

Bad News: Behind the Curtain

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Bad News is an installation-based immersive experience whose story and setting is uniquely generated, for each performance, by a computer simulation. It is experienced by one player, features a live actor, and lasts roughly 45 minutes. In this document, we provide a detailed overview of the experience.

1 Narrative Premise

The basic narrative premise of *Bad News* is as follows. It is mid-August, 1979, in an American small town. A resident of that town has died alone in their home, from unknown causes. In this jurisdiction, it is the responsibility of the county mortician's office to notify the next of kin of any death. With the county mortician occupied by another matter in the county, his newly hired assistant (the player) is tasked with handling this particular case. Given a description of the body and the address at which it was discovered, the mortician's assistant must use this information to: 1) determine the identity of the deceased person, 2) determine the identity of the next of kin (closest familial relation in the town), and 3) track down and notify the next of kin of the death. (Note: it is not the player's responsibility to determine the cause of death; there are no indications of foul play, and this is not a murder mystery.) Throughout this document, we refer to this narrative premise as the *story template*.

2 Computer Simulation

While all *Bad News* playthroughs use the same story template, each takes place in a unique storyworld that is generated by a simulation framework that we have developed. This framework is used to generate a unique town and simulate its history from its founding in the summer of 1839 up until the summer of 1979, when gameplay takes place. Over the course of this procedure, the daily lives of the town inhabitants are simulated in the following ways:

- Characters may go to work, go on errands, visit friends and family, head to places of leisure, wander aimlessly around town, or stay home.
- When two characters are in the same place, they may interact socially to evolve social relationships and spread gossip.
- Characters may carry out substantial actions such as dating, marrying, having children (thereby bringing new characters into the simulation), starting a business, hiring employees, building a house, and more; eventually, characters will die.

- Characters accumulate beliefs about the town and its residents as they go about their daily lives; as a modeling of fallible memory, this knowledge may deteriorate in a number of ways.
- Some additional details: characters’ personalities and appearances are modeled (and physical and psychological traits may be passed down from parents to children); census data informs birth, death, and marriage rates in the simulation; newborn children will be named for family members, or else probabilistically according to the actual top-200 baby names for their year of birth; businesses in a town at any point will be era-accurate, *e.g.*, farms, blacksmith shops, and general stores gradually give way to supermarkets, tattoo parlors, and daycare facilities.

The result of this procedure is a totally unique gameplay setting, in the form of an American small town with 200-500 residents who have each lived out simulated lives. Each character will be embedded in rich social, familial, and work networks, and will have a store of subjective beliefs about the world (which, as we just noted, may be false). The simulation is capable of producing an essentially infinite array of storyworlds, and it takes only a few minutes to generate an individual town.

3 Personnel

There are four distinct roles that are central to *Bad News* gameplay:

- **Player.** The person who is playing *Bad News* on a given playthrough.
- **Guide.** A team member who introduces the player to the narrative premise and gameplay mechanics in a brief session preceding actual gameplay. Additionally, in an exhibition setting, the guide serves as a public-facing team member who is free to discuss the project with passersby. This role is fulfilled by co-designer Adam Summerville; in a few performances, Tyler Brothers has filled in for him.
- **Actor.** A team member who acts out every character that appears in a given playthrough. Additionally, the actor plays the mortician in an opening sequence (more info below). This role is fulfilled by co-designer Ben Samuel.
- **Wizard.** A team member who listens in on gameplay via a microphone to manage the experience in real time. His primary activities are livecoding and discreet communication with the actor. In exhibition contexts, he may perform his duties in a public-facing area, for the benefit of passersby. This role is fulfilled by co-designer James Ryan.

4 Installation

Bad News is an installation-based experience—Fig. 1 shows an example installation that was built specifically for the Slamdance DIG showcase in Los Angeles, while Fig. 2 shows gameplay in that installation. Our installations have varied from exhibition to exhibition, but there are several critical components that must be in place:

- A *gameplay area* houses a table, two chairs (on opposite sides), and our custom model theatre. On the actor’s side of the table is a computer, hidden from the player’s view by a second, lower curtain on the model theatre that cannot be drawn; this computer displays the *actor interface* (more on this below). On the player’s side of the table is a notebook and pen (for taking notes), as well as a tablet computer; the latter displays the *player interface* (more on this below). Additionally, a microphone is placed on the table—the actor’s computer will also be capturing live audio that is conveyed to the wizard’s computer (see next bullet point) over a local area network.
- In a separate area, the *wizard command center* is set up. For some performances, this has been a separate room, or even a separate city—using the internet (instead of a local network), we did multiple performances at Slamdance DIG in which the wizard was managing Los Angeles gameplay from his home in Santa Cruz. In other performances, this area is public-facing, turning the wizard’s activities into a second kind of performance. In any event, this area houses the wizard’s computer, and potentially an array of additional monitors to display the various interfaces that he manages.
- A partition separating the gameplay area from public areas. If the gameplay area does not have a whole room to itself, we require some kind of partition that may separate it from a public area with attendee traffic. We do this to maintain the intimacy of the experience—a design goal—and to ensure that the player does not feel like she is performing for an audience. In some installations, such as the one pictured in Fig. 1, this partition has worked to both isolate the gameplay area and to separate the gameplay and wizard areas. Additionally, it can be used as a public-facing façade that lends visual intrigue to the installation.

5 Experience

The *Bad News* experience proceeds in three distinct phases: lead-in, gameplay, post-mortem. In this section, we will provide an overview of what occurs (both in gameplay and behind the scenes) during each of these phases.

- **Pre-gameplay.**
 - **Guide preliminaries.** The guide meets with the player to introduce her to the narrative premise and the game’s mechanics. The latter are also captured in a reference sheet, which he provides to her; this sheet, shown in Fig. 4, contains a list of actions that the player can take during gameplay by simply speaking them aloud (the wizard will hear the command and livecode to execute it).
 - **Town generation.** The wizard starts up the computer simulation and executes the town generation procedure. This procedure generates a storyworld by simulating the history of an American small town from 1839 until 1979. Once a specific date in August of 1979 has been reached, the procedure automatically selects a character

in the town who will be the deceased character in this playthrough; additionally, it determines who the next of kin are, given the definition of it that is operational in *Bad News* (see Fig. 4). This procedure typically lasts between two to three minutes.

- **Narrative excavation.** Once the town has been generated, the wizard begins to explore the simulational material in search of nuggets of dramatic intrigue. By this act of narrative excavation, he will isolate a set of emergent storylines—narratively potent situations that happened to have emerged in the particular simulated town that gameplay is about to take place in. For instance, he may uncover: a love triangle that the deceased character was involved in, or a secret affair; interesting pieces of family history; cases of hard luck¹; rival businesses; siblings rivalries; contempt between entire families in the town; and many more. Typically, the wizard will isolate between three and five prospective storylines that he and the actor may adopt as experience-level goals—*i.e.*, the actor will attempt to naturalistically reveal these storylines to the player through conversation during gameplay. Beyond gathering a set of potent storylines, the wizard will explore the deceased’s person life history (family history, work history, social networks, friends, enemies, romantic history, love interests, characters in love with them, etc.) to get a better sense of who this person was.
- **Actor priming.** In the period preceding gameplay, the actor is already stationed behind the model theatre, which has its curtains drawn. Already, however, the wizard and actor are communicating via a live web chat (see Fig. 6). During the process of narrative excavation, the wizard feeds the actor information on the newly generated town, as the two prepare for the next performance. This is how the actor finds out about the deceased character, next of kin, the town, and anything else that is of importance to the playthrough. Critically, this is where the wizard and actor collaborate to isolate a set of emergent storylines that the actor will work to naturalistically reveal throughout gameplay.
- **Entering the gameplay area.** The guide escorts the player into the gameplay area, and asks her to sit down on her side of the table. Here, he hands her a notebook, pen, and the tablet computer, which he explains will display information about her location as she explores the town during gameplay. The interface shows an initial prompt, as seen in Fig. 5, reiterating the guide’s explanation of how to take action and explaining that gameplay will take place once the player says aloud that she is ready to begin.

– **Gameplay.**

- **The death scene.** Once the player says that she is ready to begin, the wizard updates her interface to show a new prompt indicating that she is alone at the *death*

¹ For example, one character owned a general store for over fifty years, but was forced to close it after a new supermarket opened in town. Ironically, and tragically, he spent his remaining days as a nighttime stocker at that very supermarket.

scene. Critically, this prompt provides information about the deceased’s person’s appearance and home address—the player will need to use this initial information to determine the identity of this person. Fig. 7 shows an example prompt.

- **The mortician scene.** A few moments after the death-scene prompt is first displayed, the actor is cued by the wizard to begin the *mortician scene*. At this point, he opens the curtain and reveals himself as the county mortician (recall that the player’s diegetic role is assistant to the county mortician). The mortician apologizes for arriving late and informs his assistant that he must leave to attend to a matter elsewhere in the county, which means that the player must track down and inform the next of kin on her own. Gently, and in detail, he outlines what this will entail, and encourages her to take notes (see Fig. 8 for an example of player notes taken during gameplay). To respect the privacy of the family of the deceased, the mortician suggests that he and the player collaborate to come up with a *cover story* for her, since it wouldn’t be tactful to openly parade around the town as a mortician’s assistant.² Finally, the mortician asks the player to participate in a brief pretend conversation with a town resident, as practice: he draws the curtain of the model theatre, pretends to be a person hearing a knock on his door, and then opens the curtain to engage in conversation with the player. Finally, the mortician fields any last questions before closing the curtain to exit the scene; from here, core gameplay begins. The mortician sequence is the only scene with scripted structure in *Bad News*, and it’s intended as a sort of diegetic tutorial that on-boards the player for the peculiar mode of gameplay (and particularly the kind of role-playing and improvisation that it entails). It can take anywhere between five and fifteen minutes, depending on the initial comfort level of the player (*i.e.*, we try to prolong it until the player appears to be ready to proceed).
- **Gameplay in three acts.** We loosely conceive of *Bad News* gameplay as having an experience arc with a three-act structure.

- * **Act I: Learning the name.** Players typically spend the first five or ten minutes of core gameplay working to learn the deceased’s person’s name.³ Here, there are a number of strategies that players have taken: do a reverse lookup in the city residential directory, using the person’s address; inquire with a neighbor (using the cover story); head to a hot spot in town, such as a bar; and many more. To take an action, such as viewing the city directory or navigating to a new location, the player simply says what she’d like to do out loud—the

² We’ve found that having a cover story—on top of the narrative framing of being the mortician’s assistant—serves as a sort of scaffolding that helps players who are uncomfortable with role-playing to improvise more readily. Example cover stories include a county historian, genealogist, private investigator, lottery representative, and more.

³ Note that the wizard and actor can coordinate to provide this information more easily if a player is having a hard time finding the name.

wizard is always listening in, and it's his job to promptly update the player interface after each command. Fig. 9 shows the player interface after a player has navigated to a bar. Wherever she goes, the player is free to engage nearby characters in conversation—again, this is done by speaking aloud. Whenever she does this, the *actor interface* (see Fig. 10) will update to show information about the character with whom she is starting a conversation. At this point, the actor scans the interface to learn the character's personality, history, and present context, and then spends a few moments getting into character (consciously adjusting his stance, mannerisms, intonation, etc., accordingly). Once ready, the actor opens the curtain to play that character live. Throughout a given portrayal, the actor must constrain himself so as not to contradict the character's personality, beliefs, or life history—this means glancing at the actor interface and web chat with the wizard as is needed. The actor is allowed, however, to *augment* the simulational material with additional detail.⁴ When a conversation ends, the actor closes the curtain of the model theatre and the wizard waits for the next player command.

- * **Act II: Tracking down the next of kin.** Once the player has determined the deceased's person's name, the remaining work is to determine who the next of kin is (given the definition provided on the reference sheet, shown in Fig. 4) and where they are currently located. This is where the core experience of *Bad News* begins to open up. During this phase, the player must ask around the town about the deceased character and the life that they lived—as such, it's primarily during these conversations that the actor seeks to reveal the emergent storylines that were isolated as narratively potent prior to gameplay (see above). Here, the tone of the piece tends to become more intimate, as the townspeople begin to open up more to the player (and the player begins to open up more in her own improvisation). Through these conversations, the player not only discovers the identity of the next of kin, but more critically she learns about the life that the deceased person lived. Often times, information uncovered during this phase will raise the emotional stakes of the impending notification.⁵ This act

⁴ For instance, in one generated town, the player encountered a character drinking alone at a bar—a house painter in his mid-twenties with few friends in the town. Though the simulation doesn't model character ambitions, the actor augmented the character's base simulational material to improvise a scene about him dreaming of leaving his small town to become an artist in New York City. When it comes to this kind of augmenting, our mantra is “do not contradict the simulation”.

⁵ In one playthrough, the next of a kin was an older woman who twice prior had married an older man who died during the marriage. After the death of her second husband, she instead married a young man in his twenties—tragically, this man was the deceased character for the playthrough. Heading into the notification scene, the player spoke aloud to himself about the difficult prospect of delivering bad news to a woman who had already heard it on two separate occasions.

typically lasts between twenty and thirty minutes, and it culminates once the player has determined the location of the next kin and traveled to that spot.

- * **Act III: The notification scene.** This scene occurs at either a home or public place—it all depends on where the next of kin happens to be located in the simulation. Often, players spend a few moments to collect themselves before engaging in conversation with the next of kin. Act II can vary considerably in tone, depending on the player's improvisation and the particular characters and storylines that she encounters; it often features comedic moments. Act III, however, is always emotionally tense. Players frequently ask the next of kin to sit down (even though the actor is already sitting down in physical reality), or request to take the interaction to somewhere more private; the actor and/or player may break into tears, even. Once the notification has been fully delivered, the actor slowly closes the curtain and the player interface updates to express that the mortician's assistant has successfully completed her task.

– **Post-gameplay.**

- **Decompression.** After the curtain has closed for the final time, we allow the player a few moments to collect herself and properly exit the storyworld.
- **Post-mortem.** Once some time has passed, the wizard and guide enter the gameplay area and thank the player for playing; the actor emerges at this time to do the same. From here, we ask the player for her thoughts and generally discuss the experience, as a sort of postmortem.
- **Epilogue.** Finally, we escort the player to the wizard area for a brief *epilogue*. Because the storyworld is generated by a simulation, we can easily move ahead in time to see what ended up happening to the principal characters and locales that the player encountered during her playthrough. Specifically, the wizard simulates up to the summer of 2009—thirty years after gameplay—and then livecodes to determine what happened to the entities of interest. Often, many of the principal characters will have themselves died—the simulation can say on what date and of what causes—but updates can be positive as well (such as a deceased character's business still thriving, or young children in 1979 becoming prominent town figures by 2009). Sometimes, the epilogue is poignant: in one playthrough, the deceased character's brother was the next of kin, and also the town realtor—here, the simulation revealed that after receiving the death notification he had to complete the sale of his deceased sister's now-vacant home. In another playthrough, the deceased character was a janitor whose siblings were successful business owners in the town who looked down upon him; in the epilogue, we found out that each of their businesses had shut down and the siblings had themselves become janitors and stockers at grocery stores.

- **Goodbyes.** Once the epilogue ends, the player's *Bad News* experience is over. No one had ever before visited the town that she visited, and no one will ever visit it again. The wizard exits the simulation program and the town disappears forever.

6 Figures



Fig. 1. *Bad News* installation at the Slamdance DIG showcase in Los Angeles. A partition separates the public-facing wizard area (left) from the isolated gameplay area (right). In the latter, our model theatre sits atop a table.



Fig. 2. A shot of gameplay in our installation at the Slamdance DIG showcase in Los Angeles. The wizard listens in and livecodes (left) while the actor (right, far side) has drawn the curtain of the model theatre to respond to a pair of players. Exhibition Note: *Bad News* is a single-player experience, but we accommodated two players here as a special request.

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Hiring of Hamil Eklof as Lawyer at Law Offices of Hamil Eklof in 197
Name change by which Marie Hendy became known as Marie Dewitz in 197
Name change by which Marie Hendy became known as Marie Dewitz in 197
Hiring of Hamil Eklof as Lawyer at Law Offices of Hamil Eklof in 197
Death of Herman Books in 1973
Move to apartment at 516 Dublin Avenue (Unit #30) by Jon Elbers in 1
Hiring of Robert Schlotman as Owner at Rogus Brewery in 1973
Retirement of Clifford Books as Owner at Rogus Brewery in 1973
Move to apartment at 516 Dublin Avenue (Unit #30) by Jon Elbers in 1
Retirement of Clifford Books as Owner at Rogus Brewery in 1973
Death of Herman Books in 1973
Move to apartment at 516 Dublin Avenue (Unit #30) by Jon Elbers in 1
Name change by which Marie Hendy became known as Marie Dewitz in 197
Hiring of Robert Schlotman as Owner at Rogus Brewery in 1973
Retirement of Clifford Books as Owner at Rogus Brewery in 1973
Move to apartment at 516 Dublin Avenue (Unit #30) by Jon Elbers in 1
Name change by which Marie Hendy became known as Marie Dewitz in 197
Hiring of Robert Schlotman as Owner at Rogus Brewery in 1973
Purchase of house at 417 9th Street by Hamil Eklof in 1973
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Fig. 3. Console output from the town generation procedure that precedes gameplay. In motion, the output is a dizzying flurry of events sampled from the history of the town as it is occurring in real time. This provides additional audience intrigue in installations with a public-facing wizard area.



Fig. 4. The reference sheet that is available to players during gameplay. It defines what exactly constitutes a next of kin, and it provides a list of actions that the player can take simply by speaking them aloud. When the player utters an action, the wizard hears (via audio feed) and livecodes to execute the command. This will cause the player interface to update accordingly (*e.g.*, to display the city residential directory).

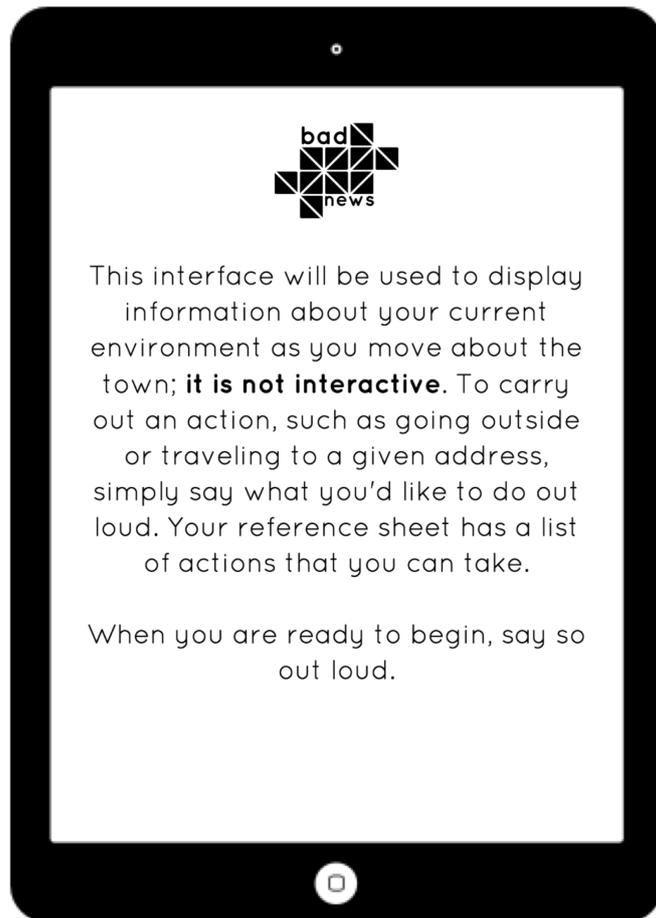


Fig. 5. An initial prompt is displayed on the player interface as she sits down at the model theatre. Gameplay starts when she says aloud that she is ready to begin. The player interface is meant to be spare and minimal—it shouldn't detract from improvisation with the actor (the core interaction in *Bad News*).

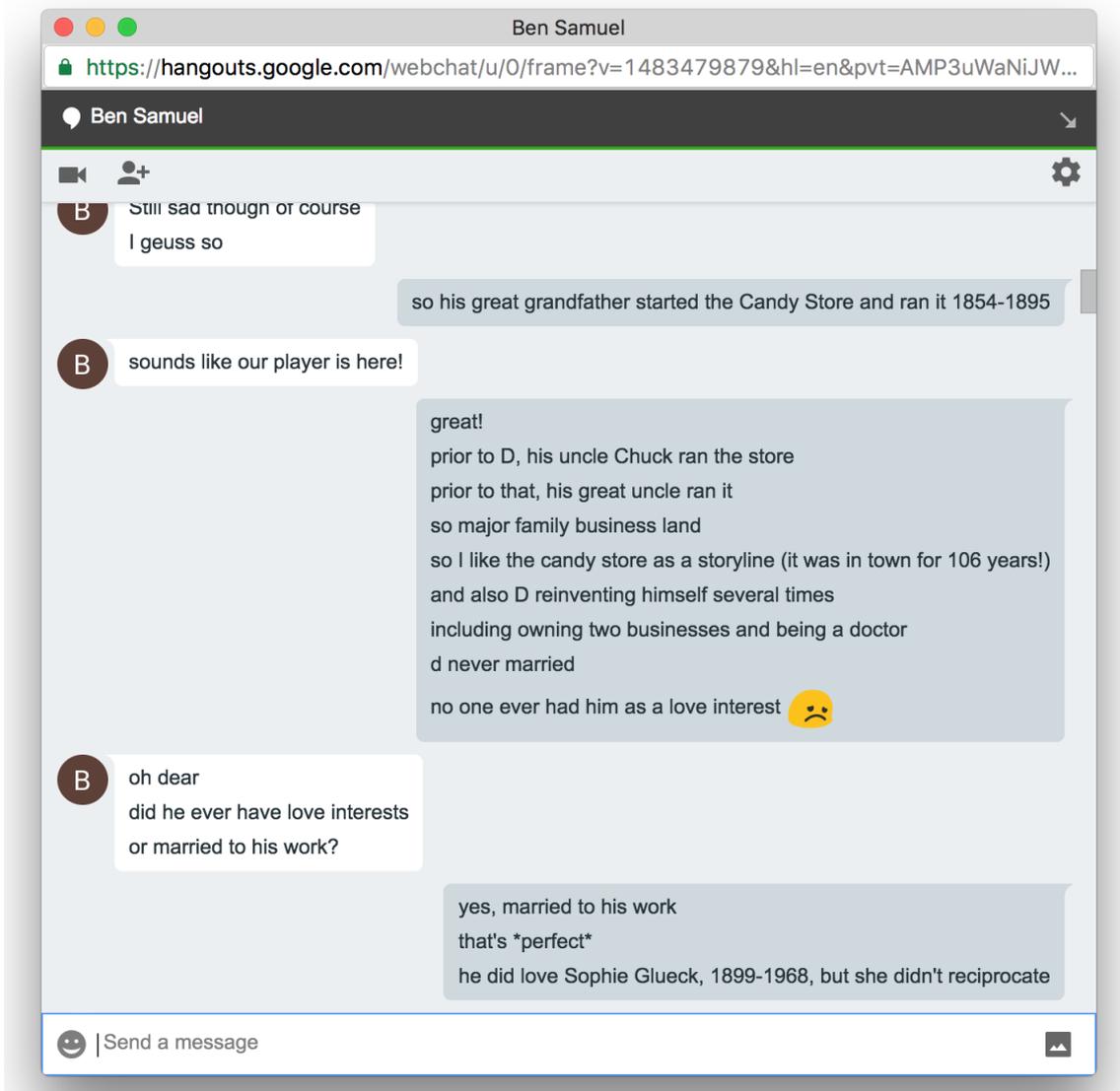


Fig. 6. Prior to gameplay, the wizard explores the generated town in search of nuggets of dramatic intrigue, which he feeds to the actor via a live web chat. As part of this interaction, the two settle on a set of potent storylines—ones that happened to have emerged during simulation of the town’s history—that the actor will attempt to reveal to the player naturalistically, through conversation. In the shorthand of this communication, ‘D’ refers to the deceased character for the upcoming playthrough.



Fig. 7. At the start of gameplay, the player interface displays information about the death scene. Here, the deceased person's appearance and home address are crucial pieces of information that the player will need to use to discover the person's name (and thereby, family situation and, critically, next of kin).

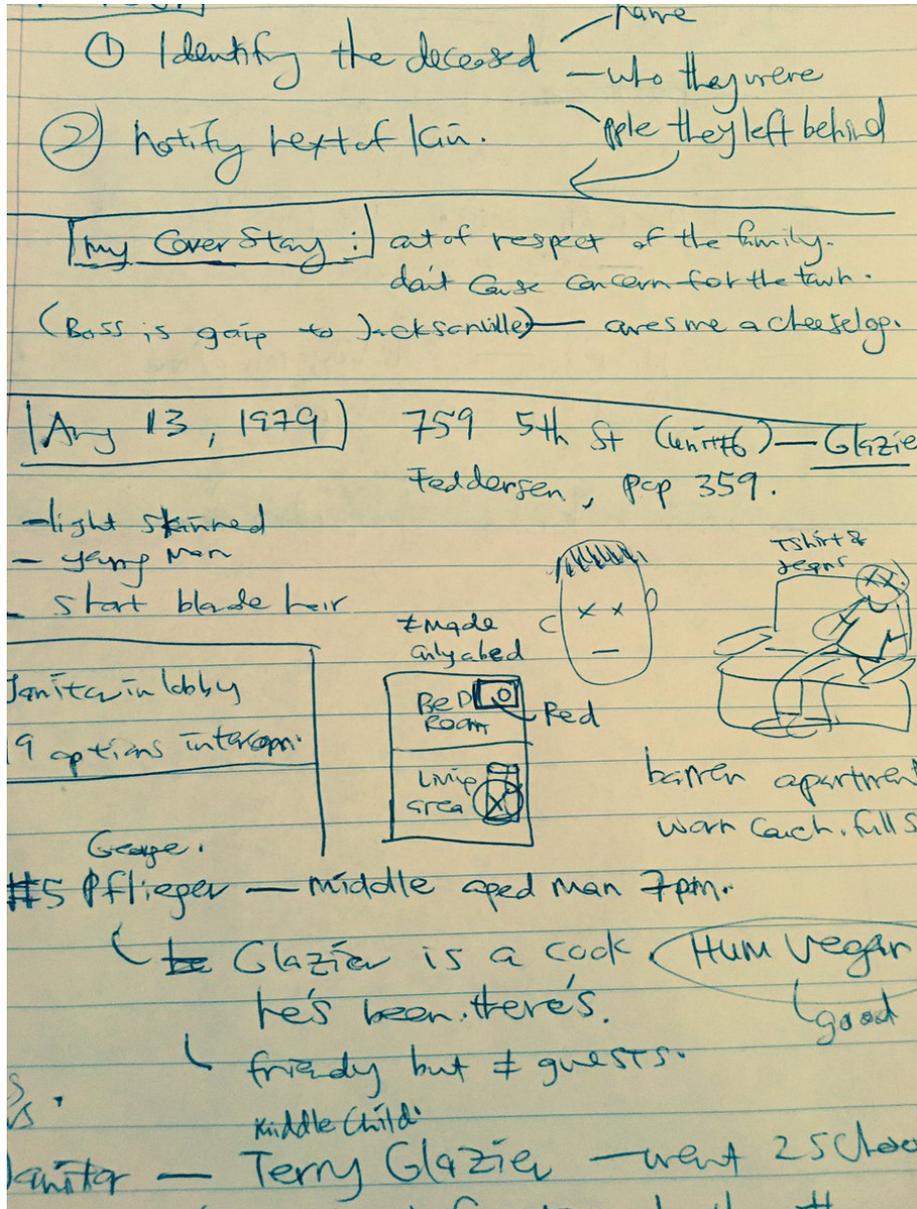


Fig. 8. We encourage players to take copious notes during gameplay—frequently these notes feature diagrams capturing family genealogies, town histories, and love triangles, among other kinds of information that may be generated during the world generation procedure that precedes gameplay. This example comes from a player at the Slamdance DIG showcase in Los Angeles.



Fig. 9. As the player moves about the town (by speaking commands out loud), the wizard livecodes to update the player interface accordingly. In this example, the player has visited a bar—here, she is free to engage either of the two characters that are there in conversation (by saying, *e.g.*, “I speak to person number zero.”) Whenever a player begins a conversation, the actor gets into character (using his actor interface, shown in Fig. 10) and opens the curtain to play that person live.

My Name is: Cecil Jack Senn

Town Name: Ketchikan Current Date: Day of August 20, 1979 My Location: Chodlates Address Here: 608 Cardiff Avenue
Next of Kin: Rosemary Thies (my neighbor; at Schoettle residence)

Me	Subject of Conversation
Extroversion: somewhat low	First name: Rolland (positive) Last name: Thies (positive)
Agreeableness: neutral Neuroticism: low	Status: alive (positive) Death year: None (pretty sure)
Openness: high	Departure year: None (pretty sure) My sources: myself (100%)
Conscientiousness: somewhat high Age: 45	Relations to me: neighbor Charge: - Spark: Age: 19 (somewhat sure)
Skin: light Hair: short, brown Tattoo: no	Job status: employed (sure) secretary (positive) Job shift: day (sure)
Scar: no Birthmark: no Freckles: no	Workplace: Wartrace Street Realty (positive) Skin color: light (positive)
Glasses: yes Purpose Here: work	Hair color: black (sure) Hair length: long (sure)
Other People Here: [Player can see]	Facial hair: none (somewhat sure) Tattoo: no (positive) Scar: no (positive)
Marital Status: single Moved to Town: birth	Birthmark: no (somewhat sure) Freckles: no (not confident)
Home Address: 655 Wartrace Street (Unit #10) (since 1950)	Glasses: yes (not confident) Spouse: single (positive)
Job Status: employed	Parents: Rosemary Thies (alive), Herman Thies (dead) Kids: ?
Job: Day bartender at Chodlates (since 1965)	Siblings: Nancy Thies (alive), James Thies (alive), Sharon Thies (alive), Andrea Thies (alive)
Job Address: 608 Cardiff Avenue	Extended family: Donald Lemberg (uncle; alive)

Fig. 10. Throughout gameplay, a hidden screen on the actor's side of the model theatre displays a special *actor interface*. Whenever the player engages a character in conversation, the wizard updates this interface to show information about that character, and the actor spends a few moments studying this information to determine how he will play them. This information includes (on the left side) that character's personality, appearance, employment details, and life history. As the interaction shifts between different subjects of conversation (*i.e.*, characters that the player and actor are discussing), the right side of the interface updates to show the beliefs that the character that the actor is currently portraying has about the subject of conversation (including confidence levels). All of these beliefs will have been accumulated by that character as part of the town generation procedure that precedes gameplay.



Fig. 11. The *Bad News* core team (its three co-designers), after receiving the Audience Choice Award trophy at the 2016 IndieCade festival in Los Angeles. From left to right, Ben Samuel, Adam Summerville, and James Ryan are pictured.