, of whether similar arguments can be made for presumed filmic macro-themes. In the rest of this paper we will accordingly explore this further, suggesting how a linguistically-motivated characterisation of filmic organisation indeed allows us to see filmic macro-themes at work.

2. Filmic discourse organisation

To carry out an empirical study, we need first to identify the filmic properties that we are to analyse. Here we draw on previous work in which we have argued that there are several quite specific kinds of discourse organisation at work in film, sometimes similar to those of language, sometimes interestingly distinct. We have described two of these kinds of discourse organisation at length elsewhere: filmic discourse relations (Bateman, 2007) and filmic cohesion (Tseng, 2008, 2012); a brief overview and application of both these aspects of filmic discourse is also

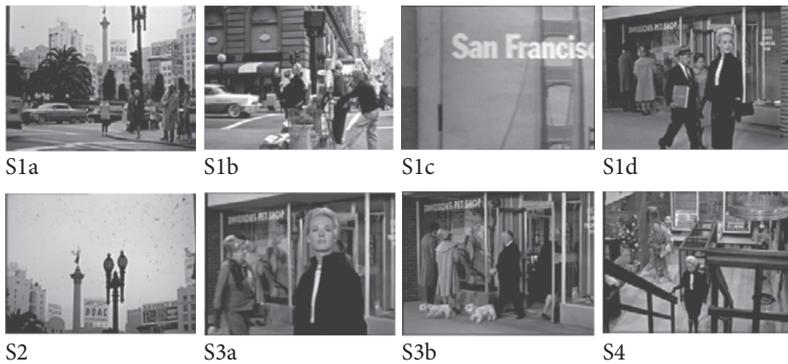


Figure 1. The first four shots of Alfred Hitchcock's *The Birds* (1963)

provided in Tseng and Bateman (2012). For current purposes, we will simply suggest by example the kinds of textual organisations that these aspects of filmic discourse organisation employ so that the subsequent discussion can be followed.

We illustrate both kinds of analysis briefly with respect to the opening of Alfred Hitchcock's *The Birds*, as shown in Figure 1. The first shot (S1) is a complex tracking shot following a character that gradually comes into closer focus against the backdrop of busy streets, going behind a poster of San Francisco (S1c) along the way. She looks up at the sky, seeing massed birds (S2) and then proceeds into a pet store (S3). The fragment ends with her going up some stairs inside the pet store (S4).

Filmic discourse relations are relations postulated to hold between film segments in terms of temporality, spatiality, epistemic status and audiovisual structural dependence. They draw on the notion of conjunctive relations proposed for verbal language by Martin (1983) and as extended for the moving audiovisual image by van Leeuwen (1991). Building on this, Bateman (2007) and Bateman and Schmidt (2012) argue that relations of this kind can also be taken as the basis for constructing filmic discourse structures, although the specificity of the filmic medium necessitates some changes with respect to the relations employed for verbal language. These relations are seen to operate at a discourse level of analysis, which means that the description may well cut across shot-boundaries; in this respect, analyses employing filmic discourse relations are somewhat different to traditional notions of inter-shot relations pursued in treatments of filmic montage and relate more to notions of 'events' as explored in the cognitive study of film (cf. Zacks, Speer, & Reynolds, 2009) or to 'subphases' in the discourse account of Baldry and Thibault (2006). The discourse relation approach has also now been taken further by Wildfeuer (2013), who provides a more formal framework for capturing discourse relations for film that relates directly to the formal account

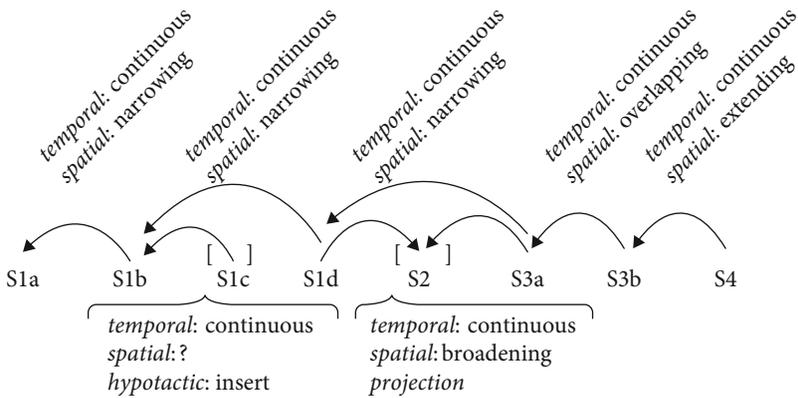


Figure 2. The filmic discourse relations holding among the first four shots of Alfred Hitchcock's *The Birds* (1963). Hypotactically embedded fragments (inserts) are marked with square brackets and their relation types are shown below the main line of fragments; other relations are shown above, labelling the arcs

of verbal structured discourse representation theory developed by Asher and Lascarides (2003). For present purposes it will suffice to describe this aspect of filmic discourse interpretation in terms of the relations that the film material suggests for relating successive film segments, rather than detailing the discourse structure itself and the mechanisms employed for building it.

Filmic discourse relation analysis operates in a similar fashion to the corresponding resource for verbal language. As each putative 'event' is encountered, it is necessary to find a relation that holds from the (small) set of relations defined. The relations are cross-classified according to temporal, spatial and mental state (seen, heard, imagined, etc.) and to whether they are dependent (hypotactic) or independent (paratactic). The relations that apply to our illustrative opening sequence are shown in Figure 2. Hypotactic relations can also dynamically construct inserted sequences that interrupt the unfolding sequence around them, as is here the case with fragment S1c and shot S2. Since the sequence as a whole follows the well-known principles of 'invisible continuity', there is little problem in allocating appropriate discourse relations in this case; a more challenging example is given below.

In contrast to relations between fragments, filmic cohesion sets out how characters, objects and settings in coherent film narratives are presented, re-identified and tracked throughout a film. These tracks are combined into cohesive chains. The reoccurrence of elements across chains then indicates particular patterns of textual density that serve to bind together information across the semiotic modes at work in a film. Looking at chains of cohesion appears to provide important

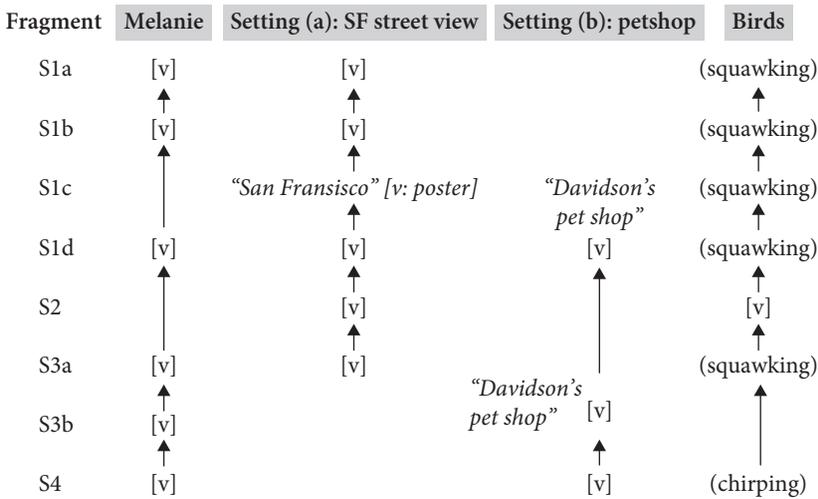


Figure 3. The filmic cohesive ties holding between the first four shots of Alfred Hitchcock’s *The Birds* (1963) organised into cohesive chains. [v] indicates visual elements, (...) indicates aural elements, and “...” indicates printed or verbal linguistic elements

guidance for keeping viewers on intended paths of interpretation. Here also, it will suffice for current purposes to identify the cohesive relations, or ‘ties’, that films exhibit during their opening sections.

We illustrate this for the opening sequence from the *The Birds* in Figure 3. This figure shows the cohesive ties between filmic elements across the sequence. Such elements can be drawn from any modality employed within the film. The constructed ties then build up cohesive chains, which we then investigate for their ‘interactions’ in order to show how filmic texture is created (cf. Tseng, 2008, 2012). In the current case, for example, the main character, Melanie (Tippi Hedren) is shown visually in almost every fragment, while the general street setting is shown visually in all the external shots and, most probably, is also labelled textually in the poster shown in S1c – all such discourse attributions are expressed as *abductive hypotheses* in the style of linguistic discourse representation theory and so may turn out to require revision by a viewer when more material concerning the film becomes available. In the move from outside to inside, the setting is also labelled textually by the printed name of the pet shop and, throughout the sequence, there is an acoustic indication of birds being present. Because cohesion analysis operates by picking out just those filmic elements that are *repeated*, it functions to ‘self-select’ chains that are being constructed by the film – that is, it is generally unproblematic to take too many elements (for example, individual cars,

other passers-by, fire hydrants or whatever else may be visible in any particular shot) at first, because the fact that they do not reappear means that they will not participate in cohesive ties. The backgrounded presentation of “Davidson’s Pet Shop” already in fragment S1d is of this nature; had the main character simply walked on following S1d, the cohesive chain for this named pet shop as part of the setting would never have been established. The building of ties into chains and, subsequently, the description of chains that are brought together in particular actions or events, thus reveals quite clearly what *the film itself* is constructing as textually significant for its development.

3. Application of the analysis methods for empirical investigation of a corpus

Our study now applies these analytic schemes to a selection of films in order to explore whether the structuring effect of the opening sections of a film can be seen in how these resources are deployed. For this we employ a small film corpus and annotate their beginnings according to the organisations suggested by our framework. The corpus consists of 20 films selected to include both ‘mainstream’, traditional narrative organisations and some less traditional, non-linear narrative structures. The purpose of including films varying in this way is to see whether the very different ‘methods of development’ that such films make use of can already be detected in the film beginnings.

The non-linear films selected have been variously described. They are sometimes characterised as ‘puzzle films’ (Buckland, 2009), ‘forking narratives’ (Bordwell, 2002), ‘multiple draft’ films (Branigan, 2002) and similar. Less extreme cases are commonly described using the narratological concept of ‘unreliable narration’ (e.g., Booth, 1961; Hansen, 2007; Koch, 2011). There is therefore considerable variation within the groupings discussed, as well as many open questions concerning their definitions and demarcation. The idea behind our selection is that for the majority of non-linear films, it is nevertheless the case that the film is considered narratively coherent by viewers. This raises the question as to how this is achieved and the role that a film’s beginning may play in bringing this about. If a film’s beginning functions in any way similarly to macro-themes, it would be expected that guidance for following even non-traditionally structured films would still be forthcoming.

The film corpus is listed in Table 1, grouped into two subcorpora reflecting a pre-theoretical classification according to their linearity. An analysis of the first 5 minutes was undertaken for each film. Within the discourse relation dimension, relations between shots were classified according to whether they were spatial,

Table 1. Film corpus used in the exploratory study; for production details, the reader is referred to the invaluable Internet Movie Database (IMDB): <http://www.imdb.com>

Non-linear	
<i>Blind Chance</i> (1981)	<i>Hana-bi</i> (1997)
<i>Run Lola Run</i> (1998)	<i>Code: Unknown</i> (2000)
<i>Memento</i> (2000)	<i>Vanilla Sky</i> (2001)
<i>Oldboy</i> (2003)	<i>Reconstruction</i> (2003)
<i>2046</i> (2004)	<i>The Fountain</i> (2006)
Linear	
<i>The Thin Red Line</i> (1998)	<i>The Sixth Sense</i> (1999)
<i>Donnie Darko</i> (2001)	<i>Black Hawk Down</i> (2001)
<i>Synecdoche, New York</i> (2006)	<i>The Prestige</i> (2006)
<i>Once</i> (2006)	<i>Juno</i> (2007)
<i>My Blueberry Nights</i> (2007)	<i>Mr Brooks</i> (2007)

temporal, 'projective', comparison, structuring relations or unidentifiable as suggested above. Within the cohesion dimension, the specificity of characters, objects and settings was compared, including both multimodal cohesive devices – verbal (spoken or written) text for naming/specifying characters, objects and settings visually shown on screen – and visual cohesive devices – without verbal cues.

When films unfold linearly this is carried most straightforwardly by the filmic discourse relations between shots and the scenes which build themselves on top of these shots: these filmic discourse relations can therefore be expected to be dominantly chronological, just as was the case in the analysis of the *The Birds* opening shown in Figure 2 above. This particular aspect of the method of development should then be signalled in the openings of films also. For non-linear films the filmic discourse relations will generally be more diverse. Thus as a first hypothesis to be explored empirically, we can suggest that:

Hypothesis 1

The beginnings of linear films should signal their linear method of development by employing generally chronological filmic discourse relations, whereas the beginnings of non-linear films withhold chronological filmic discourse relations.

Moreover, since non-linear films are still generally perceived as coherent by viewers, it might be expected that there is actually a trade-off between the two filmic discourse organisations: the very fact of non-linear narrative will mean that the discourse relations, and particularly scene transitions, will violate chronological development and, as a consequence, the cohesive ties established may need to

take on a greater functional load in helping to guide viewers across underspecified transitions; an example of this trade-off for one particular case is discussed at greater length in Tseng and Bateman (2012), where the opening sequence of Christopher Nolan's *Memento* (2000) is addressed.

If a film's beginning is then indeed to function as an indicator of the method of development, then there should also be observable differences across the corpus concerning the structuring employed within the beginnings of non-linear films. That is, according to the hypothesised function of macro-themes, differing methods of development should also bring about recognisable differences in the film's beginnings. Two further hypotheses are then:

Hypothesis 2

The beginnings of non-linear puzzle films should signal a non-linear method of development by relying less on spatial and temporal regularity in the filmic discourse relations.

Hypothesis 3

The beginnings of non-linear films should employ a higher degree of cohesive organisation than linear films.

This means that in order to maintain coherence it should be the case that the respective beginnings of non-linear films signal to the viewer that non-linear, more cohesively based interpretative schemes are to be applied during the film.

4. Results of the exploratory study

The results of performing the filmic discourse relation analysis on the beginnings of the 20 films of the corpus are suggested graphically in Figure 4. To improve reliability the analysis in each case adopted shot boundaries as a common level of granularity throughout. The graph shows how many transitions between shots needed to be taken before the discourse relations were reliably identifiable, ordering the films analysed along the horizontal axis according to the increasing delay holding before reliable identification becomes possible. For the last film in the list, Christoffer Boe's *Reconstruction* (2003), the uncertainty lasts a considerable time into the film, persisting well beyond what might reasonably be considered the 'beginning'. For the linear films, the discourse relations are in fact never seriously in doubt. Each shot follows on the other in the manner that we saw with the *The Birds*. This distribution is certainly compatible with our hypotheses 1 and 2 above.

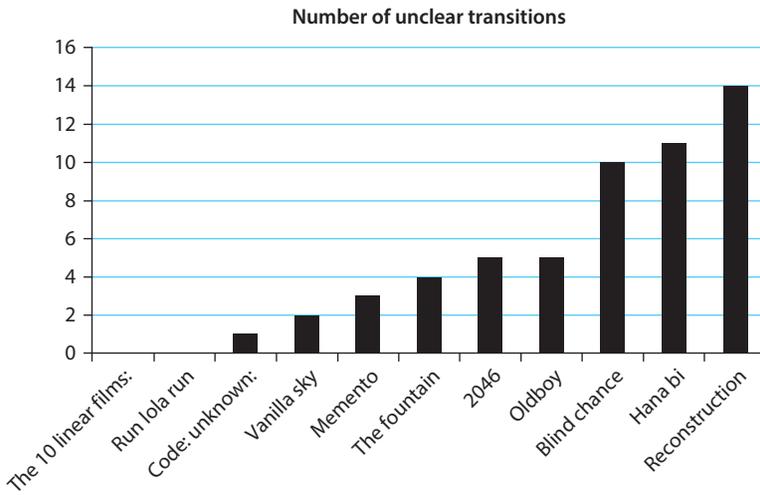


Figure 4. Number of unclear filmic discourse relation transitions in the opening sequences of the films of the corpus

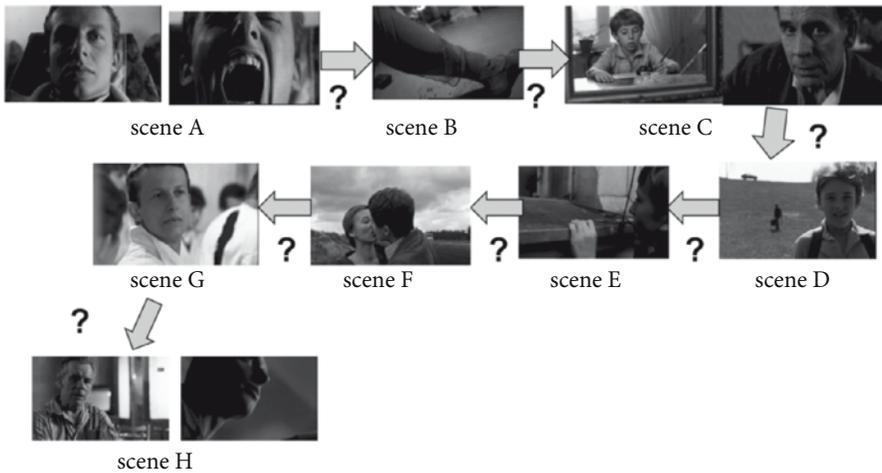


Figure 5. Filmic discourse relations in the opening sequence of *Blind Chance* (1981)

Illustrative of the complexity involved in the non-linear portion of the corpus is the beginning of Kieślowski’s *Blind Chance* (1981), shown in Figure 5. Here there is very little opportunity for the viewer to decode the filmic discourse relations. We take this as strongly suggesting to the viewer that the film will be employing some method of development that is not straightforwardly linear, which indeed turns out to be the case.

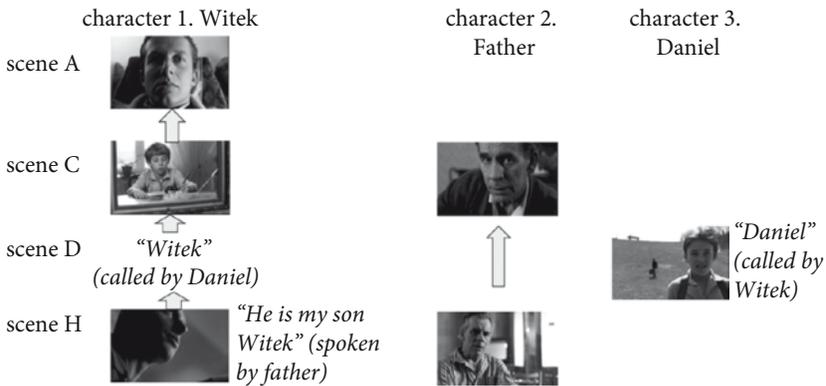


Figure 6. Cohesive ties in the opening sequence of *Blind Chance* (abbreviated)

Turning to the cohesive analysis, there are several possibilities for describing the various textures that are constructed. Indeed, in both linear and non-linear films, cohesive structures are well established from the beginning of each film. Considering again the opening from *Blind Chance* we find with respect to its cohesive analysis a relatively dense interweaving of reoccurring filmic elements. This is shown graphically in Figure 6. We suggest here that it is particularly significant that the texture is created *cross-modally*: i.e., there are reoccurrences of visuals and verbal elements which are bound together, often again employing established continuity techniques. Thus, the boy that is shown in Scene B is identified as ‘Witek’ by being called verbally in Scene C. This verbal identification is then picked up again in Scene D. From this we can see that cohesive structures tracking the main characters’ identities are strongly established and may then be available as a counterbalance to the severe uncertainty in the filmic discourse relations that apply.

When we explore the distribution of visual cohesion and visual cohesion combined with verbal cohesion across the entire corpus (cf. Table 2), a systematic trade-off between cohesion and underspecified discourse relations is supported. The results show a suggestive difference between how cohesion patterns operate in the linear and non-linear films. Although both linear and non-linear

Table 2. Cohesion results across the beginnings of the films of the corpus

Cohesive texture	Linear	Non-linear
Cohesive chains with specific verbal cues specifying names and identities of characters	5	9
Cohesive chains with no verbal cues but with visual reappearance to confirm main characters	5	1

films adopt cohesive patterns relying on visual and verbal ties, when we move to non-linear films: much less reliance is made on the purely visual elements and multimodal cohesive ties, such as naming, are employed in addition in order to carry the viewer over material for which it is difficult, or impossible, to find visual relations. The sample size here is too small to offer statements of statistical significance but the trend is clear: the openings of non-linear films appear to exhibit patterns of filmic discourse relations and filmic cohesion that distinguish them from the linear films, thus supporting hypothesis 3. This difference may well provide a more or less explicit message to the viewer that a different kind of method of development than usual is to be expected for the film that is to follow.

5. Conclusion

As a summary of the analytic results reported above, we can therefore suggest the following general film properties:

- Non-linear films require highly specific, multimodal cohesive chains to direct viewers' recognition of elements across underspecified interpretations of discourse relations between sequences.
- The sooner the discourse relations are made predictable, the less demanding subsequent interpretation paths become and less work is required of the cohesive texture.

In addition, all three hypotheses above were supported, although further studies need to be undertaken to evaluate the extent to which the tendencies revealed are robust with respect to larger samples. Nevertheless, the apparent availability of clear indicators for the kinds of filmic narrative strategies that are going to be employed within a film suggests that this source of guidance needs to be taken into consideration whenever exploring viewers' interpretative activities when watching film.

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