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# Tiger's Big Plan: Multimodality and the moving image\*

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## Introduction

Here is an image of Anansi the spider, from one of the cycle of African folktales about the spider-man trickster. It is a single frame from a short (about five minutes) animated film made by 10 and 11 year old children and their teacher in a primary school in Cambridge, UK, in collaboration with teachers from a specialist media school, a Film Education Officer from a partner cinema, a professional animator from the British Film Institute, and a composer-in-residence.

**Figure 1: Anansi the spider**



The conception of this project is, we want to argue, multimodal: the architects of the project and the children working on it are imagining a final production which speech, music and animated film blend. Our purpose, in this chapter, is to explore how this blending works, both in terms of the social and technological processes of design and production, and in the final film and how we might read it. As a framework to think about these processes, we will adopt what Kress and van Leeuwen propose as strata of semiotic production: *discourse, design, production, distribution* (2001). We will develop the idea of the moving image as a specific mode – the *kineikonic* – and identify some of the principles through which it integrates other communicative modes through the design of time and space, and the use of a wide variety of media and tools. We will use this theory to analyse a short section of the film of *Anansi and*

*the Firefly*; and will also explore how a school curriculum leading to moving image production needs to be, itself, multimodal.

The film is a transformation of a Ghanaian folktale. It tells the story of how Anansi, the trickster spider, goes out with Firefly to collect eggs. While Firefly lights the way, Anansi takes all the eggs for himself, leaving Firefly to return home with none. However, Anansi now cannot see to find his way home, and has to stop for help at Tiger's house. In order to convince Tiger to take him in, he gives him the eggs for dinner. To present himself as unselfish, Anansi refuses any eggs at dinner, secretly planning to steal any remaining eggs and eat them during the night. Tiger's suspicions are aroused, and he conceals a live lobster in the pot of eggs, covering it with eggshells. When Anansi goes to steal the eggs during the night, the lobster pinches him. Tiger shouts out, hearing Anansi's cry of pain; Anansi pretends it is only dog-fleas biting him. Tiger pretends to be outraged; and Anansi is driven from the house, disgraced and devoid of eggs.

### **Discourse: mischief, Africanness, and pedagogy**

This image comes with certain cultural properties. It imports a notion of Anansi from the provenance of the African oral narratives, trailing discursive threads to do with trickiness and irreverence, an off-the-peg metaphor for our disobedient instincts, or, if we are children, for our endless desire to outwit the adult world, its rules and its humourlessness. There are two interrelated discourses at work here, perhaps. One is child-oriented, and is a discourse of childhood mischief, realised in different ways in different cultures and different historical moments, and a perennial topic of folktale. The other, more adult-generated, is a curricular discourse of multiculturalism, here reflected in the choice of a Ghanaian folktale as the basis of an animation made by a group of mostly white children in the UK.

As it is a picture, the child recreating Anansi here must make quite specific decisions about what he looks like. What resources have been used to make these decisions? We want to suggest three important factors. Firstly, the child could reach for images of "Africanness", garnered from film or television, perhaps. The image, however, suggests nothing of this. Indeed, the landscapes the children have drawn behind Anansi are clearly European pine-forests. Though this is an African story, it is easier to stick with familiar images, which may duck the representational issue, rendering the Africanness of the story invisible; but may on the other hand avoid an embarrassingly stereotypical image of Africa. Already, the image has a complex relation to the provenance of the narrative on the one hand, and of the visual resources used to present it on the other.

Secondly, the child who drew the picture has made some decisions about colours. It may be no coincidence that the red and blue of the spider, along with the elaborate web, are elements of the design of Marvel's comicstrip superhero, Spiderman, familiar to children at the time of writing as a TV cartoon packaged within children's magazine programme formats, and about to be launched as a live action movie.

Thirdly, if the colours are those of Spiderman, the bulbous eyes with pinpoint pupils and the rotund body are reminiscent of the Simpsons and South Park, and the humorous characterisation associated with them, as well as the discourse of mischief and irreverence in which Anansi is rooted.

This image of Anansi, then, is on the one hand completely original – it exists absolutely for the first time. On the other hand, all the decisions in its making are framed by the discourses within which the children are working, and the genres which most typically express these discourses in their experience: the folktale, the comicstrip, and the animated cartoon.

The discourse framing this act of transformation is pedagogic – it represents a set of beliefs about what is to be learnt and how the learning might best be organised. It also represents an approach to the question of how modes of communication can be organised in the curriculum.

This pedagogy has a double content. The subject matter of Anansi is important for cultural reasons: the secondary school involved in the project has a weblink with a school in Ghana, through a curricular programme organised in collaboration with Comic Relief, an Aid charity in the UK, and Day Chocolate, a Fair Trade chocolate manufacturer part-owned by a Ghanaian cocoa-farmers' co-operative. However, the pedagogy here is also intended to promote a broad notion of literacy which encompasses the moving image. Though the moving image often becomes part of a wider definition of literacy through the notion of 'visual literacy' (cf Raney, 1997), it is conceived of by the educators and professional artists in this project as multimodal (though they have not used that term). In other words, the design and production processes experienced by the children as an integrated series of activities have been organised through a pedagogic division of labour, involving media specialists, a film education specialist, the Head of English from the secondary school, the Head of Art, a professional composer, and a professional animator.

For the educators, then, the development of the project follows the contours of the typical structure of moving image production: a period of specialised work on the different modes to be employed in the film, followed by a period of assembly in which these modes are brought together to make the moving image text. The experience of the children, on the other hand, is of all the different processes, as the project works to overcome the more usual monomodal way in which the curriculum is conceived, where print stories, film and music are experienced and made by children in quite separate curriculum slots, with no systematic regard for how such modes interact in almost every part of our cultural lives. As a result, and unlike the film industry, the children experience the full range of multimodal and multimedial engagement as they make their film.

### **Design: the Kineikonic Mode**

The moving image is an integrative, combinatorial assemblage of modes, which has posed theoretical problems throughout its history. Its broad features have never been in doubt – that it consists of the combination of moving image and sound on the one hand – what Eisenstein called *vertical montage* (Eisenstein, 1968) – and of the combined practices of filming and editing on the other, which serve to frame the representation and to assemble it in a series of juxtapositions. We will regard this set of practices as a mode in its own right, the mode of the moving image, partly because filming and editing offer what is, in effect, a grammar within which sound and image are re-made, partly because this set of practices has been regarded since its inception as a kind of language. The terms often employed to describe these practices are *filmic*

and *cinematic*. These are confusing terms (for Metz, for instance, they mean quite distinct things, as we shall see), and both evoke cinema rather than other forms of the moving image. We will introduce a new term for the mode of the moving image, then – the *kineikonic*, from the Greek words for *move* and *image*.

In the mid Seventies, the French film theorist Christian Metz made a distinction (Metz, 1974) between film language as *filmic*, by which he meant the whole assemblage of codes of language, gesture, music, filming and editing; and *cinematic*, by which he meant strictly those structures produced by the processes of filming and editing, and which he built his theory of film language around.

Our kineikonic mode combines the two aspects of Metz's distinction. It refers to how all the elements of the moving image are assembled, but includes the particular conventions afforded by the practices of filming and editing. This mode uses a range of semiotic resources to make the moving image, integrating them into the spatiotemporal flow by (re)designing and producing them within the spatial frame and the temporal sequence of the film. In other words, the kineikonic mode is distinguished by its relation between the grammar of filming and editing, and what Metz and others have called the *pro-filmic* – those elements of the moving image which have been made, as it were, before the camera got there. We will distinguish further, however, between the *pro-filmic*: communicative acts made for film; and the *pre-filmic*: communicative acts not made for film, but later incorporated into it, such as an event which is filmed as a piece of news footage.

What does the choice of the kineikonic mode mean for the educators and children engaged in this project? We need to look back at the beginning of the process. Like many moving image projects, this one began with storyboarding. Two points are clear in this practice: firstly, that the modes of written language and still visual design are employed as notations for the moving image which is to be; and secondly, that the eventual moving image has to be imagined by the child-designers in order for them to make any sense of this notation. If they cannot adequately imagine the moving image they are designing, the notation will become incoherent, or even slide into a quite different mode, such as the comicstrip, which in some ways it resembles. Two particular difficulties children have experienced in previous years of this project (which is in its fourth year at the time of writing) at the stage of storyboard design are in framing the shot in each drawing. They showed a tendency to draw everything in long shot, as if needing to see whole figures against backgrounds all the time. The convention of the closeup, with its selective indications of salient detail and its implications of social proximity, needed to be explicitly taught. The other difficulty, not overcome in this film, is that of drawing low-angle shots, because of the technical difficulty of drawing foreshortened images. As we shall see, this difficulty with visual design can be overcome by saying something similar in another mode.

At the storyboard stage, the other key mode in play was writing, as a way of notating the dialogue and voiceover. For the children, the writing of the script involves cutting it up into groups of words, clauses or sentences, the decision hinging on which groups of words will go with which shot. Already, then, *design* means to articulate image and word.

The notation of movement on a storyboard is – can only be – minimal. Though movement and duration are criterial to the kineikonic mode, in the early stages of design they remain largely in the heads of the designers. The next stage of this animation moves more decisively towards the design of movement. It involves making drawn bits to be animated. The decision facing the children here is: which bits will move, and therefore need to be drawn separately? The Head of Art working with the children says, in a talk to a seminar in the later stages of the project, that he has never done this before – never worked with children to draw exploded versions of animals, with separate legs, mouths, eyes, eyelids, torsos. For him, as for the children, this movement from design into production is a new multimodal inflection of Art – the mode of visual design orientated towards the kineikonic mode.

The production of the image as a set of exploded bits opens up another stage of the kineikonic mode, for which the design becomes a set of resources.

### **Designing and producing time**

The animation of the disaggregated images, now scanned onto a computer network as digital resources within the animation software package, ‘The Complete Animator’, is largely about the design and production of movement. As the name suggests, this is a dedicated animation package which allows for a high degree of control over the production process (for an exploration of how children use this software, see Parker & Sefton-Green, 2000). The design of the software interface – the way the varied production options are communicated in an interactive, audio-visual manner - offers a set of iconic resource available to the kineikonic mode. For example, the fact that Complete Animator allows externally produced images to be imported as a ‘stamp’ brings together the resources the children design themselves for potential movement – disaggregated objects, the drawn mouths, limbs, eyes, and eyelids mentioned above – and the ability to use the principles of stop-frame animation to make up the first stages of the moving image grammar. The main difficulty facing the children in the design of the temporal axis of their film is in imagining how the accumulation of still frames and the repositioning of visual objects on each frame will result in variables in movement such as smoothness, speed, and direction.

As they make their animated sequences, the children come out in groups to record their music tracks with the composer on the project. They have previously composed and practised these pieces, and now bring their instruments to perform them; though the composition has been provisional and not notated, and is subject to further improvisation now as they think about the animation which it will accompany. These decisions of production as design add emotional inflections to the piece: warning, reassuring, darkening, lightening. They are produced in short syntagmatic clusters, roughly equivalent to short segments of the action in the film. Recorded on DAT tape, they, again, become digital resources for the next stage of production.

Finally, in the process of editing, the syntagmatic groupings of image and sound undergo a further reordering. The editing is done on a non-linear (digital) editing system called Media 100. Such a system brings another set of tools into play, making possible forms of digital inscription to produce the moving image in new ways, which we have described in more detail elsewhere (Burn & Parker, 2001). Unlike the animation package, in which the children work ‘directly’ with the images using digital

tools for positioning, sizing, rotating and so on, in the editing programme sound and footage are represented in two ways. One is an edit window, which shows both sound and image as they will be in the final film. The other is the timeline, where groups of image, sound or graphics appear as coloured strips of image and sound, and in many ways are assembled as a series of graphic representations, using graphic waveforms, colour-coding, and horizontal and vertical alignment as cues for the composition of the piece.

Both these inscriptional technologies – the animation package and the editing package – gesture both forwards and backwards in the history of the kineikonic mode, offering a configuration of tools and semiotic resources unique to a particular historical moment. On the one hand, they offer the children an audiovisual interface which is structured around metaphors of older material processes of moving image production. The animation package mimics the cell-frame structure of traditional animation, as well as offering tools which are metaphors of the cell-frame production process, such as “in-betweening”. The editing package offers visual metaphors of the physical processes of editing film, in which strips of celluloid are represented by strips of image and sound on the timeline. On the other hand, the plasticity and provisionality of digital media mean that, where the physical properties of cell painting or celluloid recording meant that any action was impossible to undo, now such actions are in principle provisional, and can be undone and redone indefinitely. This principle is obviously valuable to educational practices, where making mistakes and redoing actions are important features of learning (cf Burn and Reed, 1998). However, it is not only children who use these technologies, of course. Digital media mean that professional editors can also take more risks in editing ‘on the fly’, without needing the painstaking calculations in setting up part of an edit that were so necessary in the days of analogue video or traditional film editing, when they only had one chance to get it right.

Perhaps most important of all, what was originally very much a technology of assembly, to do with ‘post-production’, has shifted in terms of Kress and Van Leeuwen’s scheme of semiotic strata towards design. Digital editing is a medium of production and design, in which the functions of assembly are fused with the functions of composition: aspects of the soundtrack which were originally carried out at an earlier stage, aspects of visual design such as colour, brightness, cross-zooming, which formerly belonged either to filming or to physical treatments such as dyeing; and the integration of semiotic resources which have only existed in digital form, such as computer-generated images, synthesians, and new kinds of transition effects.

### **Tiger’s Soliloquy: grouping, boundary, conjunction**

In this section, we will analyse a short sequence of the film (Figure 2), to see how sections of the image and soundtracks are grouped, how the groups are articulated, and how this tells the story. Especially, we want to see how the different modes are articulated: how they *complement*, *reiterate*, *anticipate* and *contradict* each other.

To do this, we will sometimes reduce the complexity of syntagmatic articulation to a simpler principle – that of *grouping*. This is simply to see the wood for the trees, so to speak, as we expect to see groupings of different kinds made within modes, between modes, and within symbolic representations of the process of production, such as the

timeline of the editing package. Where such groupings can be described using established systems of analysis (as in the lexicogrammatical structure of the clause, or the intonational patterns of spoken language, or the rhythmic structure of music), we will refer to these. However, some groupings in the kineikonic mode have much sparser histories of description: groups of gestures, groups of lights, groups of actors, groups of objects-to-be-animated, groups of image and sound on an editing timeline. We want to retain, for the moment at least, some sense of parity between all these syntagmatic bundles, even if it is at the expense of the detail of those which have hitherto been most 'visible'.

We will also refer to two related principles: *boundary* and *conjunction*. Simply put, if a group is made by the principle of what gets included, then an inevitable corollary is the principle which establishes the limit or edge of the group, and what this edge comes to mean, whether it is the frame of a picture, the silence between two musical phrases, the pause between two pieces of speech, or the cut between two shots in a film. Similarly, as is already apparent, the boundary is always going to lead to some kind of conjunction with an adjacent grouping. In the moving image, a new significance is added by the principle of conjunction – the significance of the frame when juxtaposed with the next frame, which is the principle at the heart of Eisenstein's *montage* (Eisenstein, 1968); or the significance of the mobile frame which moves within the shot, discussed at length by Bordwell and Thompson (2001).

In the diachronic axis of the visual track, the most obvious conjunctions are those between shots, called transitions. These offer a quite specific grammar of cuts, wipes, dissolves, and so on, familiar to anyone who has used a digital editing package. The transition, which constructs the distinctive disjunctive structure of the moving image, always has, in narrative films, a spatial meaning (we have moved to a different position) and temporal meaning (there has been no gap in time; or there has been a gap in time).

At the same time, however, boundaries at the edges of speech, music and sound - pauses, hesitations, silences, breaks – will delimit, fragment and conjoin the meanings made in these modes, in patterns which will complement those of the image track rather than being identical with it. Though we are used to analysing film by shot segmentation, and though visual shots make up an important signifying layer, it is necessary to consider how other layers in the kineikonic mix may work through different rhythms.

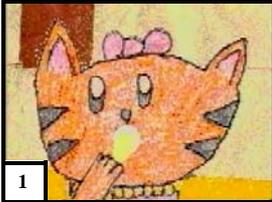
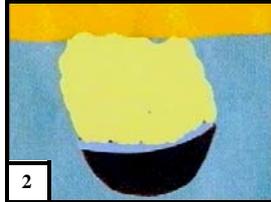
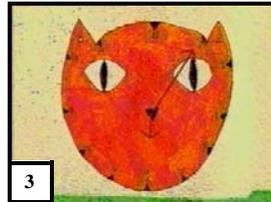
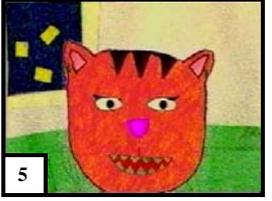
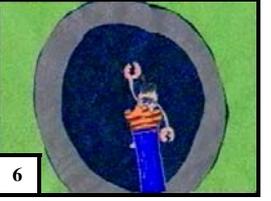
We want to look at this in terms of three overarching functions of any form of communication (Kress *et al*, 2001: 13): **ideational** (how some aspect of the world is represented); **interpersonal** (how the film constructs imagined relationships between text and spectator); and **textual** (how the text is composed as a coherent message).

### **Ideational**

In this first part of the sequence in Fig. 2, who is doing what? The answer is complex. As far as the overall sequence is concerned, Tiger is talking, and we infer his image, perhaps, from the sound of his voice, which we recognise. The sound of his voice, in other words, only works if the spectator's act of interpretation produces a new sign, combining the speech with the memory of Tiger's appearance from earlier shots. At the same time, this is a double narrative – Tiger as part of the larger story, and Tiger

as narrator of this section, which is both a memory and a plan for the future. The first shot, then, in terms of the image track, represents the cub eating eggs: a single action, grouped into a sequence of three – the eating movement is repeated three times.

**Figure 2: the kineikonic mode: a short sequence**

Minor scale up and down - piano	None	Weird noises on violin and flute	
Tiger: All the eggs are gone. What a feast.	Tiger: Strange how Anansi didn't want to eat any himself.		Tiger: I'm sure he'll try to trick me
			
Rapid two-note flutter on flute; violin ostinato below		None	"Ting"
I'll place this lobster into the empty pot and cover it with eggshells.	Anansi will think it's still full of delicious eggs.	Tiger: You should stay the night, godson.	None
			

In the speech track, the voiceover has two groups for the three in the image track. The two groups do not represent the cub at all, but make the eggs the subject of the first clause: 'All the eggs are gone'. Clearly it is the disappearance of the eggs that is important rather than who has eaten them, teaching us that the cub is simply an exemplary instance of egg-eating. Shots 2 and 4 reinforce this emphasis, presenting a visual equivalent of the deleted agency of Tiger's first clause: it is the disappearance of the eggs which is important rather than who has eaten them.

The second group tells us Tiger's feelings about the egg-supper: 'What a feast!' The unworried enthusiasm in Tiger's voice (partly achieved by the words themselves, partly by the material signifier of the mildly excited tone of voice of the child doing the voice characterisation) is significant because of its contrast with the dawning suspicion in the next clause/shot group. This contrastive structure, which works to heighten the suspicious tone of the next section, is also related to the music track. The initial shot/sound group has coinciding boundaries for the speech, image and music tracks. While the image shows the cub enjoying the eggs, and the speech shows Tiger innocently enthusing over the meal, the musical phrase consists of a rising and falling minor scale on a piano. Its function is to introduce a sinister note of warning, *anticipating* the suspicion in the following speech, and *contradicting* the image and speech groups with which it is conjoined.

The other images in the sequence represent other projections of Tiger's mental act. If the cub represents the immediate past – the delicious dinner – the lobster (shot 6) represents the future – Tiger's plan to place the lobster in the pot to punish Anansi.

However, the complex temporal design of this sequence - Tiger's voiceover in the "present" tense of the overall story; the dinner in the past; and the lobster in the future - is constructed through a complex multimodal interweaving of speech, image and music.

Temporality is constructed in all moving image narrative sequences using five possible time relations which have been categorised and used within film semiotics (Chatman, 1978):

- 1] Summary duration: the discourse takes less time than the events depicted.
- 2] Ellipsis duration: the discourse stops but we infer from subsequent shots that some time has passed.
- 3] Scene duration: story and discourse are of approximately equal length
- 4] Stretch duration: here discourse time is over-cranked, taking more time than the story events
- 5] Pause duration: where discourse time continues but story time stops.

In the sequence of shots listed above the discourse time is easily established; the sequence lasts about 20 seconds. However the events depicted in that relatively short time take place over a much longer durative span. We might suggest about one hour. So one of the main functions of time as it is designed here is to condense a series of narrative events into a much shorter timespan than they would normally take. What design choices are made in order to make this happen?

Shot 1 begins a flashback sequence which serves as an example of summary duration, as the eggs disappear (shots 2 and 4) and a clock face made in tiger's image depicts time passing (shot 3). Although this use of literal symbols is a common way of depicting the passage of story time in a succinct way (many films have resorted to pages of a calendar peeling off or dates and times written as the legend onscreen) the children have made an effective design choice. Not only have they passed over moments of marginal interest in terms of plot to reach the moment in the story on which the narrative pivots (Tiger's trick on Anansi), they have visually depicted in a clear way that this is very much 'Tiger's time', both in terms of his importance as a plot device at this moment, but also in the sense that he will get revenge for Anansi's past tricks and at the same time punish the spider's greed in giving no eggs to firefly.

As the image groups and the sharp boundaries between them emphasise this temporal summary, the speech track is accomplishing a quite different, but complementary, representation of time. Over the two images in shots 2 and 3, the speech track continues in one single sentence, composed of three clause groups. The first is a compressed clause consisting of one word - 'Strange ...' - which implies the missing verb structure 'It is'. This omission emphasises the strangeness as the theme of this utterance, aligned with the disappearing eggs: and both of these imply Tiger's suspicion, the causal hinge of his revenge trick. This is immediately followed by '... how Anansi didn't want to eat any himself'. Ideationally, this has two main functions. It introduces Anansi's agency: his refusal to eat the eggs; and it locates it in the past, continuing the established temporal status of this and the previous shot as flashbacks. However, the temporality constructed by the two modes is mobile and syncopated: as the speech track utters the past tense 'didn't', the clockface shows time hurrying by on the clock, already moving us on to the present tense of the story.

Shots 4, 5 and 6 reinforce our burgeoning sense of Tiger's importance. Shot 4 begins with the eggs disappearing, marking both the 'dinner we did not see' and the passing of time generally. Again, the speech track staggers the temporal design – as shot 4 represents the past dinner, the speech track introduces a flashforward for the first time – 'I'm sure he'll try to trick me'. This is a future event entirely made by the voiceover – it has no visual equivalent on the image track. Again, Anansi's agency is confined to the speech mode, and absent from the Tiger-dominated image track; and again, his agency is relegated to the secondary clause in the structure, the bracketing clause representing Tiger's controlling mental act: 'I'm sure ...'.

We cut to the next shot (5) in which the disembodied head of Tiger talks to us, in a theatrical soliloquy. This is an example of *scene* duration – the speech equalling the discourse time: it brings us back to the present, anchoring Tiger's voiceover in image and lipsynced mouth movements. At the same time, the future tense in the speechtrack again constructs a flashforward, this time anticipating the visual event in the next shot, as well as preparing us for the fact that this is a future event.

Indeed, when we cut to shot 6 and see the empty pot and Tiger's hand placing the lobster inside, we recognise that this is a resumption of the summary mode, this time as flashforward. The voiceover continues to run ahead of the time represented in the visual track, this time indicating a future time in which Anansi, again only present in word, not image, will be fooled by the pot full of empty eggshells.

Shot 7 marks a cut to Tiger in medium shot, implicitly talking directly to Anansi (though again Anansi is absent visually) – 'You should stay the night Godson'. It takes us back into 'real-time', the story and discourse-times merged as Tiger speaks.

We have left out an account of the music track, apart from pointing out the effect of the rising and falling minor scale in shot 1. Over shots 3 and 4, the sounds suggest no clear melody, but are rather an ostinato (a persistent, repetitive pattern) of agitated notes on the violin and a rapid repeated two-note sequence on the flute. This suggests something disturbing and hard to resolve; and this music grows through the next two shots. Unlike the minor scale, which suggests closure (perhaps the finishing off of the eggs, with which it coincides) the ostinati suggest lack of closure, and coincide with Tiger's plan to put a lobster in the pot. The modality created by the lack of either closure, clear rhythm or clear melody is one of uncertainty. In tandem with the future tense in Tiger's voiceover ('... he'll try to trick me. ... I'll place this lobster into the empty pot and cover it with the eggshells. Anansi will think it's still full of delicious eggs.') the sense of uncertainty is reinforced.

Clearly, this sequence is a complex marriage of dialogue and visuals which combine to create an impression of a great deal of time passing quickly. This is common during plot-rich moments in moving image narratives and that is certainly a likely reason for this sophisticated use of summary duration.

The principles of grouping, boundary and conjunction operate differently in each mode, and across the modes. Time is signified in speech by past, present and future verb forms. This is an explicit representation of narrative time, formed by the grouping of a clause around the verb structure. In the image track, by contrast, time is

signified entirely by boundary – the abrupt cut of one moment in time – and conjunction – the juxtaposition of a different moment in time. Here, temporal shifts are, as is common in film, implicit rather than explicit – they are conventions that the spectator learns and will construct as part of the process of internal sign production which Kress *et al* propose (2001: 6). Finally, the temporal nuances of this sequence are overlaid by the vertical grouping of modes. It is worth remarking that, in the case of every visual shot, the grouping of temporal representations in image and speech is disjunctive rather than conjunctive – the times in the speech groups are most typically at odds with the time in the visual groups, the two tracks sliding over each other, syncopating, staggering, shunting around the past of the dinner, the present of Tiger's soliloquy, the future of his plan.

### **Interpersonal function**

For reasons of space, we will not examine this in detail. The text works to establish a particular relationship with the audience: that of confidant. This sequence is directly addressed to the audience, evoking the genre of the theatrical aside, which in the moving image is characterised by a direct gaze at the camera; by a closeup of the character's face, which augments the social proximity of the theatrical aside with actual proximity; and by a voiceover which indicates in various ways that it represents the characters thoughts, spoken aloud to the audience. We can see that they are spoken aloud in shot 5, which is clearly not addressed to anyone in the story, but in which Tiger's lips move, and speech and image are grouped in one of the most common multimodal groupings of the moving image, lipsyncing. The entire voiceover's interpersonal function is affected by this – it is the visual equivalent of the words "Dear Spectator", and we hear the words as a dialogue with the audience. At the same time, our speculation about Tiger's trick and our sense of certainty about how these future events will pan out is coloured by the modality created by the music: anxiety, uncertainty, lack of closure.

The different modes offer other aspects of spectator position. We appear, for instance, to be on an equal level with Tiger, as the horizontal angle of the frame is level. However, this may be a question of what semiotic resources were really available to the children. They drew the characters from front, side and back – drawing them from different angles may have been beyond the resources of the students – and drawing a human figure from below requires a sophisticated ability to represent foreshortening, which is not easy. That the children's intentions may have been to make Tiger a powerful character, at least to a child audience, is perhaps shown in the choice of the material quality of Tiger's voice – a simulation of gruff adulthood, which is a sound-signifier in some ways equivalent to a low angle camera shot. These principles operate in different modes to construct the relation between text and spectator around spatial principles, placing us higher or lower (through angle), further or closer (through shot distance – or through sounds which suggest distance), or through signifiers of social hierarchy, such as the gruff voice of Tiger, or his patriarchal location in the family group shown in the visual design of the animation. In the sequence immediately before the one we focus on, Tiger is shown in a family group, almost like a family portrait – he is central in the group, and taller than his wife, who in turn is taller than the child/cub.

### **Textual function**

The distribution of information throughout the sequence sees a similar interplay between the modes. In the voiceover (shot 5) which anticipates the lobster shot, there are two clauses: 'I'll place this LOBster into the empty pot / and cover it with the EGGshells.' The information marked as new by its tonic prominence is 'lobster' in the first clause and 'eggshells' in the second. By the time we see the lobster in the following shot, then, it's not new; though its appearance is. What's new is its comic appearance, with one claw waving over its head. The marked aspect, then, is this comical quality. Simultaneously, the voiceover is saying: 'Anansi will think it's still full of deLICIOUS eggs.' Here, the tonic prominence is placed on the second and third syllables of 'delicious'. Eggs are old news – we've been told about those in the previous section of the voiceover; the emphasis on 'delicious' implies the potency of the snare being laid for Anansi.

Anansi, as agent of the presumed conspiracy to eat the eggs in the night, is represented not in the image track at all, but purely in the spoken sequence. His visual absence both suggests the negative action which triggers Tiger's suspicion – he didn't eat the eggs at dinner – and allows Tiger to be foregrounded in the image track as the dominant character of this sequence. The spoken voiceover sometimes anticipates the information in the image track, as in the introduction of the lobster; and in the emphasising, again through tonic prominence, that ALL the eggs are gone in the voice-track for shot 1, whereas the eggs do not finally disappear on the image track till shot 4. Sometimes information is offered in one mode which contradicts that in another mode, for purposes of ambiguity (as in the uncertainty expressed in the music while Tiger is spelling out his plan); or for dramatic irony, as when the tooth glint and the "Ting!" contradict the apparent hospitality of Tiger's offer of a bed in the final shot, suggesting a much more sinister intention.

The composition of the groupings, boundaries and conjunctions within and across the modes also suggest which bits of information are most salient, offering hierarchies of significance. In shot 1, for instance, the large closeup and centrality of the cub on its own would make the cub indisputably the most salient item. As we have seen, however, the salience of this image is significantly reduced by the voiceover, in which the authority of Tiger's voice and the way the words and emphases in the tonal group are organised make ALL the eggs the most salient piece of information. Towards the end of the sequence, the importance of the "Ting" sound accompanying the glint on Tiger's tooth is emphasised by the boundary of silence which surrounds it on the image track.

### **Constructing time: rhythm**

The function of rhythm as an integrative principle in film is discussed by van Leeuwen, on whose work we draw (van Leeuwen, 1985; 1999). The rhythm of editing in the image track is mostly aligned with the representation of story time we have already discussed. Every transition signifies a temporal shift of one kind or another, and the overall effect is of a rapid sequence of shots in which time is segmented, omitted, elided, compressed.

The rhythms of the speech tell a different story. Across the sequence, the rhythm of Tiger's voiceover is measured and even, and flows over the rapid breaks in the editing; while the tempo is fairly slow. If the edits – and the verb tenses – show rapid

movements, fragmentations and inversions of time, the speech- rhythm suggests a thoughtful musing about Anansi's duplicity and the brewing of Tiger's plot.

The music, again, is performing quite specialised tasks. In the sequence immediately before the one we have analysed, its rhythms are quite at odds with both speech and the editing of the visual track. While the dinner is being set up, there is a two phrase piano sequence in triple time, which continues over two shots. Tiger then makes the offer of eggs to Anansi, the refusal of which sparks off Tiger's suspicions. This break is not marked in the visual sequence, nor in the rhythm of Tiger's speech. It is marked only by the music, where the phrase in triple time stops abruptly, and a sinister two note (a minor third) sequence, changing the triple time to duple time, and the major key of the first sequence to a minor. This sequence continues across the next transition, so that where the editing breaks the rhythm to suggest the ellipsis, the music insists on the continuous rhythm of the threat and counterthreat implied between Tiger and Anansi. This sequence then gives way to the unmeasured time of the minor scale in shot 1 of the sequence we have discussed above, and finally to the even less well-defined rhythmic and melodic patterns of flute and violin.

The movement of rhythms in the music, then, is from triple time (suggesting here cheerful dance-like dinner), to sparse duple time, suggesting possible imminent threat, to minor scale, suggesting the sinister significance of Anansi's refusal to eat the eggs; to the indeterminacy and lack of closure of the final sequences, suggesting the uncertainty of the future events. These rhythms are all to do with the play of insinuation and conspiracy which snakes through the sequence, and provide a sinuous undercurrent to the rapid fragmentation of the editing and its temporal representations, and the slow, musing rhythms of Tiger's speech.

Finally, there are many kinds of spatial rhythm – we will mention just one, which is to do with signalling life – literally, a rhythm of animation, which functions simply to keep the characters animated, even when they are not doing anything particularly important. This consists of a regular blinking of all the characters, made up of animated eyelid graphics; and of slight movements of Tiger's head when he is talking. These are background rhythms, just keeping the animation on the boil.

### **Conclusion: multimodal pedagogies and the kineikonic mix**

The teaching and learning of the kineikonic mode is an explicit objective of this project. One thing we have not made clear, however, is that only some aspects of this multimodal venture become part of the conscious design of the animation, and are explicitly taught and learnt. These include narrative conventions, the words and grammar of the speechtrack, the music, and the visual conventions of the moving image, as well as the specific visual and auditory repertoires offered by the two software packages. However, some aspects of the design may be less conscious. These may be because the children designing the piece make unconscious associations which determine how certain semiotic resources are imported (for instance the colours reminiscent of Spiderman). Elsewhere, it may be because both children and teachers are less aware of some of the semiotic resources they use than others (a good example would be the tonal patterns of speech, which clearly contribute to the meanings of the sequence, but are almost certainly not consciously designed). The question with these, as with other features of the kineikonic mode

which we have tried to make visible in this chapter, is whether they can then be drawn more consciously into the design process in future.

The design of an animated film by 10 year old children is a collaborative and creative venture that embraces a range of processes, each deploying particular tools and other resources in different ways at different stages. We have attempted to show how the creation of a moving image text is simultaneously multimodal and yet governed by a single overarching mode which we call kineikonic. In the sequence of shots analysed above we have attempted to show how this kineikonic mode acts as a kind of mixing board through which different combinations of image, music, sound and speech can create a narrative experience, like spun colours blurring into white, in the synthesised narrative perceived by the spectator. In design, however, as in the disaggregative work of analysis, the significations of character, location and event are revealed as transformatively shuttled between the modes.

Our understanding of moving image, therefore, allows for a fully realised grammar of the moving image at every level. Unlike the grammar proposed by Metz, in which there could be no proper grammar of film below the level of the shot sequence, the kineikonic grammar used here can accommodate both spatial visual design at the level of the single frame (particularly important in animation); the spatiotemporal articulations of the shot and sequence; and the different affordances of the modes which Metz recognised in his notion of a ‘filmic language’, which assembled the different elements of film, but which he was not able to conceive of within a single semiotic framework.

For us, this is an urgent task, because the use of the kineikonic mode, though a century old for film theorists and the texts they describe, is newly-deployed by schoolchildren, teachers and community artists, who have only had access to these resources in a widely-distributed way since the recent advent of digital technologies. We need a new way to describe this kind of curricular vision and practice: a coming-together of communicative specialisms in an effort to create the moving image with children in a break with the monomodal pedagogies of the past.

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