Elements of 'interactive drama': Behind the Virtual Curtain of *Jupiter Green*

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Immediately after I registered online for 'Australia's first web-based drama', I received an email from Old Norm, a fictional character in Jupiter Green, a fictional apartment block (Anonymous, 2004c). Old Norm, the caretaker, let me know that 'there's pretty much no limit to where you can go. You've got permission to snoop about wherever you like'. So I did, both within the work and beyond. I read the emails and SMS messages of the Jupiter Green residents, chatted with them via email and through a forum, spied alongside them through a web-cam and even sent a confession to one of the characters. I also checked the source code of the web-pages, discovered every website connected to the work, researched the creators and recorded every screen of the massive work. I've spent weeks in the audience, behind the curtain and loitering in the neighborhood. This essay is a review of the work and a snapshot of the theories and methods of 'interactive drama'.

1. The Work

The setting of the story is in an old apartment block called Jupiter Green, where the characters are tenants—Amber, Derek, Charlotte, Joss and Maggie—who go about their melodramatic lives, while we watch and delve into it. You enter to a screen with a large square for viewing moving images surrounded by various communication devices: a mobile phone, card file, web-cam, speaker, video-camera, answering machine; door buzzers with residents' names, and the usual help-sections inconspicuously positioned with a link to a forum. The devices, when clicked, trigger real-world representations. The mobile, for instance, triggers a screen with SMS messages from and to fellow-residents that the user can click through and read; the web-cam a video of its view; the card file postcards. Content uploads into these devices and more appear (e.g. Polaroids) at certain points when a video sequence is watched. Therefore, as the episodes progress, so does the data on offer. After each video sequence (one per episode), the user is permitted access to a resident's room. This is indicated with a dot on a floor-plan. Further devices are then made available for perusal: personal computers and therefore emails, diaries, pictures. When a door buzzer is pressed, the visitor's pleas for entry, drunken abuse or friendly hellos are heard and likewise updated each episode.

Figure 1: Screenshot of interface of *Jupiter Green*,
sourced from *Jupiter Green* Press Kit [Online] Available at:
http://www.jupitergreen.citysearch.com.au/presskit/images.html.

The *Jupiter Green* world is a mix of characters, all bound by the red-brick walls of the Jupiter Green complex and by their own small-mindedness. Their meddling and unhealthy fascinations with each other provide much of the narrative complexity. The two girls, Amber and Charlotte, share a penchant for fashionable garments, a taste for the same man and the habit of undermining each other's confidence. They giggle about the resident weirdo Derek, who prefers Elvis attire and offers sincere and obliging advice to confessors on his website. Derek also pervs at the others through his web-cam, set up in the elevator. Yet he is oblivious to grey-haired Maggie, who rummages through his, and everyone else's, belongings. Maggie is her dementia-stricken husband's carer. She tends to him, combing his hair with objects swiped from other tenants, hoping to coax him back to the present and into her arms. Then there is Joss, the good-looking Uni student who avoids intimacy, preferring one-night stands and collecting sound bites of everyone's conversations, tantrums and gossip.

Jupiter Green was conceived in 2000 by filmmaker and interactive designer Kylie Robertson, who also wrote and designed it along with television, film and game (*The Dame was Loaded*) producer Jo Lane.[1] A prototype for episode 1 was finished in July 2002 and user-tested with teenagers the same year (Place, 2002). The pilot I experienced was developed in 2003. After years of trying to explain the concept of an 'interactive drama' to potential investors, a version was produced, unwittingly, from funding intended for producing a business plan from the Australian Film Commission and then developed

and placed online due to the involvement of Sensis™. Sensis™, the company behind advertising, information and directories such as the online publications of *Yellowpages*®, *Whitepages*®, *Citysearch*® and *Whereis*®, were in the audience of a talk given about the project in 2003, and they jumped on the opportunity immediately (Lane, 2003). *Jupiter Green* was online at CitySearch—a popular culture and lifestyle website with the demographic of e-literate 18-35-year olds and over 645,000 unique visitors every month—from June to August in 2004. This is perhaps, as Jo Lane dubbed it, the 'most public user testing [of a work]' (Lane, 2004).

2. Who's on first?

Though it is probably the first networked user-testing of a 'web-based drama' of such a large scale, it is obviously not the first 'web-based drama' in Australia and elsewhere. In the late 1990s, for instance, Jason Wheatley co-produced *Byte-Sized Theatre* (Wheatley and Morris, 1997). Wheatley then created *Love Bites* in 2002 with AFTRS, NIDA and Brainwave Interactive and claims it as 'Australia's first interactive drama for broadband' (Wheatley, 2002). An irritated *Jupiter Green* forum participant, Josh Nicholas, also cited three years ago works he has collaborated on in the genre in Australia: *Voyeur Motel* (2001) and *Hardboiled* (2002). Outside of Australia there are also a number of related projects, such as the *Oz Project* at Carnegie Mellon University, which operated from 1987 to 2002. The *Oz Project* was influential in its research into developing 'technology and art to help artists create high quality interactive drama, based in part on AI-technologies' (Anonymous, 2002). Some of the project members are currently researching and producing 'interactive drama'. Michael Mateas, for instance, is collaborating with Andrew Stern to produce an AI-driven drama *Façade* (Mateas and Stern, 2002/...). Stern and previous *Oz Project* members are creating sentient characters at *Zoesis*. Magy Seif El-Nasr is developing responsive lighting in his work *Mirage* (El-Nasr, 2002a). Despite the small list cited here, it is still difficult to understand why potential investors did not understand what an 'interactive drama' is.

3. Interactive what?

Many of the funding bodies the *Jupiter Green* team approached found the concept difficult to understand: 'You mention online and interactive and they sort of glaze over' (Jo Lane, quoted in Anonymous, 2004b). The term 'soapie' was therefore introduced to bridge the gap and give potential partners a genre they understood (Robertson, 2004). The prefix of 'interactive' is often added to any work in the new media ecology. The addition is meant to indicate that the work is digital and that the user is to some extent in control. A digital work—one that can be used on a computer, for instance—is easily conceivable with the advent of games and CD-Roms in the entertainment market. However, an evolving drama that allows participation on behalf of the audience is not. This is due in part to the polemic between ludologists (researchers of games) and narratologists, but mainly to the lack of consensus on usage of terms.

'Interactive drama' was originally defined by Brenda Laurel in her 1986 thesis as

> a first-person experience within a fantasy world, in which the user may create, enact, and observe a character whose choices and actions affect

> the course of events just as they might in a play. (Laurel, quoted in Mateas, 2002: 7)

The aforementioned *Oz Project* described 'interactive drama' as 'the presentation by computers of rich, highly interactive worlds, inhabited by dynamic and complex characters, and shaped by aesthetically pleasing stories' (Kelso, Weyhrauch and Bates, 1992: 1). Traditionally, the area addresses research into stories experienced from a first-person perspective as managed by a software system, where the user activity affects the outcome. However, the term can encompass all forms of storytelling in the digital medium, as in Janet Murray's generic 'cyberdrama' (Murray, 1997), or represent a 'specific niche' (Mateas, 2003). Andrew Stern describes 'interactive drama' as 'a dramatic situation […] in which you are free to say things and take actions that affect how the drama unfolds' (Stern, 2003). But how and to what degree a user's actions affect the drama is still under discussion in the field of 'interactive drama', which is still in a 'pre-paradigmatic' stage (Swann and Watts, 2000).

Thankfully, Sensis™ ignored this and the 'soapie' rhetoric and saw in *Jupiter Green* an 'opportunity to add breadth and depth' to the CitySearch® site (Cheryl Vize, quoted in Anonymous, 2004b). Kylie Robertson stands by the term 'interactive drama', however, adopting a fundamental meaning: that the work employs both these two tools for telling a story (Robertson, 2004). Robertson also explains how *Jupiter Green* differs from other works:

- it doesn't allow you to change the ending
- you can't vote anyone off
- you get to be part of a fictional space
- it is a blend between reality and fiction
- there is one on one interaction via email with characters
- the complexity and level of interaction affects how you experience the narrative
- you can choose the character you want to follow
- the 'intelligence' behind the site tracks the user and customises the content accordingly
- it uses everyday communication devices to tell the story. (Robertson, 2004)

The rest of this paper will examine the fields of 'interactive drama' through an analysis of the *Jupiter Green*. Previous theories and methods for the design of 'interactive drama' will be extrapolated and developed through Robertson's criteria of difference.

4. Elements of 'interactive drama'

4.1 Fixed ending

The Technical Director of *Jupiter Green* stated on the work's forum that they 'don't feel [the] method of choosing an outcome or path of the narrative necessarily creates an interactive experience' (Simpson, 2004). This is an interesting position considering the

plethora of hypertext and AI-driven works being researched and produced to explore and extend this very aim. Combining agency and drama is unilaterally considered the ‘holy grail’ that theorists and practitioners seek to develop. Although there are works that react to the input of users, none of them have outcomes that are not pre-scripted in some sense. This does not equate with a collaboratively produced story, as Joseph Tabbi succinctly explains in relation to hypertext:

> Hypertext readers might enrich the work by contributing to it new content, but as yet their activity is for the most part limited to making choices about how to *operate* the text—selecting narrative pathways, following links both internal and external to the work, and forming mental connections that the author has already placed there. (Tabbi, 2002: xxv)

Some works lean into the domain of an open work where the user builds a story out of their own conceptual construction. Simon Norton’s ‘interactive and animated comic-strip’ *Testimony: A Story Machine* has each ‘clink’ randomly replace an image and text balloon, altering the order of events and perspective and therefore facilitating in the user the desire to fabricate associations between them (Norton, quoted in Dena, 2003).[2] This kind of *bricolage* is also obligatory, Jane Yellowlees Douglas contests, in an emerging storytelling environment:

> The demands particular to interactive narratives and to reading in any new environment lacking established reading and interpretive strategies seem to demand that we evolve into *inner-directed* readers, or readers who move beyond simply realizing an author's virtual text and resist authorial prescription to arrive at readings of our own. (Douglas, 1992)

The ‘bottom-up’ approach can also be prescribed, as with an ‘emergent narrative’, where narrative is ‘due to the interaction between the participant and some animated believable characters’ (El-Nasr, 2002b: 24). Despite being able to talk to the characters through email in *Jupiter Green*, none of what was said had any influence on the characters and plot, and neither did my clinking. However, the interactivity inadvertently encouraged me to believe that I may be able to influence the outcome. I emailed Amber, one of the main characters in the story, and tried to encourage her to try and date a fellow she seemed reluctant to consider, and to drop her friend Charlotte who was always criticising her. This is her response:

> hi Christy
> thanks for the email. As for Max, I know I know....he's very sweet....but don't you ever get the feeling that some guys are just not right for you? I think it was the nenish tarts on level 1 that sealed the ‘I can't date Max’ deal. Do you think I should give him one more chance though?
>
> Oh and Charlotte....well I love her to bits despite our probs. Being best friends from kindy there's no doubt we've had our ups and downs. She is so different to me I know. But her hearts in the right place.....most of the time anyway.

> Anyways, I'm off to cook up my banana loaf.
> Chat soon? Your friend Amber

Amber continued to lust after a character, Joss, who I felt was wholly inappropriate, and stayed friends with Charlotte, who I considered poisonous. My involvement in her circumstances was shared by many of the users:

> Amber was the most popular recipient of emails from viewers, with both male and female audience members showing empathy for her situation and encouraging her to look at life differently. The most amazing part of this process was the fact that viewers often wrote themselves into her story, or offered anecdotes of their own. (Robertson, 2004)

The passionate participation of myself and others in the lives of the characters—an example of 'expressive enactment' or self-implication of reader response theory (Kuiken, Miall and Sikora, 2004)—exposes the problematic nature of the interactivity of this type of drama. If a character does something that is not aligned with what the reader/user believes to be appropriate, then the character or the author becomes unbelievable or annoying. But interacting with a character implies a direct link to the author or at least to the decision-making part of the character's brain. Does interacting with characters then *necessitate* a user influenced ending? Although the ability to interact with characters may be desirable and enjoyable, if it has no impact on the story it renders the user's efforts pointless, with implications for the experience of the work and for the user personally. However, considering the state of story engines, the budget restraints of the project and the level of e-literacy expected of the users, the *Jupiter Green* team made a defensible choice to have a fixed ending.

What should also be made clear about the narrative of *Jupiter Green* is that each character had their own storyline that interweaved with the others. Each plot line was explored by the user through the video and media snooping and then neatly wrapped up in the final episode. But parallel to the narrative thread was the game-like or ludic element: that of solving puzzles (for example, figuring out the password to Amber's diary) and the ultimate 'secret' of Jupiter Green.[3] Indeed, the story was realised with a two-pronged approach of a *narrative* that is *accessed* by the user and the ludic with puzzles that could only be solved through 'non-trivial effort' (Aarseth, 1997: 1).[4] This straddling of 'text as world' and 'text as game', as Marie-Laure Ryan conceived it, triggers alternating expectations and strategies from the user, which will be further discussed, but for now we'll continue with Robertson's criteria (Ryan, 2001: 176-203).

4.2 Can't vote anyone off

This criterion attests to the influence of reality television programs on the creator rather than any specific trait of 'interactive drama'. For Robertson, the success of programs such as *Big Brother*, *Popstars*, *Survivor* and *Australian Idol* signifies best practice in capturing the attention of a targeted demographic. *Jupiter Green* was originally developed for distribution through an interactive television series and website. Finance

and technology restraints and the preference for immersion through interactivity helped shape the current work. Robertson has not ruled out having a television series, but insists that the online content should not merely augment it, as this option 'underestimates the importance/power of interactivity to the story' (Robertson, 2004a).

Many television series, including reality television, have websites that can either augment, or provide a further dimension to, the main channel. These are known as 'cross-platform' projects and have become the latest trend in commercial content production. The most visited television website in the history of ABC (Australian Broadcasting Channel) Online was *Fat Cow Motel* (MacDonald, 2003). In this work viewers were offered clues to puzzles in the television channel and could then choose to utilise the website, email, voicemail and SMS to discover the mystery through active sleuthing rather than deduction. The audiences could even vote for an ending, but not vote a character off. In a comment on social dynamics it seems only real people in 'reality' programs, not virtual characters in works of 'fiction', are ever voted off.

4.3 Part of a fictional space

As I noted at the beginning of this essay, the character Old Norm emailed me and immediately assigned me a role: that of a new tenant of Jupiter Green. Obviously, this role was fantastical, a device for plausibly placing me in the storyworld. Usually in works of fiction the reader, viewer or audience members does not need a role for they are silent observers with access to the fictional world and characters' thoughts. Regardless of representation in a virtual world—whether an avatar or a user—an interactive work needs to account for a user's presence, intra-textually. Games (computer and traditional) have developed the dynamic of a role player and this has influenced the design of interactive works.[5]

An indicator of the adoption of a role is seen in the postings to the *Jupiter Green* forum. Characters Old Norm, Amber and Charlotte all posted to the forum and so it was loosely implied that all who participated in the forum were tenants. One of the threads on the forum, 'Where is everyone from?' had the following typical response:

> Hi everyone,
> I just moved into Jupiter Green today and I love it!
> I grew up in Melbourne, but I've traveled a fair bit and lived everywhere. Last year I lived in Fat Cow until the twins left. What was the point of staying after that?
> *hugs*
> Monique
> P.S. I love your designs Amber, where can we get them? (Monique, 2004)

Monique is not only staying in character but also alluding to another fictional work, *Fat Cow Motel*. The role she is portraying therefore is not only a fictional one but that of an experienced role-player. Alongside such fiction-sustaining threads were those permitting discussion about technical difficulties and queries about unsolved puzzles. Characters such as Old Norm frequented the board with answers both in and out of character. This did not affect, consciously, my immersion in the work, because of a peculiar phenomenon

that technology has afforded. The lines previously demarcating the author and reader, pre-production and production are not definite in the new media ecology. As the media release unintentionally intimated:

> *Jupiter Green* aims to make people feel that they are stepping onto the set of their favourite program. (Anonymous, 2004c)

Stepping onto the set, not into the story? One of the effects on the larger community of the introduction of desktop publishing and Internet publishing is an awareness of production and the ability to participate in it. More people are aware of how works are constructed and therefore have a greater understanding of what is 'behind the curtain'. Also, websites, forums, listservs and blogs are now highly accessible, accepted and popular forms of personal publication that involve a high degree of opinion. The *Jupiter Green* forum permits sanctioned comment, where a work is discussed within the producer's domain. But what this also does is widen the boundary of a work to encompass non-storyworld elements and pre-production and post-production participation. A 'work', then, becomes the sum of narrative and non-narrative elements from a variety of voices that are intra-textual and extra-textual over a period that encompasses pre-production, publication and ongoing publication stages. I believe this is why the forum was a seamless inclusion and participants casually moved between user-tester and character without discordant effects.

4.4 A blend of reality and fiction

'Underground marketing techniques' were used to capture the *Jupiter Green* initiates from bars and the streets: posters were put up with teasers such as 'more than neighbours'; 'concertinas—foldable paper "choice" games' with dare statements; key tags with a green key; giant sticky notes from a character/resident; flyers; personalised sticky notes on the back of toilet doors; postcards left on trams and trains; rubber stamps on advertising material, all with the web-address of the work (Robertson, 2004). These were not only used to capture audience but also to facilitate immersion into the storyworld. Known as 'alternate reality gaming' or ALG, the blending of reality and fiction became a worldwide phenomenon with the immersive games *Majestic* (Electronic Arts, 2001) and *The Beast* (Microsoft and Dreamworks, 2001). *The Beast*, as it was dubbed, was produced to market Steven Spielberg's film *A.I.: Artificial Intelligence*. The game involved fictional websites, videos, puzzles, hacking, receiving SMS, faxes, making and receiving phone calls and so on. For the creators of the game, '"immersion" meant integrating the virtual play into the online *and* offline lives of the players' (McGonigal, 2003). Jane McGonigal studied the work and concluded that the game world was not a virtual, or in literary terms fictional, world but an '"alternate" (layered) reality' (ibid.). Of the many devices enlisted to promote this 'alternate reality' was the real-time aspect of the game-play: a week in real-life was a week in the game.

In *Jupiter Green*, a sense of real time was facilitated through the emails from the characters, but this, when combined with the need for linear narrative progression, often led to irreconcilable clashes. The time and events in the video sequence often mismatched with the networked elements such as emails, the online newspaper (that in fact has a

direct feed to a real-world paper), Derek's website *Darkest Nights*, and Joss' download link to the music of *Denis Canary*. The video segments were designed with filmic conventions rather than those of ALG. An ALG approach would be like that of an epistolary novel—have the footage represented as documented surveillance, an archive—rather than narrative.

The question to be asked here is 'Why do I perceive a clash over the representation of time in the work and not in the inclusion of an extra-diegetic text such as the forum?' As previously suggested, I believe the user of *Jupiter Green* alternates between approaches to the work as a game and as a world. Marie-Laure Ryan defines the differences for the reader in such approaches: when a text is a game, their attitude is lucid, reflexive and refusing illusion, while the approach to a text as world is non-reflexive and accepting of illusion (Ryan, 2001: 192). So the inclusion of the forum and the temporal disjunction (between networked time and story time) are experienced and judged differently.

4.5 One on one interaction with characters

A human's interaction with a 'virtual character' or 'synthetic actor' is the concern of many researchers in this field. Virtual characters can be the product of a complex A.I. system, as in Mateas and Stern's *Façade* characters, or simple reflex systems like chatterbots or chatbots. Chatbots can 'hold' conversations with humans in natural language and in real time and are found on many corporate websites. The most well-known chatbot is Joseph Weizenbaum's *Eliza* program (Weizenbaum, 1966) but a contemporary example is the chatbot on the *A.I.* film website (Anonymous, 2001).[6] In computer games, characters that players can talk to and even those in the background are controlled by software systems that take into account the location of the player, their character's abilities, the difficulty level of the game and so on. These programs, therefore, are an integral part of the narrative experience—both in terms of the code and in phenomenological domains. Interaction with virtual characters, regardless of program complexity, can be text-based, 'embodied' (for instance, an animated head), and can also include speech input and output. The characters in *Jupiter Green*, it should be noted, are not sentient programs, nor are they computer programs. They are characters in a story told on a website, enacted by actors filmed and actors or production members masquerading as them in emails and the forum. It is my contention, however, that regardless of the degree of flesh or code involved, the dynamics of human-agent interaction apply.

Figure 3: Polaroid of characters Charlotte and Amber,
sourced from *Jupiter Green* Press Kit [Online] Available at:
http://www.jupitergreen.citysearch.com.au/presskit/images.html

Herbert H. Clark, in his paper on communication with virtual partners, proposed a theory of 'coordinated activity' (Clark, 1999). When considering the interpretation of disembodied language—'language that is not being produced by an actual speaker at the moment it is being interpreted'—Clark saw the need for a system to address the unique form of communication (ibid.: 43). Clark identified two layers of action in such communication: in layer one are the producers and the recipient and in layer two the virtual speakers. The producers and recipient 'coordinate in creating a joint pretense—namely, the world of layer 2' (ibid.:47). A user therefore, is wholly aware of the construction and does not benefit from a 'willing suspension of disbelief' (Coleridge, 1907, 1817) or even a 'willing construction of disbelief' (Gerrig and Rapp, 2004).

For Clark, virtual agents are successful when they are 'consistent in character', 'appropriate for the pretense' and 'easy to imagine' (Clark, 1999: 46). The characters in *Jupiter Green* are appropriate for the pretense and easy to imagine, but not entirely consistent. The characters, for instance, are suspicious of each other, yet email a new tenant, divulging their secrets freely. Old Norm obviously acts as a narrator of sorts, mediating the link between the user's reality and the fiction of the apartment. But why the caretaker is emailing everyone, helping out with technical difficulties on the forum and providing filmed sequences and surveillance devices is not accounted for. This is a difficulty in creating works that has interaction with characters, the questions of how the characters are able to talk to strangers, and why they're willing to do so, must be plausibly addressed.

Robertson cited as one of her influences *Online Caroline* (Bevan and Wright, 2000). The personalised emails were, for Robertson, the main reason for her feeling of involvement in the work (Robertson, 2004). Jill Walker, in her article 'How I was played by *Online Caroline*', observes:

> The program behind Online Caroline doesn't just track my movements; it also makes me move. Each email needs to be opened. Then I have to click a link in the email to visit the web site. To follow the narrative I have to move around the web site to find changes and I have to answer questions. If I don't do this, the story doesn't move on and Caroline complains. (Walker, 2003).

The characters in *Jupiter Green* don't complain when I haven't visited for a while, but they do persist with emails, asking where I am. It is exciting and surprising having characters respond specifically to your emails. This facilitates a feeling that the author, indeed the storyworld, is making an effort to reach out; and this results in a desire to continue with the illusion or, at least, be polite.

4.6 Experience of narrative affected by complex and deep level of interaction

As we have discussed previously, *Jupiter Green* is not managed by a complex 'intelligent' software system. It does, however, permit interaction beyond control of the interface to the 'choosing what to do, say, and think' (Kelso et al., 1992: 1). Users can chat with characters and therefore explore their personalities, delve into event and motivation information and attempt to influence plot. They can choose to access the various media represented in the interface to discover sub-plots and secrets.

The reading path begins with watching the video sequence and then progresses to the various devices. A user of *Jupiter Green* is indeed a snoop and their diligence in media use is rewarded (I was emailed a postcard from Amber and a pdf of a cube to cut out and build for my efforts). It is addictive—rummaging with a mouse click through objects that permit access to private communications. Appropriately, the term 'addictive comprehension' has been used to describe how users interact with stories told over various media (Neil Young, quoted in Jenkins, 2003b).

Figure 4: Screenshot of Amber's diary,
sourced from *Jupiter Green* Press Kit [Online] Available at:
http://www.jupitergreen.citysearch.com.au/presskit/images.html

Watching the video triggers other devices: a mobile SMS, the answering machine, the DV, a Post-it. This juxtaposition of video content and triggered devices provides further insight into the characters through contrast and extrapolation. The web-page becomes a mutable work that transforms with time, offering new gateways to information and necessitating attention. The follow-on from the video to the now active objects seems logical, but the creators did not design the work anticipating such use:

> The depth to which viewers understood the intricacies of the story was also exciting. Judging via the stats of what people were viewing, the feedback on the forum, and the viewer emails, we were incredibly pleased that most of the content on the site was consumed at a rapid rate. (Robertson, 2004a)

The video content was also designed to stand-alone. The user 'could watch each episode and not take any further part in it and you'd still have an enjoyable experience' (Simpson, 2004). Although intended for works over various media, the approach of having stand-alone content is likewise considered by Henry Jenkins a 'core principle' (Jenkins, 2003a). For Jenkins, '[e]ach franchise entry needs to be self-contained enough to enable autonomous consumption. That is, you don't need to have seen the film to enjoy the game and vice-versa' (ibid.). However, as Gunther Kress and Theo Van Leeuwen's observations on 'multimodal discourses' suggest, 'We may be approaching a time when the question is not so much "what discrete modes are occurring together?" as "what ensembles of resources are being produced?"' (Kress and Van Leeuwen, 2001: 125).

The guiding between the video, audio and textual modes was obviously part of the design, so what function did each mode have? An intercom message to Derek mentions that a surprise has been left in his postbox and so I opened Derek's postbox and found a pair of undies. Amber's Post-it notes offer insight into her thoughts as we watch her public face in the video. In most instances, however, the modes provided little supplementary information and were often duplicitous. For instance, there is an audio recording of Derek saying that he's like a detective. In his room we can click on a package and see a book cover titled *How to be a No.1 spy in 7 days*. Amber continuously refers to Derek in her diary and Post-it notes with messages such as 'Maybe he's a spy'. On Derek's computer is an email from ASIO rejecting Derek's application and we see Derek logging onto his computer when the girls get into the elevator where he has placed a webcam. I got it. Thankfully, the user-testing of *Jupiter Green* made sure the creators got it as well.

> The biggest surprise for the team was the length that most viewers were spending in each episode. It far exceeded our expectations. (Robertson, 2004a)

4.7 Choice of characters to follow

All of the characters had their emails listed and so were available for computer-mediated conversation. I pursued Amber since she was the only one of interest to me and because I

considered her the main character. Her Post-it notes littered the interface. She greeted me with an email and she was the subject of the first video. Amber was chosen as the main character because she was seen to fit the targeted demographic and appealed to both male and female viewers (Robertson, 2004a). But there are a range of characters to address a variety of interests: ‘Amber is a thirty-year-old biologist who is searching for ‘Mr Right’, ‘Derek is a 32-year-old who leads a duel life’, ‘Joss is currently studying, intermittently’, ‘Maggie's somewhere between 60 and death’ and ‘Charlotte is a thirty-year-old fashion designer on the cusp of local success’ (Anonymous, 2004a). Unlike stories told in traditional media, the user of an interactive work is able to pursue a specific character. The work becomes, therefore, a polyphonic piece that is conducted by the user’s activity.

Figure 5: Characters: Amber, Charlotte, Joss, Derek, Maggie, sourced from *Jupiter Green* Press Kit [Online] Available at: http://www.jupitergreen.citysearch.com.au/presskit/images.html

4.8 Intelligence used to customise content

When I asked Robertson about customised content two examples were given: user tracking and user profile. Each ‘clink’ is tracked and so items not viewed are logged for follow up by a character (Robertson, 2004a). For instance, if the user did not view the character Amber’s Polaroid collection, then Amber will send an email urging them to further explore her apartment. This type of customisation is reactive, emerging in response to user actions and input. Generally, responses can either be by a human (humans sending email messages in character) or computational (an automated program altering the interface for instance). Magy Seif El-Nasr is researching the latter, developing a computer program that alters visualisation techniques such as lighting and camera angle ‘depending on the story action, past events, authorial objective, character attributes, relationship values, and the dramatic intensity of the story unit’ (El-Nasr, 2002b).

An example of human response is the efforts of the designers or ‘puppet-masters’ of *The Beast* to satisfy the gregarious players (McGonigal, 2003). Lead designer Elan Lee outlined how the players collaborated across the world as an organised group known as *The Cloudmakers* to solve puzzles intended to be stewed over for weeks or never solved, in one day (Lee, quoted in McGonigal, 2003), and negotiated a database intended for months of trail and error input, in one hour (Meadows, 2003a: 133). One puzzle that had no answer was an artificial character, Loki, who was addicted to nightmares. Unsure with what to do with this character the designers

> opened up the doors to the players and wrote out a distress call […] so they [the players] all got together—thousands of people—and they made a dream database and put all of their own nightmares into this database (it was beautiful to see them all work together like that), so we directed Loki toward the site and there he died.’

(Elan Lee quoted in Meadows, 2003a: 135)

Similarly, the *Jupiter Green* team-tracked user actions with computer programs, but then adjusted the work manually. The second customisation Robertson cited was that of the user profile. The user has the option of filling in their profile with radio button choices. How the user answers the questions defines the topics Amber will address in her emails. I noticed this immediately and also registered as a male with a different profile. I still received emails from Amber but with casual mentions of going to 'the pub' rather than 'a club' (my profile changes, not gender assumptions).

Another aspect of what I see as customised content and found much more exciting was the networked imports and location specific references. The first, networked imports, was evident when I clicked on Derek's laptop and saw news items from an online paper called 'The Daily'. The headlines seemed familiar, so I logged onto national newspaper *The Age* and found the same headlines. I tried another day and confirmed that Derek's fictional version had a direct feed to the real-world equivalent. 'The Daily' had no relevance to the story in any way, besides confirming Derek's status as tech king of the block, but it was enjoyable to me.[7]

4.9 Use of everyday communication devices

The use of everyday communication devices in the interface obviously targets the tech-savvy audience and the use of email and a forum is likewise a familiar form of interaction. This is important for uninitiated users of 'interactive drama' and, as discussed, is also a device for promoting immersion in an 'alternate reality'. The interface to the story perpetuates or takes advantage of the habit of facilitating communication through devices; but does not critique in any way the facile consequences of viewing people through artefacts. It is 'being piloted to see how people interact with online drama' (Jo Lane, quoted in Anonymous, 2004b) and will achieve a catalogue of interaction likes and dislikes. Until mass audiences are familiar with storytelling through the computer and writers provide stories that can reach out further than an interface, we're left with voyeurism, media fetish and the stimulation of 'artefact-based emotion'.

Figure 6: Amber's mobile phone,
sourced from *Jupiter Green* Press Kit [Online] Available at:
http://www.jupitergreen.citysearch.com.au/presskit/images.html

Concluding Remarks

Jupiter Green has succeeded in bringing a unique experience to a general audience of users that may not have previously been exposed to 'interactive drama'. It rejects ideals such as multiple endings and user-driven plot in favour of dynamics accessible and capable of being enunciated in the present new media ecology. The high numbers of user-testers (1,315 registered users in the forum) attests to the readiness the general public to experience interactive drama. It is helpful to remember that the uptake of interactivity in entertainment—computer games, television voting, 'interactive drama' and so on—is not the sign that audiences are being assimilated into users, but that computers permit the opportunity to exercise 'a strongly held culturally based desire to participate in the creation and transformation of the text that has effectively been denied by previous technologies' (Cover, 2004: 174).

In conclusion, there are traits of extant interactive narrative emerging from this investigation and from Robertson's criteria of difference which might be presented as follows:

• It doesn't allow you to change • the ending. • You can't vote anyone off. • You get to be part of a fictional space. • It is a blend between reality and fiction. • There is one on one interaction via email with characters. • The complexity and level of interaction affects how you experience the narrative. • You can choose the character you want to follow. • The 'intelligence' behind the site tracks the user and customises the content accordingly. • It uses everyday communication devices to tell the story. (Robertson, 2004)	• Co-presence of storytelling approaches: top-down and bottom-up, narrative and ludic; • Multiple roles adopted by users -- character and user-tester enacted within the work; • Range of media used or emulated: both fixed and mutable; • Anterior (eg: pre-production, user-testing) and posterior (eg: reviews) activity and subsequent texts are framed within rather than exterior to the work; • Range of interactivity and ergodicity; • Need for plausibility of presence of the user; • Need for plausibility of interaction from the character; • Navigation between modes and media and a story and plot that can accommodate such movement.

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Endnotes

[1] Kylie Robertson was also creator of the award-winning interactive work *Silent Passages. Jupiter Green* was made with technical direction by Mark Simpson, interface design by Lee Mullen and over 100 other team members.

[2] 'Clink' is a handy portmanteau word of 'clicks-on-links' (schraefel, Carr, Roure and Hall, 2004).

[3] A further thread that was initiated by the creators, literally, was the 'secret of *Jupiter Green*'. In the final episode the producer of the *Jupiter Green* played an anonymous character that entered the lift and showed a sign to the web-cam with the dramatic tease: 'The walls can talk'. The viewing of this web-cam sequence triggered a change in a picture located in the character Maggie's room: a hyperlink was suddenly there. Clicking on the hyperlink opened a popup with the information: 'Derek's computer can unlock a secret within Jupiter Green.' I, like many others, ransacked Derek's

computer remotely: I re-read his emails, his messenger logs, I even tried calling the phone numbers of people in his contacts file. I, like many others, could not figure out what the secret was, despite the restrained assistance of the creators on the forum. Not solving the puzzle left me with the joint feeling that I was a bad player and stupid reader, an inept sleuth. Robertson assured me I wasn't stupid and told me the secret—a clip containing archival footage of Miss Lin—was a 'little too difficult to find' and will be changed in the next version (Robertson, 2004).

[4] To capture the peculiar activity of users of interactive works without denigrating readers of fixed texts to being passive, Espen Aarseth frames works that require more effort than turning a page as 'ergodic literature'.

[5] Robertson also cited as an influence on her creativity the game *Riven* (Cyan, Inc., 1997). For Robertson, the game fascinated her because it allowed her 'to "exist" in a fantasy world' (Robertson, 2004a).

[6] The chatbot used on the site is the Alicebot program initially created by Richard A. Wallace and has a large developer community. The A.L.I.C.E. Artificial Intelligence Foundation has a website at: http://www.alicebot.org/ .

[7] Ed S.-H. Tan terms emotions like 'enjoyment, admiration and wonder' stimulated by technical wizardry as 'Artefact-based emotion', as opposed to emotions stimulated by the fictional world: 'Fiction-based emotion'(Tan, 1995: 13). I must admit that the majority of my enjoyment of *Jupiter Green* was stimulated by 'A-emotion'.

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