

CROSSED LINES: THE CREATION OF A MULTIFORM, MULTISCREEN INTERACTIVE FILM

By Sarah Atkinson

Abstract

This article investigates the multiform, multiscreen interactive film installation, *Crossed Lines* (2002-2007, Dir: Sarah Atkinson). *Crossed Lines* amalgamates multiform plots, multiscreen viewing environments, interactive interfaces and interactive story navigation forms into one storytelling paradigm. My research probes the challenges of designing, authoring and scripting such an ambitious piece, drawing comparisons to traditional approaches to screenplay, authoring and traditional modes of fictional production. Various theories and paradigmatic perspectives are referenced whilst reflecting on the extensive creative developmental and production process of the filmic installation.

Article

Crossed Lines is a multiform (or multiplot) film telling the stories of nine characters in a way that the viewer can constantly explore and switch between all nine forms, and can simultaneously witness all sides of the characters' exchanges which are taking place between the nine remote locations. The starting point of the piece was to conceive a series of narratives that could be viewed as individual stories, but would also reference and link to the other stories, as is the case of the multiplot film genre. As McKee has noted 'multiplot films never develop a central plot; rather they weave together a number of stories of subplot size'. (1998:227) The difference with *Crossed Lines* is that it is delivered through an interactive interface paradigm, meaning that the viewer has the power to navigate and order the stories themselves, and to create a story of varying complexity depending on the number of different characters which are selected through the interface. Multiform plots have already been explored extensively in the commercial cinematic realm. For example, *Shortcuts* (1993, Dir: Robert Altman) traces the actions of twenty-two principal characters, both in parallel and at occasional points of connection. In *Magnolia* (1999, Dir: Paul Thomas Anderson), nine separate yet connected storylines are investigated. *Run Lola Run* (1999, Dir: Tom Tykwer) depicts three alternate realities triggered by the same event. Other influences to *Crossed Lines* have been non-linear films such as *Memento* (2001, Dir: Christopher Nolan), which is told in two separate narratives. One as a series of black and white scenes shown in chronological order which is intercut with a series of colour scenes which are presented in reverse chronological order; the two narratives converge at the film's climax. Influences also stem from multiscreen presentations such as *Timecode* (2000, Dir: Mike Figgis), which incorporates four simultaneous ninety minute takes shot by four different cameras and is presented to the viewer in a screen

divided into quarters. This type of approach is not usual within feature film production. As Boyd Davis has theorised;

Polyptychal approaches survive, indeed flourish, in some kinds of factual television, where the agenda is a quite different one from that of fictional narrative... In the classical film, only temporal, not spatial, juxtaposition of separate views is generally permitted. (76:2002)

Interactive film presentations have also been created through cinematic, DVD and computer interfaces. The viewer of such content 'is thus no longer merely an observer but a user of the film.' (Himmelsbach, in Shaw, J and Weibel, P. 2003:236) The first known interactive cinematic system is cited by Hales (2005) as being *Kinoautomat* premiering at Expo '67 in Montreal:

In a specially constructed voting cinema, the 124 audience members at each screening could vote on how Mr Novak should act at five key moments in the film by pressing red or green buttons on their seats. (2005:55)

Interactive interfaces have become commonplace within the DVD mode of delivery. Films such as *My Little Eye* (2002: Mark Evans) have been presented in an alternative screen interface on DVD, in this case through a web browser to enhance the narrative, which is centred on a reality web cast. Interactive story navigation systems have also been delivered on DVD. The format's architecture allows 'additional content to be embedded into the experience of watching a feature film, similar to hyperlinks within a web page'. (Atkinson, 2007:22) One such example, *Tender Loving Care* (2000, Dir: David Wheeler) allows the viewer to navigate and witness alternate content dependant on questions that they answer after each chapter of the film. These types of films in both their content—and story design—in the former examples, and in their form in the latter, challenge the dominant conventions of traditional classical film, and are far removed from 'normative diegetic exposition.' (Grieb, 2002:157) This is precisely the area in which the conception of *Crossed Lines* was posited.

There's a conflict between interactivity and storytelling. Most people imagine there's a spectrum between conventional written stories on one side and total interactivity on the other. But I believe what you really have are two safe havens separated by a pit of hell that can absorb endless amounts of skill, time and resources (Freitag in Platt 1997:195)

Crossed Lines is presented as a large-scale nine-screen projection, which is controlled by the use of a telephone interface. The nine numerical buttons of the telephone keypad mirror the layout of the nine video screens establishing a firm visual relationship between the interface and screen (see figure 1). A familiar, simplistic and efficient user interface is used intentionally since it is a ubiquitous piece of hardware that can be operated intuitively, with no or very minimal instruction for the user. As McLuhan states, 'the telephone demands complete participation' (1964:267) and is 'an irresistible intruder in time or place' (1964:271). In

Crossed Lines the user presses one of the keys, (numbers 1-9), and the result of their action is then immediately apparent on the corresponding screen in that a dramatic action is triggered, for example, a phone rings or someone walks into frame, thus giving the operator an immediate sense of user agency. In technical terms, what the user's key press actually activates is a switch in video streams. The corresponding screen (numbered 1-9 in exactly the same way the phone keys are positioned, the numbers run chronologically from left to right, top to bottom) changes to a new scene, as does one or more of the other screens depending on which characters are in conversation. This is consistent throughout the entire piece. It is therefore apparent to the user early on in the experience that they are driving the narrative. On the nine screens, the user is faced by nine characters (Figure 2) each of whom are seen or will be seen as the narrative progresses, on the telephone, and then communicating with one another solely through the use of the telephone. The approach taken to the production of the installation was to purposefully heighten and enhance the experience of the multiple narratives; and to encourage user engagement and immersion.

With the telephone, there occurs the extension of ear and voice that is a kind of extra sensory perception. With television came the extension of the sense of touch or sense of interplay that even more intimately involves the entire sensorium. (McLuhan, 1964:266)



Figure 1: Crossed Lines Interface



Figure 2: Crossed Lines: Nine Screen Projection

The comparison to the television here implied is of note, since the aspect ratio of the screen depicted in figure 2 is more akin to a television set and it's 4:3 dimensions than it is to a 16:9 cinema screen. The use of DV also contributes to the installation's televisual aesthetic.

When the handset is first lifted in the installation, the user is read the following pre recorded verbal instruction:

Welcome to Crossed Lines. There are nine people within this telephone exchange who communicate solely through the use of their telephones. You can activate their phones by pressing the corresponding key on the telephone keypad in front of you.

There is no other instruction presented to the user, either as printed documentation or on the screen itself. Aside from the nine video streams, there are no additional on-screen buttons or visual cues, and the visual composition to that illustrated in figure 2 is not changed at any time. As Boyd Davis has noted in similar interactive pieces:

The elimination of screen-furniture, together with the intuitive simplicity of the interaction, seem to hold some promise of making even an aggregate display feel natural. What is offered to the user is another segment of the diegesis, not an extra-diegetic button or control (2002:79)

This sense of the natural is of paramount importance to the piece and will be discussed further in a moment. It is difficult to escape from the ‘vending machine paradigm’ mode of interactivity in such installations (Hales, 2005:61), where there is a sense that there is nothing of any valued significance happening other than the pressing of a button to select an item. However, this was tackled in *Crossed Lines* by the use of the interface being an intrinsic element of the viewer’s experience of the narratives, to allow a sense of ‘transparent immediacy’ (Bolter and Grusin, 1999); as if the viewer is listening to the intimate exchanges in real time, it is as if they themselves are experiencing the result of a crossed line, as they enter the installation space and pick up the phone to listen in. The action of listening to the intimate exchanges on the screens also mirrors the actions of the characters and the stories that unfold on the multiple screens adding a further sense of narrative enhancement. Further retrospective investigation is planned into the user experience of the piece, as Sloane has noted:

The equipment used to present the story to the reader is not an adequate site for rhetorical analysis of how stories act on their readers. (2000:126)

In addition to its study of story structure and interface, *Crossed Lines* also explores concepts of surveillance and voyeurism as critical metaphors and also as dramatic motifs. The camera is locked off in each of the nine screens ensuring that the nine frames are static throughout. This was a thematic decision and functioned as a narrative device since the locked off and passive camera connotes surveillance. The viewer is therefore positioned as the voyeur. This theme is also prevalent in the use of the viewer’s listening device; the telephone handset. The viewer is also the eavesdropper. To further emphasise the theme of voyeurism and surveillance, each individual scene was shot as one continuous take with no cuts in either sound or picture, to give the viewer the impression that they are experiencing the events in real time. Artpolous cites Deleuze,

and the concept of the ‘time-image’, which characterises films that use different forms of montage to manipulate the relations between time, space and the duration of the movie. (2006:214) In terms of time, there is no such manipulation in *Crossed Lines*. Events appear to play out in real and in correct chronological time order. During the filming of the scenes, each character was shot individually; the actors heard the dialogue to respond to through an earpiece. In later shoots, the actors heard the pre-recorded dialogue through the earpiece, to which they then had to respond in complete synchronicity. Dialogue had to fit exactly and overlapping had to be avoided in order to eliminate any postproduction manipulation. If editorial cuts were to have been executed to structure scenes, if changes in shot size and camera movement were to be included, not only would the staging of real time be ruptured, the authenticity and actuality of the piece would also be compromised. A sense of authorial control would also have been imposed compromising the interactive intentions of the piece. As it is, by using the telephone paradigm as a cutting device, scenes are effectively actioned and sliced in two by the user. The Director/Author does not act as the editor. Instead, the user enacts that responsibility. If cuts had been put in, then it would also have emulated a conventional film. Whilst arguably, this still remains the case, there is less of a sense of stage management and manipulation. The classical cinematic codes of using different shot sizes to control the dramatic tensions within a film is absent, for example; cutting to a close up to raise the viewer’s awareness of heightened emotion within a character or scene. In this sense, the comparison of the installation to the television can again be drawn, with the telephone keypad acting as a remote control.

Television is encountered through techniques such as channel hopping, muting, and multiscreens, through multiple association in different contexts or fragmented through time-delay and by report (Brown, N, Del Favero, D, Shaw, J and Weibel, P, 2003:312)

This analogy is particularly relevant since viewers can choose to continually favour one character by repeatedly pressing the corresponding key on the telephone keypad, or they can explore the multiple strands by pressing a different key at each interactive juncture. These are the points at which a conversational interchange has finished, and each of the nine screens reverts back to looped ‘waiting’ states. Viewers can also interrupt the story flow at any time, by pressing any key to intercept another conversation. *Crossed Lines* therefore addresses viewers’ contemporary modes of viewing and reception. This type of fractured viewing behaviour is also comparable to viewers’ experiences of television serial dramas in which they have become well versed in the archetypal characters, episodic structure and predictive storylines. Viewers are able to skip action, to miss whole weekly episodes and yet are still able to pick up from their point of narrative departure as they have developed an awareness and fluency in the language of the medium. The ability to channel surf, to pick and choose, to make random selections, obviously has a profound effect on the different readings of the visual text and the different narratives that are revealed by the users’ choices. This will certainly be investigated further during user analysis of the piece, which will be discussed in the conclusion of this article.

The choice of a locked off camera also provided consistency; each of the frames needed to be similar in both composition and shot size, action needed to be equal and democratic, so that no one frame was favoured, and viewers could not be influenced on their selections on this basis. A mid shot was therefore selected as the most appropriate shot, this shot size also allowed key elements of the locale to be shown. In interactive works, says Garrand, ‘special attention is paid to sets and props to provide exposition’ (1997:76) This was also ensured through the various atmospheric audio beds that were used to provide the viewer/listener with further environmental information. The sound of keyboards tapping, and constant talking in a multiplicity of voices can be heard in screen two to indicate Phillip’s position of working in a busy, open plan office. In screen four, the viewer can hear constant background dialogue, but this is rather more subdued within Maureen’s environment of a Samaritan call centre. These narrative techniques are crucial communication tools in this type of narrative. As David Riordan points out, ‘if you spend time introducing the characters, the viewer is not being asked to do anything. In interactive, that is death. Instead you need to discover the back-story more as you go’ (Garrand, 1997:75).

The use of the telephone provides an obvious interplay between form and content. The detailed narrative strands were developed around this. The title *Crossed Lines* makes specific reference to the telephone interface chosen. A paradigm of a crossed line is used at certain points of the piece. Attitudes towards chaos and confusion lying behind crossed lines are central to the narrative. An example of this occurs in which Phillip (screen two) and Gary (scene seven) are connected together, seemingly by the viewer’s interactions. An intriguing exchange takes place in which an argument develops where the characters are attempting to ascertain who telephoned whom, and then Gary confesses to an act of violence that he has recently committed. Instances of physical crossed lines also occur towards the climax of some of the narratives, in which characters enter other characters frames (see example in figure 3) Julie abandons her car in screen three, and enters the phone box in screen seven, Martin leaves his screen, five, to enter Julie’s car in screen three, James from screen one visits Brenda in screen four, during which time Phillip from screen two enters James’ flat in screen one.



Figure 3: Crossing boundaries: In screen three, Julie has left her car and has appeared with Gary in screen seven. Julie's mother Maureen in screen six tries to calm Gary down unaware that her daughter has just entered the phone box. A simultaneous exchange is also taking place between James, screen one and Mandy, screen nine. Paramedics tend to Bob in screen eight, in a failed attempt to resuscitate him.

The narrative was purposefully focussed as a naturalistic piece, borrowing certain codes and conventions from British television drama in its choice of storyline and characters. It was grounded in real life ideas as opposed to fantacism, which is characteristic of many interactive projects, which tend to be far more abstract and exploratory. The work of Toni Dove exemplifies this tendency. Within her compelling interactive cinema installations, the theme of time travel is prevalent. Users are able to interact with a physical motion-tracking interface which in turn effects the visual images that are projected. By stepping on a motion sensor floor mat in the installation *Artificial Changelings* (1998) users are able to step in and out of different time zones; to travel back and forth in time. There are obvious visual signifiers imbued in the different character's costumes which communicate to the user the frame of time which they are in; future or past. The challenge of *Crossed Lines* was to design an experience that had sufficient openness and freedom of navigation whilst maintaining the naturalism of the storylines and of the user experience, and also communicating a cohesive narrative. Platt has commented that 'realism isn't a luxury in interactive entertainment'. (1997:197) This was an area that was a primary investigative focus of the piece and a key aim was to actively challenge this notion through practice based experimentation. Mateas and Stern have proposed that;

stories with looser, sparser event structures (plots) will be easier to implement in an interactive medium (require less generativity) (2005)

Bruckman differs, suggesting that ‘A balance must be struck between giving the viewer freedom and maintaining narrative coherence’ (In Garrand, 1997:68) *Crossed Lines* was indeed conceived as striking a balance between these two view points. A definite methodological intention of this piece was to develop a more fluid interface and storytelling experience, allowing the viewer to explore the stories, rather than to make decisions at forced points. This has been the case with several other web and film interactive projects in which the viewer is subject to a branching tree structure in which they can select a different storyline. Examples of this genre are *Jack Point Jack* (2002, Dir: Michael Stelzer) and *Dual* (Dir: Buckley Hubbard). These two web based interactive short films invite viewers to instruct the main male protagonist on the different courses of action that he can take, based on a choice point selection system at set points in the story.

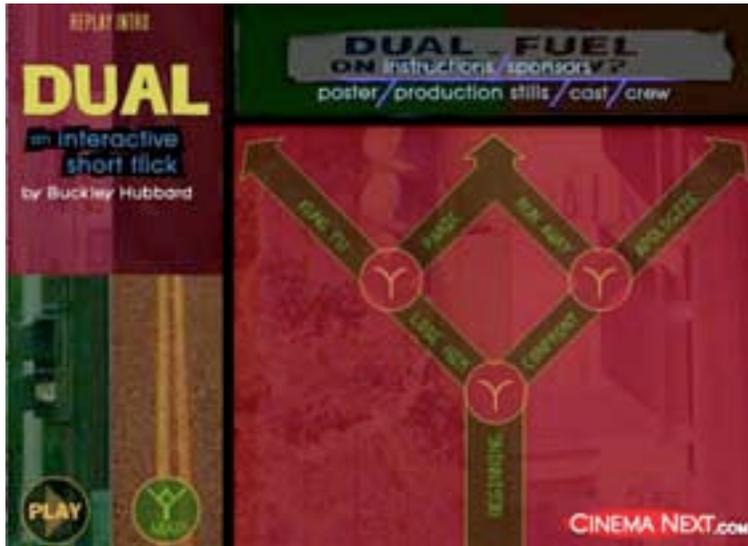


Figure 4: Graphical map of branching points in the interactive movie dual

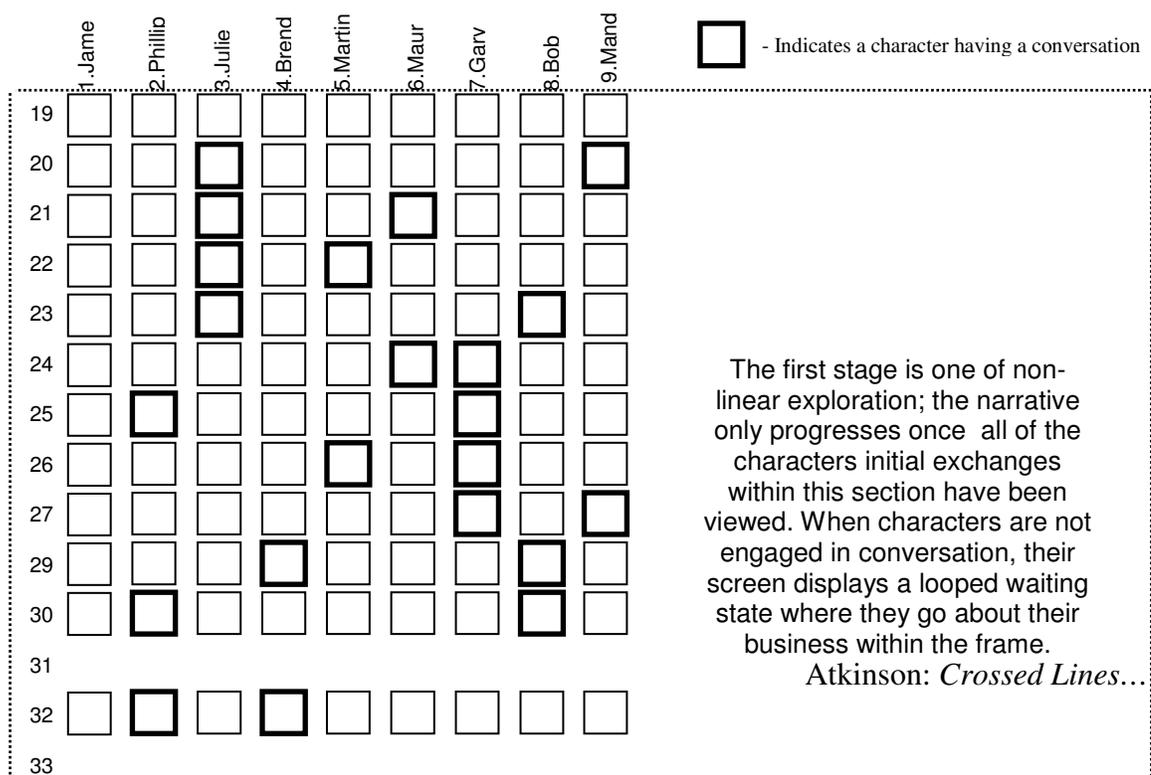
In branching tree interactive narrative structures, users cannot sidestep through the story, they are only able to move forwards limited by ‘dual’ the choices made available to them. In projects with longer running times, this also presents the producer of the content with a branching explosion, in which infinite numbers of alternate scenes would need to be recorded in order to satisfy the various different narrative pathways that could be followed. Dixon has argued of the commercial viability of interactive cinema;

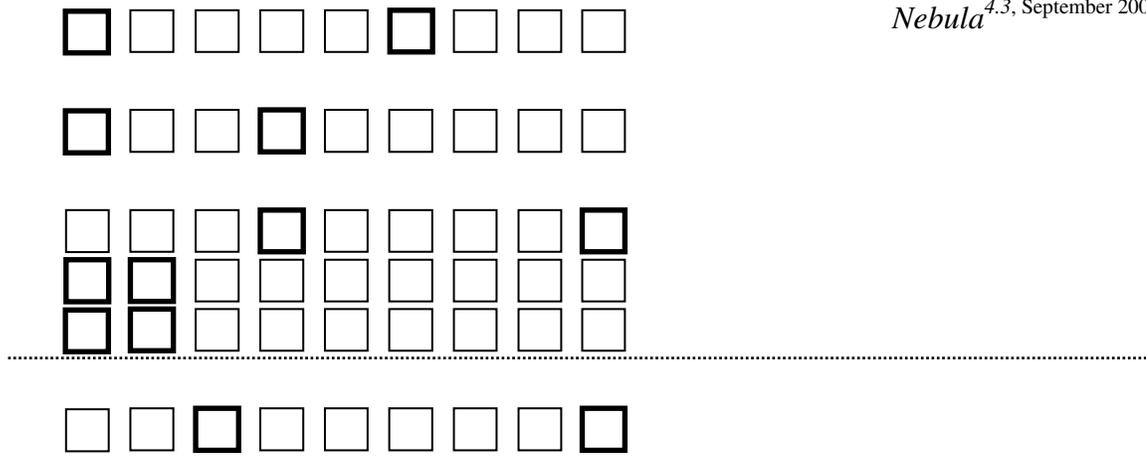
To give enough breadth to differentiate different plotlines and to follow the stories of different individual characters takes vast amounts of film, and consequently vast budgets, and the key problem is that most of it will not be seen. (2007:577)

Exploring an alternative to the branching tree form of exposition, to allow sufficient opportunities for choice and navigation was key in designing and defining the interactivity of *Crossed Lines*. This was of paramount concern in the scripting of the piece, and the subsequent structure of the storylines and scenes. The nine narratives in *Crossed Lines* are designed to run alongside one another, and to intersect with one another at strategic points. The user is never restricted by the amount of choices that are available to them, only in the sense that they have a choice of nine buttons to press (see figure 5) Various combinations of the story can therefore be viewed, and this will be an entirely different experience for every user. The user inevitably will make choices through the narrative and structure their own experiences and journeys through the set narratives. This interactive dichotomy presented in the comparison of branching tree structures and the one utilised in *Crossed Lines* is illustrated in Peacocks definition of interactive media being characterised in two ways, as redundant or entropic;

Redundancy is a term used to refer to the viewer's experience of a sequence of events that is highly predictable, where options are closed... entropy refers to experiences of sequences which are unpredictable, where options are open and remain open, possibly appearing to be discontinuous or disconnected (2000:23)

In this sense, the intention was certainly to explore the entropic possibilities presented by the structure of *Crossed Lines*. In the first section of *Crossed Lines*, the same scenes can be accessed at different points. Once a scene has been viewed, even partially, the user cannot revisit the same scene, unless the narrative is reset at any point by the user pressing the 0 key on the telephone handset. This restriction was imposed to maintain a sense of real time, of reality, and not to create an environment in which the user could transcend time boundaries as in the examples of Toni Doves work.





Once this stage is entered, the viewer follows a linear path, although still able to select any one of the characters at any point, the story will move forwards until the selected character's conclusion.

Figure 5: Illustration in linear form of the structure of *Crossed Lines*

The writing of the screenplay was approached by firstly developing nine identifiable and clearly defined characters (or archetypes) and then by mapping the various different and complex relationships between them (see figure 6 for brief character descriptions and relationship details). Contrasting character types were chosen and developed, strong affirmative types, (James, Phillip, Julie and Brenda) were purposefully placed against weaker more disturbed characters (Gary, Martin, Mandy, Maureen and Bob). There was a definite balance of ages and gender. There was also a balance of genre albeit in a subtle sense, in terms of the characters that were used to represent the specific genres. Phillip is the embodiment of the comedic, Julie, Bob and Gary exemplify the victims of tragedy and Martin personifies a representation of the villain in a thriller. The boundaries between the genres become blurred as different characters from different genres engage with one another. As Gilligan has noted in commenting on other interactive projects, humour, which is not a commonly used form of expression in interactivity, could be achieved by 'contrasting characters and information' (Gilligan, in Garrand, 1997:78) This is certainly the case in scenes when Phillip, is positioned

into two of the more serious storylines; that of Gary and Bob, with humorous results. Viewers of *Crossed Lines* can therefore choose to follow the genre of their choice through the representative character or mix and match through varied choices.

	Mandy <i>Sex line operator</i> Sullen and preoccupied	Bob	Gary	Maureen	Martin	Brenda	Julie	Phillip
James <i>Tarot card reader</i> A confident womaniser	Mandy calls James for anonymous tarot readings.	James calls Bob from Brenda's phone when he discovers that he is a victim of her fraudulent credit card activities.	No connection.	Maureen calls James for an anonymous tarot reading.	No Connection	James and Brenda are having an on-off sexual relationship. Brenda is seeking revenge for an affair she suspects James is having.	No connection.	Phillip calls James part of his plot with Brenda to see revenge. He also enters his flat at a la

								scene the narrat to sabota his tar cards and to steal h wallet
Phillip <i>Catalogue call centre agent</i> Camp and quick witted	Phillip speaks to Mandy from James' phone when he enters his flat to take his credit card.	Bob calls the catalogue order line from his Sunday newspaper and is connected to Phillip.	Crossed Line.	Maureen calls the catalogue line to place an order and is connected to Phillip.	Phillip calls Martin to let him know about Gary in the phone box. He knows him through Brenda's criminal connection.	Friends/ Conning Associates, they speak with one another in order to plot for Phillip to steal James' wallet.	No connection.	
Julie <i>Motorist stuck in her broken down car</i> Young, naive and trusting	They are good friends and speak throughout as they are meeting That evening to go out.	Crossed Line.	They meet at the climax of the narrative, when Julie runs into the phone box to call for help.	Mother and Daughter. Maureen becomes increasingly worried for Julie's safety.	Martin intercepts Julie's calls for assistance and calls to taunt and stalk her.	No Connection		
Brenda <i>Credit card fraudster</i> Unpleasant and selfish	Mother and Daughter; a troubled and distant relationship.	Brenda targets Bob to dishonestly obtain his credit card number.	No connection.	No connection.	No connection.			
Martin <i>Telephone hacker and stalker</i> Sinister	Martin phones the sex line to speak to Mandy.	Father and Son, they only speak in the conclusion of the	Martin calls Gary in the phone box to taunt him, after	Maureen speaks to Martin at the climax of the narrative				

and controlling		narrative when Bob calls Martin for help.	being given the number by Phillip.	when he answers Julie's phone from her car.
Maureen <i>Telephone Samaritan</i> Kind and well meaning	No connection.	No connection.	Gary calls the Samaritans and is confides in Maureen on a number of occasions.	
Gary <i>Alcoholic depressive</i> Aggressive and desperate	Gary calls the sex line from the phone box and speaks to Mandy.	No connection.		
Bob <i>Confused elderly man</i> Lonely and vulnerable	Bob calls Mandy from a number in his Sunday supplement.			

Figure 6: Grid of relationships and connections between the nine characters

The balance of characters was deliberate in order to allow the viewer a choice of a favoured point of view dependent on their own subjective experiences and preferences. On point of view, McKee argues that 'the more time spent with a character, the more opportunity to witness his choices. The result is more empathy and emotional involvement between audience and character' (1998:364) There are nine points of view in this film, each are equally presented in both form and content. The aim being that empathy and emotional involvement can be experienced on comparable levels with each of the nine characters. They are each given equal attention in terms of character complexity, three dimensionality, screen time, and dramatic tensions. Their stories are delineated and they each progress on their own different narrative journeys. Each character's story reaches a satisfying narrative closure. As Dancyger has argued, 'underlying the experience of the linear

narrative is the invitation for the viewer to identify with the main character' (2007:155). In the case of *Crossed Lines*, nine 'main' characters are depicted and developed, and the viewer is given the option of which character to identify with. All nine characters are present to the viewer at all times, in that they are constantly on screen either engaged in conversation with one of the other characters, or in some form of looped waiting state. A piece of software called Sophocles was used for the purpose of ensuring screen time and dramatic democracy; 'Sophocles was conceptualized from the start as a *story creation tool* for screenwriters. By allowing you to easily navigate and manipulate your story elements, Sophocles helps you craft a tighter, smoother flowing screenplay' (<http://www.sophocles.net/>). What was most useful for the purpose of my own research was the suite of analysis and visualisation tools available to provide statistical data from the screenplay document. Screen times and also character relationships could be identified and represented in both statistical and pictorial form. Figure 7 shows one such output.

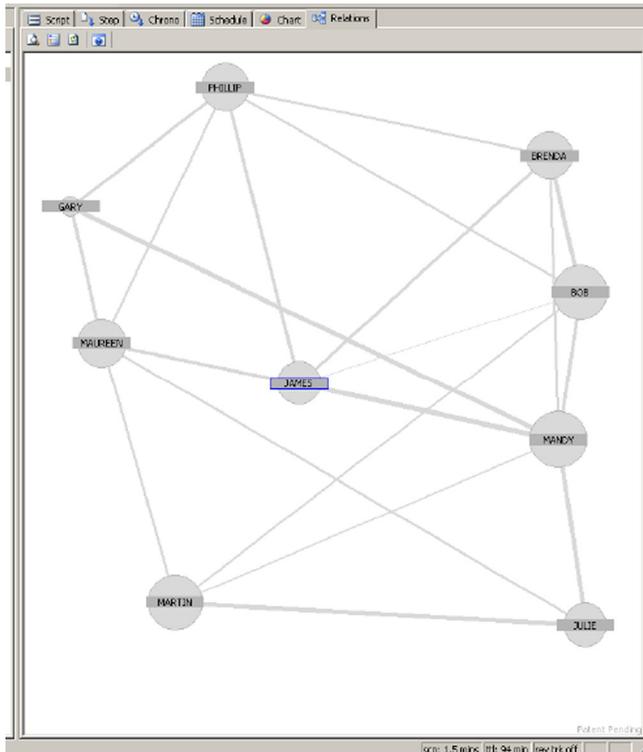


Figure 7: A relationship diagram generated in Sophocles, mapping the different strengths of character relations in *Crossed Lines*, indicated by the boldness of the conjoining line

Action between the characters was broken down into scenes or 'conversations' – the motivation point of the commencement of each scene/conversation is signalled by a telephone ring, this is triggered by the viewer's key press, and is punctuated to end by a character's telephone being put down. It was essential to structure

the narrative segments in this way, as O'Meara has observed, 'every experience in an interactive ought to be a tiny story or scene. Even if it's short, it still needs to have a beginning, middle and end'. (In Garrand, 1994:76) This was certainly the basis on which each of the scenes in *Crossed Lines* were structured. Given the problems that can arise within a potentially fractured viewing experience, in what has been scripted as a fully formed narrative, the challenge of ensuring that viewers received essential expositional elements was paramount.

The same information will have to appear in a number of different scenes, but it can't be presented in exactly the same way or the player will become bored with hearing it on repeated viewings. Instead, the writer has to feed the essential information into all the possible story tracks but do it differently each time. (Garrand, 1997:76)

The conversations are by their very nature 'dialogue heavy', since characters are inclined to explicitly state their intentions, being on the telephone, they are not afforded the additional communication tools of body language and facial expression. The usual screenwriting rule of using 'visual before aural' (Costello, 2004:82) indicators does not necessarily apply in this instance, especially given the fact that the conventional cinematic tools such as camera movement, shot changes, non-diegetic sound and music are also absent. Costello encourages the writer to omit unnecessary dialogue, if the same information can be given visually, then to cut a line or a word. This economical approach to language is not appropriate given the nature of all the scenes and the emphasised actuality of the piece. Cinematic codes and conventions are once again not appropriate, again arguably making the piece more like television in its form, content and potential reception.

In terms of approaching the formatting of the script, Friedman claims that 'no clearly defined format has come to the fore such as those that exist for the film and television worlds'. (2006:266)

Handler-Miller asserts that 'formats for interactive scripts vary widely. Sometimes they resemble the format for feature films, but incorporate instructions for interactive situations' (2004:197)

In the case of *Crossed Lines* at traditional format was followed, then additional elements not present in traditional scripts, were employed to identify the scene numbers. These scene numbers precede the master scene line in every instance (see figure 4). The first digit refers to the grid number in which the scene is visible, and the second is a shooting script number, to identify the sequence of scenes to be shot during the principle photography stage.

NINE INDIVIDUAL SCREENS, POSITIONED IN A GRID THREE BY THREE

In each we see a character.

1.1.INT. JAMES' OFFICE - DAY

James sits at a candlelit desk, next to a telephone, shuffling a deck of tarot cards.

2.2.INT. MARTIN'S OFFICE - DAY - SAME

Martin is in a darkened attic room, the light of a computer screen illuminates his face as he frantically taps into a keyboard, he stares intently at the computer screen, biting his lip and concentrating.

3.3.INT. JULIE'S CAR - DAY – SAME

Julie is driving along in a car in an inner-city setting. She taps, sings and dances in her seat to an upbeat house track playing on the radio.

4.4.INT. MANDY'S OFFICE - DAY - SAME

Mandy is sat at a desk in a very tatty office environment next to a telephone. She is chewing gum, which she pulls in and out of her mouth with her fingers.

5.5.INT. BOB'S LIVING ROOM - DAY - SAME

Bob sits on an arm-chair, fast asleep with his head tilted to one side, with a telephone receiver cradled between his ear and his shoulder, and a newspaper resting on his lap.

6.6.INT. MAUREEN'S OFFICE - DAY - SAME

We see a phone in an empty booth. There are self-help and medical leaflets surrounding the phone. There's call centre noise in the background.

7.7.INT. PHILLIP'S CALL CENTRE OFFICE - DAY - SAME

Phillip sits in a sterile office environment wearing a head set. He looks around the office and chats to people, eats and flicks through a magazine.

8.8.INT. BRENDA'S HOUSE - DAY - SAME

We see a chintzy hall way and a pseudo antique phone, fake flowers and tacky ornament. There is no character visible in the frame.

9.9.INT. PUBLIC TELEPHONE BOX - DAY - SAME

We see wide-angle view taken from the top corner of an empty phone box in a quiet street.

INT. GALLERY INSTALLATION – DAY – SAME

Viewer/Listener picks up the phone receiver in the installation to listen.

INSTRUCTIONAL V.O.

Welcome to crossed lines. There are nine people within this telephone exchange who communicate solely through the use of their telephones. You can

activate their phones by pressing the corresponding key on the telephone keypad in front of you.

1.10.INT. JAMES' OFFICE - DAY - CONTINUOUS

James deals the cards that he has been shuffling into five piles as if doing a tarot reading for himself. He is serious throughout.

2.11.INT. MARTIN'S OFFICE - DAY - SAME

Martin's tapping and concentrating continues as he turns the speakers up, the sound of police radios can be heard. He starts to pick up what sounds like telephone conversations, A man can be heard dictating directions as to his whereabouts on the motorway.

3.12 etc...

Figure 7: Script excerpt from *Crossed Lines*

While a viewer is witnessing a conversation, action continues in each of the remaining 'non-conversational' frames. We see the other characters in looped action, waiting for a call or going about their business. For each scene, therefore it was essential that all nine screens were scripted in the way shown in figure 7, even if there was no dialogue for a particular character; a description of the action of their screen was essential, as dependant on the point in time in the story, the characters in the non conversational frames would be waiting in a different way, which would be indicative of their current stage in their own narrative journeys. In screen seven, for example, Gary, the inhabitant of the phone box, becomes increasingly agitated as the narrative progresses as he either swigs from a bottle of neat rum or props himself against the phone. Similarly Julie, in screen three, stranded in her broken down car becomes visibly anxious as night falls, her camera switches to night vision as the light levels lower increasing the sense of user surveillance. The viewer witnesses her increased anxiety as she is unknowingly, telephonically stalked by Martin, the character who inhabits his phone-hacking world within screen five. The passage of time in *Crossed Lines* was initially signified within the motif of a clock which was used in the scene in which Bob, the old man sat. This frame was tightened during the postproduction phase in order to be of comparable composition to the other eight screens, as incorporating the clock meant that the shot was too wide (figure 8). The two exterior scenes are now used as the key signifiers of the natural passage of time from early evening, to dusk, to nightfall (figure 9). These changes happen in tandem with one another, again to emphasise the real time experience of the piece, to indicate that the action of all nine screens is occurring in the same time frame. Obviously faster,

impulsive viewers will experience this passage of time at an accelerated rate compared to slower more methodical viewers.

In form and presentation, the script appears as any other, but this is only a hint at the final film, as it cannot encompass all of the narrative possibilities. The variation in order and structure of the script is set in motion by the viewers' various interactions. The script includes figure 5 as a visual guide indicating the layout and the corresponding numbering of the scenes to enable those working on the project a greater understanding of the structure of the piece. As Friedman states 'writing for interactive media will require a new layout to accommodate not only more elements of media production but also the non linear form and the interactive possibilities of the program'. (2006:254)



Figure 8: A change of frame size; initially the time on the clock corresponded with the actual screen time of the events taking place in each of the nine screens.



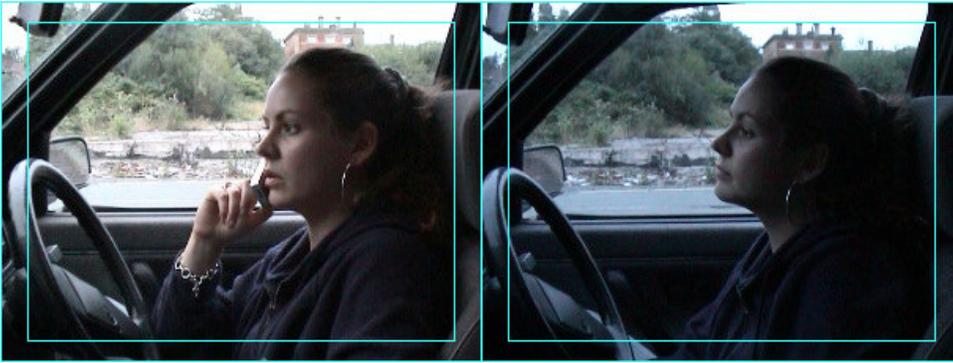


Figure 9: The passage of time is illustrated in the piece by the changing lighting conditions in screens three and seven.

To provide further analysis of the piece, audience engagement and reception need to be considered, since, as Tremblay has observed, when navigating through such ‘narrative spaces, which present multiple perspectives and simultaneous levels, the user must bring his or her subjectivity into play.’ (Tremblay, 2004) Through the *Crossed Lines* project, there is a method to not only understand subjectivity in the media, but also to track its applications. Audience studies will now be undertaken to gauge the reception of *Crossed Lines*; to build patterns of how the different story content has been viewed and accessed. A secondary level of scripting has been incorporated into the game design to enable data to be generated concerning the time spent in the different scenes, the different routes chosen, character and storyline popularity, and the overall length of the story experience. The output of this scripting is shown in figure 10 and can be used to generate and visualise this data. In-depth interviews with participants in the piece will also be undertaken to generate qualitative data.

```
-- "Viewer started watching movie at: 15:14:16"
-- "Viewer entered scenes10to18 at 15:14:45"
-- "Viewer selected scene17slug at 15:14:52"
-- "Viewer selected scene15slug at 15:15:02"
-- "Viewer selected scene18slug at 15:15:12"
-- "Viewer selected scene14slug at 15:15:21"
-- "Viewer selected scene10slug at 15:15:31"
-- "Viewer selected scene12slug at 15:15:39"
-- "Viewer selected scene13slug at 15:15:47"
-- "Viewer left scenes10to18 at 15:15:51"
-- "Viewer entered scene27 at 15:15:51"
-- "Viewer left scene27 at 15:15:58"
-- "Viewer entered scene24 at 15:15:58"
-- "Viewer left scene24 at 15:16:44"
-- "Viewer entered scene19 at 15:16:44"
-- "Viewer left scene19 at 15:16:56"
-- "Viewer entered scene31 at 15:16:56"
```

```

-- "Viewer left scene31 at 15:17:04"
-- "Viewer entered scene20 at 15:17:04"
-- "Viewer left scene20 at 15:17:15"
-- "Viewer entered scene23 at 15:17:15"
-- "Viewer left scene23 at 15:17:22"
-- "Viewer entered scene26 at 15:17:22"
-- "Viewer left scene26 at 15:17:26"
-- "Viewer entered scene25 at 15:17:26"
-- "Viewer left scene25 at 15:17:30"
-- "Viewer entered scene39 at 15:17:30"
-- "Viewer left scene39 at 15:17:37"
-- "Viewer entered scene45 at 15:17:37"
-- "Viewer left scene45 at 15:17:48"
-- "Viewer entered scene49-53END at 15:17:48"
-- "keypressed=" 7
-- "keypressed=" 7
-- "Viewer left scene49-53END at 15:18:05"
-- "Viewer entered scene54END at 15:18:05"
-- "Viewer left scene54END at 15:19:09"
-- "This movie was watched by: sarah"
-- "viewer stopped the movie at: 15:20:09"

```

Figure 10: Text file generated by the secondary layer of scripting as the user interacts with *Crossed Lines*

This creative process demonstrates the insights of the various disciplines involved; from conception, to plotting, scripting, filming, directing, picture and sound editing and interactive authoring. *Crossed Lines* brings forward debates and discourse surrounding alternate narrative structures, user engagement and interface. *Crossed Lines* is a multigenre hybrid of film, television and game which references, reflects and celebrates its predecessors and looks toward new paradigms of challenging filmic storytelling. It presents a malleable form of digital fiction, which takes into consideration the viewer's heightened awareness of narrative structure and plays to the sense of instant gratification inherent in the television and gaming audience.

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