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(Draft August 7, 2005)

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## Introduction

“Behind the *Façade*” explains **how to play** the interactive drama *Façade*, and **what’s going on inside** the artificial intelligence (AI) of the characters. The first part of this document gives you a general orientation to playing the drama, without giving away too many hints or “spoilers”. The later parts go into greater detail of the drama’s underlying structure, and detailed instructions of what to do to see all the variation in the story.

First, we’d like to describe **our motivation** for beginning five years ago to create *Façade*, and how, we hope, *Façade* serves as a prototype of a **new genre** of interactive entertainment, called **interactive drama**.

## **Vision and Motivation**

The dream of interactive drama, perhaps best envisioned by the *Star Trek* Holodeck, has players interacting with compelling, psychologically complex characters, and through these interactions having a real influence on a dynamically evolving storyline. Brenda Laurel’s book *Computers as Theater* (1991) was the first to propose and discuss the idea of computer-based interactive drama.

Motivated by our belief that a fully-realized interactive drama had not yet been built, we embarked on a five-year effort to integrate believable characters, natural language conversation, and dynamic storyline, into a small but complete, playable, publicly-released experience. *Façade* is the result of this effort.

Videogames excel at giving players *high-agency* experiences — that is, providing ample opportunities for the player to take action and receive immediate feedback. With *Façade* we

wanted to create an interactive drama that provides the level of immediate, moment-by-moment agency found in games, but unlike games, also provides longer-term player influence over the plot itself.

In addition to the very local, in-the-moment agency of games, we want the player to experience global agency, that is, real influence on the overall story arc, over which topics get brought up, how the characters feel about the player over time, and how the story ends.

Additionally, the story-level choices in *Façade* shouldn't feel like obvious branch points. We believe that when a player is faced with obvious choice points consisting of a small number of choices (for example, being given a menu of three different things to say to choose from), it detracts from the sense of agency; the player feels railroaded into doing what the designer has dictated. Instead, in *Façade*, the story progression changes in response to many small actions performed by the player throughout the experience.

Rather than being about manipulating magical objects, fighting monsters, and rescuing princesses, *Façade* is about the emotional entanglements of human relationships. Instead of providing the player with 40 to 60 hours of episodic action and endless wandering in a huge world, we're interested in shorter experiences that provide emotionally intense, tightly unified, dramatic action. Rather than focusing on the traditional gamer market, we are interested in interactive experiences that appeal to the adult, non-computer geek, movie-and-theater-going public.

Contemporary videogames make use of increasingly sophisticated graphics and physics simulations. Yet the core gameplay — navigating, exploring, shooting, jumping, unlocking — has remained the same for years. At the annual Game Developers Conference, game developers often complain about the lack of innovation in the game industry, the increasing dependence on sequels, and the design conservatism arising from ever more expensive production cycles. In this climate, a commercial experimental game such as *Façade* could never be produced.

*Façade* thus highlights the need for a robust independent game development scene that builds fully produced, radically experimental games, blazing the trail towards new game genres. If games are truly to become the cinema of the 21st century, expressing and commenting on the full range of human experience, an independent game scene that builds experimental, art-house games such as *Façade* is a necessary complement to the commercial game world.

## Part I: Tips for Playing *Façade*

Playing *Façade* is like being on a small theater stage with two improvisational actors motivated to make a drama happen. No matter what you do, a drama will occur; however you have a great deal of influence over exactly what happens, and how it ends. **You are the catalyst** for the drama – without you, nothing will change.

*Façade* is meant to be replayed several times. Each run-through takes about 15 minutes, and reveals to you about 25% of the things that can happen. By **trying different things each time you play**, you'll be able to experience the full variation of dramatic possibilities.

All you are told when you begin playing is that you're friends with a married couple named Grace and Trip, that you haven't seen them in a long time, and you're invited over to their apartment for drinks. The drama begins with you standing at their front door, able to overhear Grace and Trip arguing from inside.

Besides being told you are a friend (which you can ignore if you wish), you are given no role to play. You are free to simply **be yourself – or act like anyone you want**. Just before the drama begins, you choose your own name and gender, from a list of about 90 names. You play the drama from a first-person point-of-view, without ever seeing an image of your own body.

The interface is intended to feel natural: using the keyboard you can **say anything you want at any time**, and with the arrow keys and mouse you are free to move, gesture and use objects as you wish at any time. (Your own words are not heard out loud, since you are typing them; Grace and Trip speak back to you with spoken voice, and emote and gesture through expressive facial and body animation.)

### **What am I supposed to do?**

Grace and Trip are in a desperate situation – their marriage is falling apart. Something has to change. You have the power and influence to change them.

There are **several ways to play *Façade*** that should result in an interesting performance. You can:

- be their friend – try to help them;
- have fun with it – act crazy, flirt, etc.;
- provoke them – take sides, manipulate them;
- try to “break it” – test the limits of their understanding and intelligence;
- any combination of the above.

Ultimately, the sum total of the things you say and do can force Grace and Trip to change in a major way. By the end of the drama, depending on exactly what and how much was said and revealed, and therefore how much self-realization has occurred for either Grace or Trip or both, they will decide if their marriage can continue or not.

You'll need to play *Façade* several times to expose all the facets of their crumbling marriage, to experiment with different strategies of interacting with them, and to experience the various ways the drama can end.

## How do I play well?

A technique that tends to work well when playing *Façade* is a strategy taken from the art of theatrical improvisation: **take offers**. That is, sort of think of yourself as a fellow performer with Grace and Trip, where everyone is trying to work together to create an interesting dramatic performance. Taking offers means that when Grace and Trip are going in a certain dramatic direction, you sort of play along with them and try to imagine dramatic or funny or interesting things to say and do, that you think Grace and Trip can do something with. Taking offers does *not* mean you should just agree all the time with Grace and Trip; actually it often means conflicting or disagreeing with them, but in ways that you think might propel the drama forward in productive ways (as opposed to trying to “break it”).

You can **make offers** to Grace and Trip yourself, that they will try to take when possible. However Grace and Trip’s improvisational intelligence and adaptability is probably not as good as your ability, since you’re human and they’re AI-based characters.

Examples of making offers to Grace and Trip include praising or criticizing them; bringing up topics such as marriage, divorce or sex; picking up or asking about the objects in their apartment; flirting or otherwise acting provocatively; explaining their situation to them; asking questions or attempting to give advice.

## They don’t seem to understand me, or won’t listen to me – what am I doing wrong?

You’re probably doing nothing wrong – *Façade*, being a computer program, is limited at times in its ability to understand or react to you. Here are some of **the ways that things can go awry** when you interact with Grace and Trip:

- they don’t understand the particular words you are using, or don’t quite properly parse the sentence structure of what you’re saying – even if what you’re saying is quite reasonable or obvious.
- they *do* understand your words and sentence structure, but at the particular moment when you spoke, they are unable to respond or are only able to respond in a limited way. This can happen for a variety of reasons:
  - they are wrapped up in a tense moment that is cumbersome for them to interrupt;
  - they can’t think of a good response, due to their limited intelligence as computer characters, even if what you said was quite interesting and reasonable;
  - they understood what you said, but at this moment they’re purposefully ignoring you what you said, because they’ve run out of things to say or about it, or they actually don’t want to respond to it.

When Grace and Trip don’t understand you, rather than stop and say “I don’t understand”, they will try to acknowledge that you said *something* – but then keep going forward with the drama. This has the advantage of not causing disruptive breaks in the action that can

interrupt your suspension of disbelief and immersion in the story. But this has the disadvantage of not giving you as much feedback as you might want or need when things are going wrong, and why.

### **Suggestions for smoother interactions**

There are a few ways to make interacting with Grace and Trip more successful.

- Depending on what Grace and Trip are talking about, **they may be able to pause** and wait a bit as you are typing. But this is not always possible, especially once things get very tense.
- You'll often need to **type while Grace and Trip are still talking**. Only until you press "enter" are your words actually spoken.
- It's fine to **press "enter" while Grace and Trip are talking**. Sometimes it will immediately interrupt them (which is okay); sometimes they will wait to finish their current sentences before they respond to you.
- **Typing shorter sentences** will allow to respond more quickly, especially if you aren't a fast typer.
- To respond directly to Grace and Trip, e.g. with an agreement or disagreement, try to **say it within five seconds**, or else they may move on to something else and not always understand what you mean.
- Talk often, but not so often that Grace and Trip can't keep up. **Talking no more often than every ten to fifteen seconds** will probably be smoother than saying something every five seconds.
- It doesn't work to type part of a sentence, hit "enter", and then type more of the same sentence and hit "enter" again, as a way to type one very long sentence. Grace and Trip consider each thing you type as **separate sentences**.

### **Try playing *Façade* now!**

Before reading further, you may decide you have enough guidance to play *Façade*.

But if you find you are too often getting frustrated with not being understood, and the above suggestions aren't helping, then read on in this document for explanations of specific phrases that Grace and Trip can and cannot understand.

Also read on to learn exactly what gameplay is going on under the surface, and complete listing of the various elements of the plot and how to make them happen.

## Part II: Delving Deeper Behind the Façade (spoilers ahead!)

### **A primary design goal of *Façade*: agency**

Before describing the details of how the drama is structured, we'll mention a primary design goal of *Façade*: for you to experience *agency* over a well-formed story structure as you play. Agency essentially means *meaningful control*. A more complete definition of agency is: when the player can form intentions with respect to the experience, take action with respect to those intentions, and interpret responses in terms of the action and intentions; i.e., when the player has actual, perceptible effects on the virtual world. (Janet Murray's book *Hamlet on the Holodeck* (1997) has a good deal of discussion of the concept of agency in interactive experiences.)

Mentioned earlier in the Vision and Motivation section of this document, we find it useful to identify two types of agency: *local agency* and *global agency*. Local agency means that the player is able to see immediate, clear reactions to their interaction. Global agency means that the long-term sequence of events experienced by the player is strongly determined by player interaction; that is, what the player does in the moment should strongly influence which significant events or plot points occur in the future.

Ideally you, the player, are given the ability to experience a high degree of local agency at each moment, and a high degree of global agency over the entire experience. *Façade* doesn't quite reach that ideal; *Façade* offers varying amounts of local agency at different points in the drama (direct, immediate reactions in the moment), and a modest amount of global agency (overall plot control over a well-formed story). By comparison, we believe the best videogames tend to offer lots of local agency, but little or no global agency (mostly linear plots, or very fragmented, poorly-structured plots). A *Choose Your Own Adventure* book offers modest global agency, but little or no local agency. *Façade* offers significant amounts of both local and global agency, which contributes to our claim that it is the first fully-realized interactive drama yet built.

### **Discourse acts**

First we'll describe how everything you say or do in *Façade* is interpreted as one or more core meanings, called *discourse acts*. Of all the millions of pieces of dialog you can type into *Façade* to say to Grace and Trip, each will be interpreted *in context* into one or more discourse acts – the basic meaning of what you said, in terms of how Grace and Trip interpret the words. *In context* means that the interpretation of what you said will vary depending on the particular situation you are in at that moment. Saying “yes” or “I don't like that”, for example, at different times will mean different things, because the context of the conversation is changing over time as the drama progresses.

Here are the discourse acts in *Façade*, that your typed dialog and physical actions get turned into in Grace and Trip's minds:

- agree
- disagree
- generalExclamation
- positiveExclamation
- negativeExclamation
- express <emotion>
- maybeUnsure
- dontUnderstand
- thank
- apologize
- greet
- goodbye
- getAttention

- referTo <character> | <object> | <topic> | <theme>
- physicallyFavor <object>
- praise
- hugComfort
- flirt
- kiss
- showConcern
- howAreYou
- areYouOkay
- showSupport
- pacify
- explain <explainAdviceDescriptor>
- advice <explainAdviceDescriptor>
- explainRelationship <character1> <relationshipDescriptor> <character2>
- criticize
- oppose
- inappropriateObscene
- leaveApartment
- leaveForKitchen
- UncooperativeNotSpeaking
- UncooperativeNotMoving
- UncooperativeFidgety
- SystemDoesntUnderstand

Most of the above discourse acts can be directed towards Grace or Trip. A few have additional parameters, as specified by the angled brackets; these parameters can be:

- <emotion>: happy, sad, angry, laugh
- <character>: Grace, Trip, Player, gracesParents, tripsParents, Maria, Vince
- <object>: couch, armoire, bar, drinks, paintings, weddingPicture, italyPicture, view, adviceBall, brassBull, styleApartment, workDrawings, answeringMachine
- <topic>: marriage, divorce, sex, therapy, infidelity
- <theme>: artistAdvertising, materialismFacade, rockyMarriage
- <explainAdviceDescriptor>: controlling, controlled, loving, loved, depressing, depressed, communicative, afraid, angry, lying, toBlame, divorce, separate, therapy, haveSex, haveKids, makeArt, quitJob, kill, revenge, suicide
- <relationshipDescriptor>: loves, hates, isCheatingOn

Later in this document we'll list out a variety of examples of different pieces of dialog you can type or actions you can take to cause specific discourse acts to happen.

Note that a sentence you type can be interpreted into *multiple, simultaneous* discourse acts. For example, if you said, "hi Trip, wow, you look awful today", it would be interpreted as Greet Trip, GeneralExclamation, Criticize Trip, and ReferTo Trip, all at the same time.

### ***Façade* story structure**

The story of *Façade* is broken down into a vast and varied collection of *behaviors*. Each behavior is small computer program, or procedure, that performs a bit of dramatic action for a character. Each behavior contains one or more lines of spoken dialog, and details for performing the dialog such as emotional expression and gesture.

In fact, since Grace and Trip almost always perform their dialog together, like two actors performing in sync together on a theater stage, they mostly use *joint behaviors*, a programming technique innovated for the *Façade* project. For any one piece of dramatic action, there are actually two behaviors that work in sync, one for Grace and one for Trip.

(Behaviors are different from the traditional definition of *scripts* in typical videogames, because behaviors are more non-linear, dynamic and reactive than typical videogame scripts. However, to the extent that a videogame's scripts are also non-linear, dynamic and reactive, they really should be called behaviors.)

There are over 2500 joint dialog behaviors authored for *Façade*. They are grouped together and organized in a few different ways, in which each can intermix their performance with one another:

- *Beats* are focused narrative situations, for example, fighting over fixing drinks, or Trip bragging about their Italy vacation, or one of their parents calling on the phone. A *Façade* beat typically lasts anywhere from 30 to 90 seconds. Only one beat is happening at a time. There are 27 beats in *Façade* (listed in the next section), and usually about 15 of them will occur any one time you play *Façade*. Beats typically have a range of ways to perform their dramatic content, depending the current tension level, your current affinity with Grace or Trip, and so on. To achieve this variation, and to be as reactive to the player as possible during the beat, each beat is composed of a medium to large collection (~20 to ~100) of *beat goals*, which are the narrative goals of the beat. Each individual beat goal contains several joint dialog behaviors, the atomic unit of narrative in *Façade*, as described above. Beats and their beat goals account for approximately 66% of the dramatic content in *Façade*.
- *Global mix-in progressions* are small- to medium-sized narrative situations about supporting, related or tangential aspects of the drama. There are 34 global mix-in progressions in *Façade*. Up to one global mix-in can be happening at a time, mixing it its performance into the currently active beat. Each global mix-in is similar to a single beat goal, each of which contains several joint dialog behaviors. Global mix-in progressions account for approximately 33% of the dramatic content in *Façade*.
- *Autonomous mix-in behaviors* are longer term behaviors that mix in joint dialog behaviors intermittently across several beats. These account for about 1% of the dramatic content in *Façade*.

(A note on terminology: in traditional dramatic writing, the definition of a *dramatic beat* means a small exchange of dialog between characters that advances the story in some small but meaningful way. In *Façade* that notion is actually closer to what we call *beat goals*. In *Façade*, what we refer to as beats are actually collections of beat goals. In hindsight, we might have chosen to refer to beat goals as *beats*, and referred to beats as *beat collections* or something similar.)

Many beat goals in *Façade* are *interruptible*, and many will later *reestablish* and *re-run* themselves if interrupted. Interruptions in *Façade* are normal; we intend for and sometimes even require them to occur, so don't hesitate to interrupt them sometimes. Some beat goals are immediately interruptible; some wait until Grace or Trip are done saying a particularly important sentence before an interruption takes effect; some are uninterruptible. If a beat goal got interrupted, later on it may re-run, first prefacing itself with a brief reestablishment of what it was talking about followed by a shorter, repeat version of its content. An interrupted beat goal will not need to re-run if it had already made it past the *gist* of its performance.



Further, many beat goals have context-specific *deflection* mix-ins associated with them, that occur if the beat goal is interrupted by some generic or non-understood dialog that triggers no good beat-specific or global mix-in. There are often three types of deflects per beat goal: one for positive language, one for negative language, and one for neutral language. The deflection dialog is essentially a generic acknowledgement of the tone of your input. Reestablishment and re-run of the interrupted beat goal typically occurs after a deflection if needed.

All of these variations are part of the reactive machinery of each beat goal, allowing the dialog to seem more dynamic, responsive and intelligent.

### **The list of dramatic content pieces in *Façade***

The list of 27 beats in *Façade*:

- PlayerBehindDoor
- TripGreetsPlayer
- TripFetchesGrace
- GraceGreetsPlayer
- ExplainDatingAnniversary
- FightOverFixingDrinks
- DiscussGracesDecorating
- ItalyTripGuessingGame
- PhoneCallFromParent
- ApologizeForFighting
- OneOnOneWithGraceInLivingRoom
- OneOnOneWithTripInLivingRoom
- OneOnOneWithGraceInKitchen
- OneOnOneWithTripInKitchen
- GraceReturnsFromKitchen
- TripReturnsFromKitchen
- ReenactMarriageProposal
- CrisisBlowup
- RecoverFromCrisisBlowup
- TherapyGame
- RevelationsBuildup
- Revelations
- EndingNoRevelations
- EndingSelfRevelationsOnly
- EndingRelationshipRevelationsOnly
- EndingAlmostEnoughRevelations
- EndingRevelationsThresholdAttained

The list of 32 global mix-in progressions in *Façade*:

- PraiseGrace
- PraiseTrip
- CriticizeGrace
- CriticizeTrip
- FlirtWithGrace
- FlirtWithTrip
- HugOrComfortGrace
- HugOrComfortTrip
- ShowConcernForGrace
- ShowConcernForTrip
- PacifyAttempt
- Provocation (Post-greeting Kiss, Strong Insult, Cursing)
- MarriageReference
- DivorceReference
- SexReference
- InfidelityReference
- TherapyReference
- WeddingPictureReference
- ApartmentReference
- ItalyPictureReference
- SculpturesReference
- WorkReference
- PaintingsReference
- BrassBullReference
- BarDrinksReference
- AdviceBallReference
- CityViewReference
- GenericDeflection
- ExplainAdviceReference
- LeaveForKitchen
- LeaveApartment
- ActingWeird (not speaking, not moving, etc.)

The list of 3 autonomous mix-in behaviors in *Façade*:

- TripFixesAndServesDrinks
- SipDrinksOverTime
- TripObsessivelyPlaysWithAdviceBall

### Story values in *Façade*

Before describing how beats and global mix-ins are sequenced to create the flow of the drama, we need to describe the *story values* that are kept track of in *Façade*:

- the overall story tension
- your affinity for Grace and Trip
- the history of the meaningful things you say
- the amount of self-realization Grace has achieved about herself
- the amount of self-realization Trip has achieved about himself
- the amount of self-realization they have achieved about their relationship

We'll briefly describe how each of these story values are used in *Façade*:

- *Tension*. Each beat and global mix-in has been annotated by us to describe the tension levels it can perform at, and what effects on tension it will have if performed. Using this information, *Façade's drama manager* tries to shape the overall experience to match a dramatic *tension arc*, in which the tension begins to rise at an *inciting incident*, increases at a steady pace over time, not too slowly and not too quickly, passing through a *crisis* and peaking at the drama's *climax*, and then dropping down the very end, the *denouement*. In dramatic writing, this arc is sometimes called an *Aristotelian tension arc*, referring to the ancient Greek theorist Aristotle who first wrote about the nature of drama

around 350 B.C. Many plays and movies are structured to follow an Aristotelian dramatic arc, often divided across three acts; *Façade*, being a short play, has a single tension arc in *one act*. (Note *Façade* is meant to be replayed many times to experience significant variation, unlike traditional non-interactive plays and movies.)

- *Affinity*. In the minds of Grace and Trip, your *affinity* towards them is a zero-sum game, that we call the **affinity game**. If affinity is neutral, you are siding with neither Grace or Trip. If you start agreeing with or praising Grace, then your affinity is with Grace, and Grace thinks you're with her and Trip thinks you're against him. If you disagree or criticize Grace, Trip thinks you're with him and Grace thinks you're against her.

(One interesting exception to this is during the DiscussGracesDecorating beat where Grace tries to get you to say her decorating is awful; in that beat, she interprets flattering language to her as disagreement, losing affinity with her and gaining for Trip, and interprets negative language to her as an agreement, gaining affinity with her and losing for Trip.)

Your current affinity with Grace and Trip greatly affects the details of exactly what gets said during beats and global mix-ins, since each beat and global mix-in has dialog variations depending on the current affinity.

- *Conversational history of provocative content*. *Façade* keeps track of all the meaningful things you say or cause to happen over time – these get built up over time in the minds of Grace and Trip. The **most provocative** things you've said and/or caused Grace and Trip to say to each other will get recalled halfway through the drama during the CrisisBlowup beat. Later, during the TherapyGame beat in the second half of the drama, the sum total history of provocative dialog will again be recalled and potentially cause Grace and Trip to eventually have self-realizations about themselves and their marriage, or not. (More on this later in this document; see the descriptions of those beats for more details.)
- *Amount of self-realization*. Grace and Trip are each keeping track of **how much they've learned and realized** about themselves and their relationship; how much they each realize will determine the ending of the drama. This is the closest thing to an overall “score” going on in *Façade*. (More on this later in this document.)

Also worth listing here are the three major **story themes** and ten **backstory categories** in *Façade*. The three story themes are:

- artistAdvertising (AA) – Grace feels like she was manipulated to choose a career in advertising, instead of becoming a full-time artist
- materialismFacade (MF) – both Grace and Trip, but especially Trip, are compelled to put on a façade of materialistic success
- rockyMarriage (RM) – their marriage has been rocky from the start, which has manifested itself in a variety of ways.

The ten backstory categories are as follows, appended with the story theme(s) they each address:

- Grace\_feels\_controlled\_by\_everyone\_in\_her\_life\_Trip\_thinks\_he\_is\_helping\_her\_AA\_RM
- Grace\_has\_disconnected\_herself\_from\_Trip\_always\_seems\_unsatisfied\_distant\_even\_when\_Trip\_tries\_to\_r\_each\_out\_RM
- Grace\_wants\_more\_out\_of\_life\_eg\_art\_but\_is\_suppressed\_by\_Trip\_and\_she\_is\_afraid\_of\_going\_for\_it\_AA
- Grace\_is\_a\_bit\_spoiled\_Trip\_reinforces\_it\_to\_make\_sure\_she\_still\_has\_flaws\_MF
- Grace\_is\_never\_happy\_because\_she\_is\_lacking\_more\_passion\_beauty\_feeling\_connection\_RM\_AA

- Grace\_feels\_like\_their\_marriage\_is\_a\_facade\_all\_for\_show\_where\_is\_the\_real\_feeling\_\_Trip\_deep\_down\_knows\_hes\_putting\_on\_a\_facade\_MF
- Trip\_wants\_to\_be\_highclass\_to\_completely\_leave\_behind\_his\_embarrassing\_background\_MF
- Trip\_has\_been\_hiding\_adulterous\_behavior\_RM
- Trip\_is\_a\_charmer\_thats\_what\_initially\_attracted\_Grace\_but\_it\_leads\_to\_flirtations\_RM
- Admitting\_that\_theyve\_had\_an\_unhappy\_marriage\_RM

### When and how *Façade* beats happen, and how to influence them and their sequencing

What follows is general description of the overall, mostly non-linear flow of *Façade*'s beats – in general what we call *drama management*, or more specifically in the case of *Façade*, *beat sequencing*. (But don't forget that beats are only a part of the overall story structure for *Façade*; the global mix-in progressions, discussed further in the next section, are a major part of the plot of the drama.)

When describing beats here, we will list the types of provocative content that can potentially occur in each, that will later affect what gets said during the CrisisBlowup beat. Each provocative content addresses one or more backstory categories; due to space considerations, we do not list that mapping here.

- When *Façade* first begins, you **choose a name and gender**. In terms of the plot, it doesn't really matter which name or gender you choose; all that gender really affects is the details of how they react to flirtation.

A note on the **music soundtrack**: there are a variety of pieces of music that can play during *Façade*; you won't hear the same soundtrack each time. 80% of the time the soundtrack is made up of a mix of subtle, electronic compositions from four of our five composers: Matt, Jim, Aaron and Leo; 20% of the time, you'll get an entire soundtrack from Billy, who composed a more atonal (i.e., weird) acoustic soundtrack. (The soundtrack is or will be available on CD.)

- *Façade* always begins with **PlayerBehindDoor**, where you, the player, are at Grace and Trip's front door, able to hear them arguing from inside. If you knock, it will accelerate the performance of the beat; if you don't knock, eventually Trip will open the door on his own. There is a bit of variation in this beat, specifically what they're arguing about behind the door.
- After PlayerBehindDoor, *Façade* always next sequences **TripGreetPlayer**. Trip opens the door and greets the Player, with some variation in the greeting. Depending on how the player responds, it will set initial *affinity* with Trip (and therefore with Grace too, as described earlier).

During the greeting beats, **kissing** is allowed, without Grace and Trip getting riled up. Later, after the greeting beats, kissing tends to freak them out.

- If you don't barge in, the next beat sequenced will always be **TripFetchesGrace**, where Trip runs off to the kitchen to get Grace, who is hiding because Trip didn't tell her you were coming over so soon. If you barged in, or try to follow Trip to the kitchen, TripFetchesGrace is skipped and we go to the next beat, below.

- In the **GraceGreetPlayer** beat, Grace comes out from the kitchen to greet you, with some variation in the greeting. Depending on how the player responds, it will set initial affinity with Grace (and therefore with Trip too, as described earlier).

Once Grace first greets you, **global mix-ins** now become active, and can be mixed into to this or any of the next several beats. See the next section for more details on global mix-ins.

- Once the greeting beats are over, the plot of the drama gets much more non-linear. Any of the following beats can occur next: **ExplainDatingAnniversary**, **FightOverFixingDrinks**, **DiscussGracesDecorating**, **ItalyTripGuessingGame**, or **PhoneCallFromParent**. Generally speaking, you can influence which beat happens next by saying something related in the current beat; for example, if you bring up the idea of drinks during a beat, there's a good chance the next beat sequenced will be **FightOverFixingDrinks**, or if you bring up Italy, **ItalyTripGuessingGame** might happen next. That is one way to achieve some *global agency*, a concept described earlier.

At this early point in the drama, **tension** is at a medium level. After one to three of the above beats occur, tension will increase to medium-high, to match the overall tension arc. (Exactly when depends on how quickly you cause the tension to increase, or not). There are certain beats that can only occur while the tension is still medium: **ExplainDatingAnniversary** and **PhoneCallFromParent**. Once tension becomes medium-high, several other beats become enabled (discussed further down), and **FightOverFixingDrinks**, **DiscussGracesDecorating** and **ItalyTripGuessingGame** are still possible.

Unless you took sides during the greetings, your affinity to Grace and Trip starts out neutral. Once affinity moves towards Grace or Trip, you'll hear some music begin (unless the atonal acoustic soundtrack was already happening).

Next we will discuss details about each of the above beats.

- In **ExplainDatingAnniversary**, Trip attempts to get you to "remember" that you introduced him and Grace ten years ago tonight. Trip will have different dialog and emotional tone depending on if you currently have affinity for him, for Grace, or are neutral. During the beat, if you talk about something else, it will typically cause a global mix-in to be worked into the beat (see the next section on global mix-ins). Endings to this beat include variations for agreement with Trip, disagreement with Trip, or a non-committal answer. If you agree with Trip, affinity moves in his direction (from neutral to pro-Trip, or from pro-Grace to neutral), vice-versa if you disagree with Trip, and stays the same if you give a non-committal answer.
- **FightOverFixingDrinks** involves Trip and Grace arguing over what kind of drinks to make, revealing some of the underlying tension between them, and some character development. This beat has dialog variation depending on if you have affinity with Grace or not. (In this beat, Trip doesn't distinguish between neutral affinity and pro-Trip affinity.) The dialog further varies if the tension is medium or medium-high. So, the total number of distinct emotional tones in the dialog for this beat is 4; further, there is a good deal of natural variation *within each* emotional tone. Endings include requesting a Trip drink likes, requesting a drink Trip doesn't like, or a non-committal answer. As

usual, during this beat global mix-ins can occur.

If this beat plays while the tension is still medium, Trip will ask Grace what she wants, and then actually prepare drinks and serve them. Drinking alcoholic drinks doesn't actually have an effect on you, Grace or Trip; there's not a chance for enough alcohol to be poured for drunkenness to occur.

If this beat plays later when tension has already increased to medium-high, the beat always ends with some very tense words exchanged (e.g., Trip was going to accidentally going open their anniversary wine, or Grace reveals Trip's secret job as a bartender in college, or that Trip secretly drinks at a sports bar down the street), the beat sequencer always next chooses the CrisisBlowup beat (described later), and Trip doesn't get a chance to actually make the drinks.

This beat can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Grace mocks Trip under her breath for his pretentious drink fixing, Trip doesn't even like the taste of alcohol, Trip fixes drinks to avoid real conversation, Trip makes friends by fixing them fancy drinks, Grace hints strongly at Trip's parents blue collar class, You are making fun of my parents you think they're low class, Grace reveals Trip's bartender secret, You are such a wine snob like my dad, Grace reveals sports bar secret, Grace catches Trip opening anniversary wine, Trip thinks fancy drinks make him look sophisticated Grace feels compelled to tear down this façade, Trip suggests Grace is sexually frigid with his drink invention suggestion

- **In DiscussGracesDecorating** Grace tries to play a head game with you, to get you to criticize her decorating in order to express her hidden frustration of choosing an advertising career instead of art, and to rile up Trip who finds such self-deprecating talk about the apartment very embarrassing. This is a good example where the *context* of the drama changes the meaning of your words. That is, for example, saying "I don't like the couch" in this beat means *agreement* with Grace, whereas in other beats those same words are interpreted as *criticism* of Grace.

When the tension is medium, there are dialog variations in this beat for neutral, pro-Grace and pro-Trip affinities; at tension medium-high, there is variation for pro-Grace or pro-Trip affinities; so the total number of variations of this beat is 5.

In this beat Grace has specific dialog for the couch, the armoire, her sculptures, the large painting, the wedding picture, the view, the rug, and the style of the apartment in general. During the beat you can switch which decorating object you're discussing by referring to or touching it, can get more information about the topic at hand by asking some sort of ReferTo question such as "why?", and can even alter the affinity during the beat. And as usual, global mix-ins can occur during the beat.

Endings include agreeing with Grace, disagreeing with Grace, or giving a non-committal answer. If the painting was brought up, it can cause an especially incendiary ending to the beat.

This beat can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Grace is unhappy about her decorating Trip thinks it's fine, This wedding picture does not go in this room, If I hadn't gone into advertising I could have painted that painting, Artist in me dying to get out, I could have painted the paintings myself, I know I'll never be satisfied with it I shouldn't get so obsessed about it it's just not worth it, I want to paint freeform all over the walls, I waste all day designing ads, Grace you're never happy, With our income cut in half we'd be living in some basement apartment in Queens as if you could ever handle that, Grace you're good at decorating like you're good at

advertising, Grace was totally spoiled growing up, Grace you're good at decorating trust yourself, We've seen how your artist friends live as if you could ever survive that lifestyle, Grace grew up with nice expensive stuff can't live without it

- **ItalyTripGuessingGame** involves Trip trying to get you to come over and take a look at the photo he took on their recent trip to Italy. Grace, very unhappy about how badly the trip went, either tries to woo you over to the couch, or if the tension is medium-high, wants you to go look so she can use it as a way to strike out at Trip. If you go to the photo, Trip tries to get you to guess, in a single word, what the photo “says”. The answer Trip is looking for is “romance” or “love” or some variation.

During the beat you can get more information about their trip by asking some sort of ReferTo question such as “why?”, and as usual, global mix-ins can occur during the beat. But here is another example of context; during the guessing game, dialog that normally would trigger global mix-ins (e.g., “how’s work going?”) instead get applied to the guessing game.

Like DiscussGracesDecorating, there are 5 variations of this beat, for neutral, pro-Grace and pro-Trip affinities at medium tension, and for pro-Grace or pro-Trip affinities at medium-high tension. Endings include Trip happily telling you what the photo means, Trip surprised and excited if you guess the answer (both causing affinity shifts towards Trip), and Trip depressed if you don't play the guessing game (affinity shift towards Grace).

This beat can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Grace says Trip has a weird obsession for Italy, Grace says she'll take the Italy picture down later, Grace calls the Italy picture oppressive or suffocating, What is it with your obsession fetish with Europe you take enough business trips there as it is, Grace mentions she missed a college friends art show, Grace calls the Italy picture controlling or domineering, In our marriage romance is a code word for manipulation, You planned that trip without even asking me if I wanted to go, Trip thinks a romantic trip to Europe would thaw me out, Trip wants to show off about his supposedly romantic trip to Italy Grace is bugged by it for some reason, Trip says Italy was meant to be second honeymoon Grace says it was just a weekend getaway, Not everybody appreciates this kind of thing I thought we'd have a good time there that's all, Trip calls Grace on her supposed love of art, Trip says Italy was meant to be second honeymoon Grace says it was just a weekend getaway, I took this picture on my own Grace was too tired to leave the hotel room

- In **PhoneCallFromParent** one of their parents calls on the phone. If your current affinity is pro-Grace, then Grace's father will call, and if you're pro-Trip, Trip's mother will call, in order to upset the character who feels like they're “ahead”. If affinity is neutral, either parent may call. Trip likes and Grace dislikes her parents; Grace likes and Trip dislikes his parents. The one whose parents are calling will convince their spouse to not pick up the phone, and let the answering machine pick it up; however you can intervene and pick up the phone, upsetting them. You cannot actually have a conversation with the parent; they get confused and hang up too quickly.

As mentioned earlier, this beat is only available to occur at medium tension; there are only 2 variations, one for Grace's dad calling and one for Trip's mom calling. Endings include letting the answering machine go, or you picking up the phone causing an affinity shift away from the person whose parents called.

This beat can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Trip I wish you were more real like your dad, Trip you have shallow reasons for liking my parents, Grace you pretend to be different from your parents but you're not

- If enough time has passed at the medium tension level, and you haven't caused the tension to increase to medium-high (e.g. by causing a pushed-too-far global mix-in, explained in the global mix-in section), then the **ApologizeForFighting** beat will be sequenced. In this short beat, the character with the most affinity will openly admit that they've been fighting in front of you – and the other will proceed to fight about that admission. This will inherently increase the tension to medium-high, the effect that the drama manager is needed to achieve.

Before describing the remaining beats, it makes sense to first describe *Façade*'s global mix-in progressions, because they can affect beat sequencing.

### **When and how *Façade* global mix-ins happen, and how to influence them and their sequencing**

Beats are only a part of the overall story structure for *Façade* – global mix-in progressions, which are supporting, related or tangential aspects of the drama, are a major part of the plot, especially during the medium and medium-high tension levels (approximately the first 10 minutes of the experience). These are called *global* because they can happen over a greater range of time than beat-specific beat goals, and are a bit more generic in nature.

Each progression has three stages, referred to as the **hot-button game**. The first stage causes a relatively mild response from Grace and Trip about the topic at hand. Each progression tends to be either pro-Grace or pro-Trip. If you continue to refer to that topic, effectively "pressing their buttons", you move to the second stage – a stronger reaction that may move affinity in the direction of the pro-character. The third stage, if allowed at that particular point in time in the drama, causes a **pushed-too-far** reaction, in which one of them storms off to kitchen for a short while, causing an affinity shift, an increase of tension to medium-high, and the **OneOnOne beats** to occur (described in the next section). The drama manager allows pushed-too-fars to occur if the drama has been at the medium tension level for at least one beat past the greeting beats; before then, the characters will deflect instead of performing a pushed-too-far.

Different global mix-in progressions can *combine* to work towards the same pushed-too-far. For example, praise, hugOrComfort and showConcern all work towards the same pushed-too-far reaction. That is, when you first praise, hug or comfort or show concern, you'll get the stage 1 praise, hugOrComfort or showConcern global mix-in respectively; then, when you next praise, hug or comfort or show concern for the same person, you may actually get the stage 2 praise, hugOrComfort or showConcern global mix-in respectively (even if you haven't seen the stage 1 version of it), and likewise a third of any of those three you'll get the pushed-too-far that encompasses them all.

Note that a particular line of dialog you would type to normally cause a global mix-in to occur won't always cause a global mix-in, because sometimes the current beat will respond to your dialog instead. For example, saying "I like the couch" normally causes a PraiseGrace, where Grace acts happy you are praising her; however during the DiscussGracesDecorating beat, that same dialog from you will trigger a beat-specific beat goal reaction instead, such Grace explaining why she dislikes the couch.

Alternatively, sometimes global mix-ins can trump beat reactions. For example, during the DiscussGracesDecorating if you said "I like the couch, you idiot", the global mix-in Provocation is more important to occur than the beat-specific reaction about the couch, and it gets chosen to



be performed. The conversation management AI has *context priority mappers* to accomplish this global-trumps-beat behavior.

What follows is general description of the global mix-in progressions.

- **PraiseGrace**
- **PraiseTrip**
- **HugOrComfortGrace**
- **HugOrComfortTrip**
- **ShowConcernForGrace**
- **ShowConcernForTrip**

One of these occurs when you try to praise or support one of them. The Grace mix-ins are pro-Grace and the Trip mix-ins are pro-Trip, of course. The progression of these combine towards the same pushed-too-far, as described earlier.

This progression can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: ActedOverly Praised, ActedOverly Supported, PushedTooFar PraiseSupportPacify

- **CriticizeGrace**
- **CriticizeTrip**

One of these occurs when you try to lightly criticize one of them. CriticizeGrace is pro-Trip and CriticizeTrip is pro-Grace.

This progression can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: ActedOverly Criticized, PushedTooFar Criticism

- **FlirtWithGrace**
- **FlirtWithTrip**

One of these occurs when you tastefully flirt with one of them. FlirtGrace is pro-Grace and FlirtTrip is pro-Trip, unless you are man, then flirting with Trip is anti-Trip (and therefore pro-Grace).

This progression can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Hint that Trip is too flirtatious, ActedOverly Flirting, PushedTooFar Flirting

- **PacifyAttempt** occurs when you try to pacify either of them. These don't cause affinity changes, because they're each equally annoyed by your attempts to pacify one or both of them.

- **Provocation**
- **ExplainAdviceReference**

One of these occurs when you strongly criticize or insult one of them, kiss them past the greeting beats, say something very inappropriate or obscene, or try to give them heavy advice or serious explanations of what's wrong with them. During the first half of the drama, these cause those long stammering or confused reactions from Grace and Trip. The pushed-too-far of these progressions result in you being thrown out of the apartment by Trip.

However, the ExplainAdviceReferences are crucial in the second half of the drama in the TherapyGame beat, when Grace and Trip are finally ready to hear them.

This progression can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: ActedOverly Kissed, ActedOverly Provoked, ActedOverly VulgarInappropriate, GraceLovesTrip, GraceDoesntLoveTrip, GraceGoodGuyVictimOK, GraceBadGuyLiarAtFaultNotOK, GraceCheatingOnTrip, TripLovesGrace, TripDoesntLoveGrace, TripGoodGuyVictimOK, TripBadGuyLiarAtFaultNotOK, TripCheatingOnGrace, StayMarriedWorkItOut, GetDivorcedSplitUp, GoToTherapy

- **MarriageReference**
- **DivorceReference**
- **SexReference**
- **InfidelityReference**
- **TherapyReference**
- **WeddingPictureReference**
- **ItalyPictureReference**
- **WorkReference**
- **BrassBullReference**

One of these occurs when you reference one of the above topics or objects, or pick up any of the above objects. They combine towards the same pushed-too-far, about their rocky marriage.

This progression can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Trip makes fun of marriage with a joke aphorism, Trip dislikes talking about divorce, Trip is uncomfortable talking about infidelity, Hint that Grace has a history of attraction to someone else, Half of all marriages end if divorce these days Trip denies this, Grace is uncomfortable talking about sex, Grace is uncomfortable talking about therapy, This wedding picture does not go in this room, Grace you are slamming our marriage by wanting to remove the wedding picture, PushedTooFar RockyMarriage

- **ApartmentReference**
- **SculpturesReference**
- **PaintingsReference**

One of these occurs when you reference one of the above topics or objects, or pick up any of the above objects. They combine towards the same pushed-too-far, about their Grace's choice of an advertising career over art.

This progression can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Trip says decorating is a great outlet for Grace Grace rejects this, Trip Ive never liked this picture I never wanted to display it like this, PushedTooFar ArtistAdvertising

- **BarDrinksReference**
- **CityViewReference**
- **AdviceBallReference**

One of these occurs when you reference one of the above topics or objects, or pick up any of the above objects. They combine towards the same pushed-too-far, about Trip's materialism and need to display a façade of happiness to others.

This progression can potentially add one or more pieces of the following provocative

content to the conversation history, later affecting what happens during the CrisisBlowup beat: Grace suggests Trip loves the view because of its price tag, PushedTooFar MaterialismFacade

- **LeaveForKitchen**
- **LeaveApartment**
- **ActingWeird**

One of these occurs when you leave the room, don't move or don't speak for a while, or act overly fidgety. The pushed-too-far of these progressions result in you being thrown out of the apartment by Trip.

Now that we've described global mix-ins and how they intermix with beat goals, let's return to describing the beats themselves.

### Beat descriptions, continued

- As just mentioned in the previous global mix-ins section, when a pushed-too-far global mix-in occurs, tension is increased to medium-high and the beat manager sequences a OneOnOne beat. If Grace was the one who was pushed too far and stormed off to the kitchen, then the **OneOnOneWithTripInLivingRoom** beat gets sequenced; otherwise if Trip had stormed off, **OneOnOneWithGraceInLivingRoom** gets sequenced. These beats are symmetrical – that is, the person who has stayed with you in the living room, whoever it is, tries to pretend that everything is okay but then starts to admit that things have been tense lately between the two of them. They have stressed out and nervous responses to you, including flirtations (which you may try, since you're now alone with them). The beat ends after a bit of time where they try to stay calm and handle your interactions as best they can.

This beat can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: Hint that Trip is too flirtatious, Hint that Grace has a history of attraction to someone else

- If during the OneOnOne beat above, you enter the kitchen where the pushed-too-far person is trying to cool off, one of the alternate beats **OneOnOneWithGraceInKitchen** or **OneOnOneWithTripInKitchen** gets sequenced, depending on who is the one in the kitchen. In this beat the person who stormed off is trying to calm down, and somewhat angry deals with your interactions. They will soon return to the living room, not enjoying being alone with you in the kitchen, since you had so recently pushed their buttons.
- When any of the OneOnOne beats above finishes, either the **GraceReturnsFromKitchen** or **TripReturnsFromKitchen** beat gets sequenced, depending on who had been in the kitchen. If you had been in the living room with Trip when the beat begins, Trip will begin with trying to lighten things up by inviting you to an upcoming party of theirs, suggesting you invite a female co-worker, only to get caught in this dialog as Grace enters the room. Grace quizzes you if you know anything about this scheme of Trip's; depending on how you answer can cause another affinity shift. Alternatively, if you had been in the living with Grace when the beat began, Grace begins to confide in you just as Trip enters, accusing Grace of forgetting to buy brie.

This beat can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: I cant

believe you forgot to buy the brie its like you dont listen to me, I cant believe you forgot to buy the brie Its like you dont listen to me, You want to invite fresh young woman to our parties you do that dont let me stop you

- If the tension is medium-high, and you have been siding consistently with Grace, then the **ReenactMarriageProposal** beat may get sequenced, where Trip tries out of desperation to demonstrate his romantic nature by reenacting his original marriage proposal to Grace. Grace is horrified because Trip proposed to her on Christmas Eve, in front of her parents, effectively manipulating her into saying yes, which she did (even though she was hiding a secret about Vince, discussed later in this document). Trip asks you to agree with him that he's very romantic; endings include either agreeing with Trip, or agreeing with Grace that it was *not* romantic. Affinity shifts go either towards Trip or Grace, depending on who you side with.

This beat can potentially add one or more pieces of the following provocative content to the conversation history, later affecting what happens during the CrisisBlowup beat: How dare you embarrass me by showing your proposal, Grace does not think the proposal was romantic, It wasnt romantic you proposed to me completely by surprise what was I supposed to say, Trip romantically proposed to Grace in front of her parents on Christmas eve Grace is uncomfortable about it for some reason

## The CrisisBlowup beat

This beat is larger and a bit different than the previous beats, and needs its own section to describe it. Once the story tension has been at medium-high for at least one beat's duration and a beat ends in a particularly high-tension way (e.g., you say or cause some particularly provocative dialog), or if the tension has been medium-high for a few beats' duration, then the drama manager increases the tension to high, and always sequences the **CrisisBlowup** beat. This is a turning point in the drama where the tension increases significantly, Grace and Trip abandon whatever shreds of the façade they were trying to maintain, and “take the gloves off”. On the Aristotelian tension arc, this is considered the point where the *crisis* begins.

First we will overview the structure of this dynamically-constructed beat, and then go back into more detail about how the content of each part (i.e., each beat goal) is determined.

The beat begins with the one who was most bothered by the just-spoken provocative dialog storming to the center of the room, recalling and reacting angrily to it. Whichever character is the most bugged overall throws out an initial accusation, related to that provocation. The other then storms towards to the center of the room too, recalls something else provocative that was previously spoken that bothered *them*, and hurls a second related accusation. A third provocative line from the past may be recalled along with a third accusation by the initial accuser. During these accusations, if and when you say something, they will tend to ignore the content of what you said (they are very worked up at that moment) and instead recall something specific that you did earlier that bugged them.

After the accusations are thrown, the one who is most bothered by the events so far overall will then turn to you and pose a Dramatic Crisis Question. This yes-no question is inspired by the overall direction that the drama has been moving in so far; it is meant as a binary test for determining whose side you are really on; Grace and Trip do not give you the option of being neutral (attempting to not answer is effectively not giving the question asker the answer they want). Depending on your answer, one of them will feel rejected by you, will throw out one last hurtful accusation to the other, and flee to the kitchen.

### *The crisis calculus*

The details of the performance of this beat are controlled by the results of the following calculations, performed at the very beginning of the beat.

- Recognize past player behavior patterns.
  - Look at the history of the player's affinity with Grace and Trip; determine if the player always sided with one of them, started neutral then eventually sided with one of them, or switched affinities at some point.
  - Look at the player's history of praise, criticism, flirtation and kissing towards Grace and towards Trip; determine if they did this somewhat, or did this overly often. Also look at the player's history of being generally positive, negative, quiet, or uncooperative, and determine if they've done this overly often.
- Assign values to each previous occurrence of provocative content. For each provocative dialog that occurred (see the previous beat descriptions for what provocative content can occur in each beat and global mix-in), determine:
  - does it bother Grace or Trip, or both
  - its tier of importance to react to during this crisis beat, on a scale from 1 to 6, where 1 is most important
  - how strongly does it "push one of their buttons" on a scale from 0 to 3, where 3 is strongest
  - how much does it reduce one their affinities towards you, on a scale from 0 to -3, where -3 is the strongest
  - how constructive is the content towards helping them self-realize hidden truths about themselves and their relationship, on a scale from -2 to 2

Here are the rules for assigning these values:

- Each provocative content spoken by Grace or Trip to each other at the endings of previous beats (described earlier in each beat's section) is assigned an importance tier of 3, a button push level of 2, an affinity effect of 0 and constructiveness of 0. If it was spoken by Grace, it bothers Trip, and vice versa.
- Provocative content previously spoken by the player are assigned values as follows; if the content favors Grace then it bothers Trip, and vice versa.
  - Having said that one is cheating on the other is assigned importance tier 1, button push level 3, affinity effect -3, constructiveness 2.
  - Having said that one doesn't love the other, is a liar or is at fault, or suggesting they divorce, get therapy or stay married, is assigned importance tier 2, button push level 2, affinity effect -2, constructiveness 2.
  - Having said they love each other, or one is not to blame, is assigned importance tier 3, button push level 2, affinity effect -2, constructiveness 2.
- Past player behavior patterns are assigned values; if the content favors Grace then it bothers Trip, and vice versa.
  - Having overly flirted, kissed, provoked, explained or given advice is assigned importance tier 1, button push level 3, affinity effect -3, constructiveness -2.
  - Having overly criticized is assigned importance tier 2, button push level 2, affinity effect -2, constructiveness -1.

- Having been vulgar or inappropriate is assigned importance tier 3, button push level 2, affinity effect 0, constructiveness -1.
  - Having pushed them too far (see previous descriptions of global mix-ins) is assigned importance tier 3, button push level 2, affinity effect -2, constructiveness 2.
  - Having always sided with one of them is assigned importance tier 3, button push level 2, affinity effect -3, constructiveness -1.
  - Having somewhat flirted or kissed is assigned importance tier 4, button push level 2, affinity effect -2, constructiveness -1.
  - Having overly praised, hugged, comforted, supported or pacified is assigned importance tier 5, button push level 1, affinity effect -1, constructiveness -1.
  - Having started neutral then sided with one, or switched affinity, is assigned importance tier 5, button push level 1, affinity effect -1, constructiveness 0.
  - Having merely brought up a topic (e.g., marriage, sex) is assigned importance tier 5, button push level 1, affinity effect 0, constructiveness 1.
  - Having been overly positive, negative, quiet or uncooperative is assigned importance tier 6, button push level 0, affinity effect 0, constructiveness 0.
- Next, determine who among Grace and Trip is “most bugged”. We add up the sum total of all affinity effects (assigned in the previous step) for provocative content that bothers Grace, and sum up the same for Trip. Similarly we sum up the button push values for Grace, and for Trip. If the sum total of Grace’s affinity effects plus button pushes are greater than Trip’s totals, then Grace is considered “most bugged” among the two. Likewise for Trip. If it’s a tie, the beat randomly picks between Grace and Trip. “Most bugged” is used in decision making below.
- Determine if there was a “focus story theme” – a theme most addressed among the provocative content that occurred. The three possible story themes are artistAdvertising (corresponding to the DiscussGracesDecorating beat), materialismFacade (corresponding to the FightOverFixingDrinks beat), and rockyMarriage (corresponding to the ItalyTripGuessingGame beat and ReenactMarriageProposal beat). In order for there to be a dominant focus for a theme, a beat of a theme must occur and complete in at both medium tension and medium-high tension. Because so few beats got authored in *Façade*, the only way this can happen is for the rockyMarriage theme, if ItalyTripGuessingGame completes at medium tension and ReenactMarriageProposal completes at medium-high tension (the latter can only occur at medium-high, whereas ItalyTripGuessingGame can occur at both). If more beats had been authored however, the other two themes would have had a chance at becoming the focus story theme.
- Determine among Grace and Trip who will throw out the first accusation. If Grace had the lowest sum total of affinity effects (see earlier computation), she is the first accuser; vice versa for Trip. If they tied, then the “most bugged” character (see earlier computation) throws out the first accusation.
- Determine what the Dramatic Crisis Question will be, to be performed at the end of this beat. There are ten different possible topics for this question, corresponding to the ten

different backstory categories listed earlier in the story values section. As briefly mentioned at the beginning of the beat descriptions earlier, each provocative content (that have already occurred by now) addresses one or more backstory categories. To determine the Dramatic Crisis Question, we add up the sum total of each of the ten backstory categories addressed by the provocative content that have occurred, and pick the highest total among the ten.

- Determine the initial accusation. There are 30 accusations for Grace to choose from, and 30 different accusations for Trip to choose from. Each accusation is categorized under one of the ten backstory topics, as follows; each is prefaced by G or T, meaning Grace-spoken or Trip-spoken:
- 1) Grace\_feels\_controlled\_by\_everyone\_in\_her\_life\_Trip\_thinks\_he\_is\_helping\_her\_AA\_RM
    - G\_You\_are\_so\_controlling\_our\_whole\_marriage
    - G\_You\_think\_youre\_so\_romantic\_but\_youre\_just\_trying\_to\_manipulate\_me
    - G\_This\_keeps\_happening\_in\_my\_life\_people\_trying\_to\_criticize\_me\_tell\_me\_what\_to\_do\_suppress\_me
    - G\_Every\_time\_you\_claim\_to\_be\_acting\_romantic\_theres\_always\_else\_hidden\_there
    - T\_Ive\_always\_been\_the\_one\_who\_has\_to\_make\_the\_right\_choices\_for\_you
    - T\_Grace\_why\_cant\_you\_just\_let\_me\_help\_you\_let\_me\_let\_me\_be\_there\_for\_you\_Just\_let\_me\_do\_that
  - 2) Grace\_has\_disconnected\_herself\_from\_Trip\_always\_seems\_unsatisfied\_distant\_even\_when\_Trip\_tries\_to\_r\_each\_out\_RM
    - G\_I\_dont\_know\_how\_Im\_supposed\_to\_enjoy\_ourselves\_when\_you\_spend\_so\_much\_time\_playing\_around\_w\_ith\_your\_drinks\_and\_cocktail\_shakers\_and\_your\_goddamn\_advice\_ball
    - G\_How\_I\_am\_supposed\_to\_be\_happy\_and\_in\_love\_when\_you\_keep\_trying\_to\_act\_romantic\_and\_funny\_and\_all\_that\_crap
    - G\_Dont\_you\_dare\_accuse\_me\_of\_being\_sexually\_un\_when\_you\_when\_you\_treat\_me\_the\_way\_you\_do
    - T\_You\_never\_listen\_to\_me\_you\_dont\_believe\_anything\_I\_say
    - T\_You\_hide\_things\_from\_me\_Youre\_so\_distant
    - T\_I\_do\_one\_little\_thing\_wrong\_and\_youre\_cold\_and\_distant
    - T\_I\_try\_to\_reach\_out\_to\_you\_I\_try\_to\_be\_romantic\_with\_you\_but\_youre\_cold\_and\_distant
    - T\_Youre\_always\_choosing\_other\_things\_you\_never\_choose\_me
    - T\_You\_like\_it\_when\_other\_people\_reach\_out\_to\_you\_but\_you\_reject\_me
    - T\_Dont\_say\_youre\_going\_to\_remove\_this\_picture\_You\_are\_so\_cruel\_do\_you\_know\_that\_So\_cruel
    - T\_I\_like\_this\_its\_just\_this\_little\_thing\_I\_like\_but\_you\_reject\_it\_You\_hate\_it\_because\_I\_like\_it
  - 3) Grace\_wants\_more\_out\_of\_life\_eg\_art\_but\_is\_suppressed\_by\_Trip\_and\_she\_is\_afraid\_of\_going\_for\_it\_AA
    - G\_You\_dont\_think\_I\_could\_cut\_it\_as\_an\_artist
    - G\_Trip\_you\_always\_seem\_to\_think\_I\_am\_so\_fulfilled\_by\_decorating\_or\_something\_its\_just\_furniture\_This\_apartment\_is\_not\_my\_life
    - G\_Trip\_dont\_make\_some\_inane\_comment\_about\_artists\_or\_paintings\_trinkets\_you\_know\_nothing\_about\_ar\_t\_believe\_me
    - T\_You\_need\_to\_realize\_that\_art\_is\_not\_a\_real\_career
    - T\_You\_claim\_to\_like\_paintings\_and\_art\_and\_all\_that\_bullshit\_Taking\_a\_couple\_of\_art\_classes\_in\_college\_does\_not\_make\_you\_an\_artist\_okay
    - T\_I\_hate\_your\_goddamn\_parties\_I\_hate\_the\_people\_especially\_all\_those\_frickin\_artists\_you\_keep\_inviting\_o\_ver
  - 4) Grace\_is\_a\_bit\_spoiled\_Trip\_reinforces\_it\_to\_make\_sure\_she\_still\_has\_flaws\_MF
    - G\_Goddammit\_Trip\_you\_want\_this\_apartment\_to\_look\_so\_highclass\_but\_you\_carry\_around\_this\_piece\_of\_s\_hit\_plastic\_ball\_everywhere
    - T\_Its\_obvious\_why\_you\_keep\_redecorating\_Youre\_spoiled\_you\_could\_never\_live\_without\_all\_this\_stuff
    - T\_I\_know\_why\_you\_by\_all\_this\_stuff\_and\_decorate\_Grace\_not\_because\_youre\_really\_into\_art\_or\_creativity\_because\_you\_cant\_live\_without\_this\_stuff\_Youre\_spoiled\_and\_you\_wont\_admit\_it
  - 5) Grace\_is\_never\_happy\_because\_she\_is\_lacking\_more\_passion\_beauty\_feeling\_connection\_RM\_AA
    - G\_Im\_artistically\_stifled\_I\_need\_more\_feeling\_in\_my\_life
    - G\_You\_keep\_wanting\_us\_to\_live\_such\_shallow\_fake\_lives\_I\_want\_more\_out\_of\_life
    - T\_Youre\_never\_satisfied\_with\_anything\_Youre\_never\_happy
    - T\_You\_have\_no\_reason\_to\_be\_unhappy\_about\_this\_apartment\_about\_everything\_other\_than\_the\_fact\_that\_youre\_never\_happy\_never\_satisfied
  - 6) Grace\_feels\_like\_their\_marriage\_is\_a\_facade\_all\_for\_show\_where\_is\_the\_real\_feeling\_Trip\_deep\_down\_knows\_hes\_putting\_on\_a\_facade\_MF
    - G\_Sometimes\_I\_feel\_like\_our\_whole\_marriage\_is\_just\_for\_show\_I\_dont\_know\_what\_you\_really\_feel
    - G\_Trip\_youre\_just\_trying\_to\_make\_us\_look\_like\_were\_some\_kind\_of\_perfect\_happy\_couple
    - G\_You\_and\_your\_fancy\_crap\_that\_you\_try\_to\_impress\_everybody\_with\_its\_just\_a\_put\_on

- T\_Im\_not\_a\_bad\_person\_I\_like\_the\_good\_things\_in\_life\_does\_that\_make\_me\_a\_bad\_person
  - T\_I love\_my\_fancy\_drinks\_okay\_I love\_the\_good\_things\_in\_life\_Does\_that\_make\_me\_a\_bad\_person
  - T\_You know\_I try\_to\_enjoy\_the\_good\_things\_in\_life\_you know\_and\_share\_it\_with\_our\_friends\_but\_the way\_act\_Grace\_youre\_always\_ruining\_it
- 7) Trip\_wants\_to\_be\_highclass\_to\_completely\_leave\_behind\_his\_embarrassing\_background\_MF
- G\_You\_seem\_so\_embarrassed\_about\_your\_background\_for\_no\_good\_reason
  - G\_You\_so\_desperately\_want\_to\_be\_highclass
  - G\_I\_wish\_you\_would\_just\_be\_yourself\_Ever\_since\_Ive\_known\_you\_you\_resist\_that
  - G\_Trip\_you\_dont\_love\_this\_paintings\_trinkets\_decorating\_you\_love\_how\_everyone\_else\_supposedly\_loves\_this
  - T\_You\_think\_youre\_better\_than\_me\_just\_because\_I\_didnt\_come\_from\_a\_rich\_background
  - T\_I\_like\_this\_this\_is\_just\_a\_little\_thing\_I\_like\_but\_you\_look\_down\_on\_it\_like\_its\_lowclass
- 8) Trip\_has\_been\_hiding\_adulterous\_behavior\_RM
- G\_You\_never\_call\_me\_when\_youre\_on\_your\_business\_trips\_T\_Im\_busy\_the\_time\_difference
  - G\_Im\_getting\_really\_upset\_at\_this\_talk\_of\_cheating\_This\_is\_not\_funny
  - G\_No\_you\_only\_like\_the\_21year\_old\_girlfriends\_of\_the\_frickin\_artists\_I\_keep\_inviting\_over
  - T\_What\_is\_everybody\_hinting\_at\_I\_think\_infidelity\_is\_wrong\_Its\_a\_bad\_idea
  - T\_What\_is\_everybody\_hinting\_at\_That\_Im\_a\_bad\_person\_That\_I\_dont\_love\_my\_wife
- 9) Trip\_is\_a\_charmer\_thats\_what\_initially\_attracted\_Grace\_but\_it\_leads\_to\_flirtations\_RM
- G\_Trip\_I\_dont\_know\_how\_you\_manipulate\_people\_to\_fawn\_all\_over\_you
  - G\_Trip\_I\_think\_youre\_always\_sending\_these\_subtle\_flirt\_signals
  - G\_Trip\_I\_see\_what\_you\_do\_with\_your\_goddamn\_drinks\_you\_manipulate\_people\_to\_fawn\_all\_over\_you
- 10) Admitting\_that\_theyve\_had\_an\_unhappy\_marriage\_RM
- G\_With\_us\_talking\_about\_relationships\_never\_works\_it\_always\_leads\_to\_fighting
  - G\_Look\_I\_dont\_know\_what\_youre\_hinting\_at\_but\_I\_do\_not\_want\_to\_talk\_about\_our\_sex\_life
  - G\_Okay\_I\_see\_you\_obviously\_think\_weve\_all\_screwed\_up\_That\_weve\_got\_issues
  - G\_Trip\_I\_ask\_you\_how\_can\_I\_be\_happy\_this\_way\_How\_could\_anyone\_be\_happy\_this\_way
  - T\_Were\_doing\_fine\_why\_do\_we\_keep\_talking\_about\_relationships
  - T\_sarcastic\_Okay\_look\_if\_youre\_trying\_to\_ask\_about\_our\_sex\_life\_its\_great\_okay\_fabulous
  - T\_Grace\_doesnt\_want\_to\_go\_to\_therapy\_okay\_Ive\_tried\_she\_refuses\_to\_go
  - T\_Youre\_trying\_to\_say\_weve\_got\_problems\_huh\_That\_something\_is\_wrong\_with\_our\_marriage
  - T\_Grace\_I\_just\_want\_us\_to\_be\_together\_and\_be\_happy\_cant\_you\_just\_see\_that\_Cant\_we\_just\_do\_that

Most of the possible provocative content pieces (~125 of them) are each annotated with two crisis accusations they can cause, chosen from the list of 60 accusations above. For space considerations the full list of these annotations isn't shown here, but we will show three examples:

- The provocative content “If I hadn't gone into advertising I could have painted that painting”, which can occur during the DiscussGracesDecorating beat described earlier, has the following two crisis accusations annotated to it (labeled here with which backstory subcategory it is listed under above, e.g. 1a):
  - 1a: G\_You\_are\_so\_controlling\_our\_whole\_marriage
  - 3b: G\_Trip\_you\_always\_seem\_to\_think\_I\_am\_so\_fulfilled\_by\_decorating\_or\_something\_its\_just\_furniture\_This\_apartment\_is\_not\_my\_life
- The provocative content “Acted Overly Flirtatious to Grace”, which can occur as part of the FlirtWithGrace global mix-ins progression:
  - 2i: T\_You\_like\_it\_when\_other\_people\_reach\_out\_to\_you\_but\_you\_reject\_me
  - 10f: T\_sarcastic\_Okay\_look\_if\_youre\_trying\_to\_ask\_about\_our\_sex\_life\_its\_great\_okay\_fabulous
- The provocative content “Grace reveals sports bar secret”, which can occur during the FightOverFixingDrinks:
  - 7b: G\_You\_so\_desperately\_want\_to\_be\_highclass
  - 7c: G\_I\_wish\_you\_would\_just\_be\_yourself\_Ever\_since\_Ive\_known\_you\_you\_resist\_that

To determine the initial accusation, we look at the piece of provocative content that occurred just before the CrisisBlowup beat began, find what accusations it is annotated with, and choose one of them. This speaker of the accusation needs to match the initial accuser (determined earlier); if there is no matching accusation that exists spoken by the initial accuser, then pick a default generic accusation to be spoken.

- The initial accusation is prefaced with a snippet of dialog called a “short causation phrase”. This is a short phrase identifying the provocative content that inspired this



accusation. There are 90 short causation phrases each for Grace and Trip, such as “That damn Italy picture...”, “What did you say... I’m... depressed?”, or “Carting you off to Europe...?”

- The second accusation is then chosen, to be spoken by the character other than who did the first accusation. This is done by searching among all the values assigned earlier to each provocative content, for all the contents not yet chosen, of the highest importance tier. Among those that qualify, choose randomly. A short causation phrase preface for that accusation is chosen, in the same method described for the initial accusation.
- The third accusation is then chosen, to be spoken by the initial accusation character. It is chosen by the same method as the second accusation; note that a lower importance tier might be chosen this time, since this character has already spoken a previous accusation. A short causation phrase preface for that accusation is chosen, in the same method described previously.

### *Performing the CrisisBlowup beat, handling interaction*

Now that we’ve calculated what accusations and Dramatic Crisis Question are to be spoken, Grace and Trip begin performing the beat, using the following additional logic:

- When you interact with Grace and Trip, as described earlier they will tend to ignore the content of what you said (they are very worked up at that moment) and instead recall something specific that you did earlier that bugged them, called an “anger towards player comment”. There are 60 such comments each for Grace and Trip, such as “You’ve been critical towards me all evening”, “You and your fixation on that painting”, or “The way you flirt in front of my face!”

Which “anger towards player comment” is spoken when you interact is determined as follows. For the character who is currently throwing out an accusation when you interact, choose an unaddressed provocative content, in the same method as described above for choosing provocative content for accusations (search among most important tiers, etc.). Then choose a matching anger comment from the 60 available each to Grace and Trip.

- After the accusations have been spoken, a yes-no Dramatic Crisis Question will be asked, chosen from among 20 choices – 10 each for Grace and Trip, corresponding to the 10 backstory categories, as described earlier. The person asking the question wants to hear a specific answer; if you don’t give them the answer they’re expecting, whatever it is, they will get upset and flee to the kitchen.

Independent of the particular answer they are expecting, either “yes” or “no” will be a *constructive* answer to the Dramatic Crisis Question. Giving a constructive answer is a factor later on in deciding what revelations, and therefore story endings, will eventually occur (see the Therapy Game section). The answer the character is expecting may happen to match the constructive answer, or not; it varies because the characters (only Trip, actually) sometimes are wrong in their minds about what they think is the truth.

The 20 Dramatic Crisis Questions are as follows, grouped by backstory category, each annotated with the answer they are expecting to hear, and with the actual constructive answer for each:

- 1) Grace\_feels\_controlled\_by\_everyone\_in\_her\_life\_Trip\_thinks\_he\_is\_helping\_her\_AA\_RM  
Grace's question: "Do you think it's... wrong for one person in a marriage to listen... too much to the other?"; expecting "yes"; constructive "yes"  
Trip's question: "If one person in a marriage gives the other advice and that advice is taken, years later can you get blamed for that?"; expecting "no"; constructive "yes"
- 2) Grace\_has\_disconnected\_herself\_from\_Trip\_always\_seems\_unsatisfied\_distant\_even\_when\_Trip\_tries\_to\_reach\_out\_RM  
Grace's question: "In a marriage shouldn't you try to help the other person get what they want?"; expecting "yes"; constructive "yes"  
Trip's question: "Marriage is about saying yes to the other person even if youre not sure about it right?"; expecting "yes"; constructive "yes"
- 3) Grace\_wants\_more\_out\_of\_life\_eg\_art\_but\_is\_suppressed\_by\_Trip\_and\_she\_is\_afraid\_of\_going\_for\_it\_AA  
Grace's question: "Is it wrong for one person in a marriage to... want more than the other?"; expecting "no"; constructive "no"  
Trip's question: "Shouldn't both people in a marriage... want the same things?"; expecting "yes"; constructive "no"
- 4) Grace\_is\_a\_bit\_spoiled\_Trip\_reinforces\_it\_to\_make\_sure\_she\_still\_has\_flaws\_MF  
Grace's question: "Isn't it right for one person in a marriage to expose when the other person is acting fake?"; expecting "yes"; constructive "yes"  
Trip's question: "Is it right for one person in a marriage to bring things up from the past that other really just wants to forget?"; expecting "yes"; constructive "yes"
- 5) Grace\_is\_never\_happy\_because\_she\_is\_lacking\_more\_passion\_beauty\_feeling\_connection\_RM\_AA  
Grace's question: "Does marriage have to be the most highest beautiful most passionate thing in your life?"; expecting "no"; constructive "no"  
Trip's question: "Isn't marriage supposed to be the most important thing in your life?"; expecting "yes"; constructive "no"
- 6) Grace\_feels\_like\_their\_marriage\_is\_a\_facade\_all\_for\_show\_where\_is\_the\_real\_feeling\_Trip\_deep\_down\_knows\_hes\_putting\_on\_a\_facade\_MF  
Grace's question: "In a marriage shouldn't one person try to make their spouse a better person even if they don't want it?"; expecting "yes"; constructive "yes"  
Trip's question: "When youre married can you try to change the other person to be even better than who yourself are?"; expecting "no"; constructive "yes"
- 7) Trip\_wants\_to\_be\_highclass\_to\_completely\_leave\_behind\_his\_embarrassing\_background\_MF  
Grace's question: "If there was a thing about yourself you didn't like but your husband or wife likes it is it still okay to hide it?"; expecting "no"; constructive "no"  
Trip's question: "Isn't the goal in life and in marriage to improve your life to have more than you did before?"; expecting "yes"; constructive "yes"
- 8) Trip\_has\_been\_hiding\_adulterous\_behavior\_RM  
Grace's question: "A person in a marriage should fully trust the other person right?"; expecting "yes"; constructive "yes"  
Trip's question: "A person in a marriage should... believe it when one tells the other how they feel about them right?"; expecting "yes"; constructive "yes"
- 9) Trip\_is\_a\_charmer\_thats\_what\_initially\_attracted\_Grace\_but\_it\_leads\_to\_flirtations\_RM  
Grace's question: "Should a married person be allowed to flirt with other people for fun?"; expecting "no"; constructive "no"  
Trip's question: "It's okay for a married person to talk and be friendly with someone of the opposite sex right?"; expecting "yes"; constructive "no"
- 10) Admitting\_that\_theyve\_had\_an\_unhappy\_marriage\_RM  
Grace's question: "When you get married you just supposed to forgive and forget everything bad that happened before that right?"; expecting "no"; constructive "no"  
Trip's question: "Each person in a marriage is supposed to try really hard to be... in sync with the other right?"; expecting "yes"; constructive "yes"

- When you give an answer to the yes-no Dramatic Crisis Question, one will leave the room upset, depending on if you say the answer the asker wants to hear. (Attempting not to answer effectively means saying what the asker does not want to hear.) The character that storms off to the kitchen, so upset that they will say a *self-revelation* – a line of dialog that reveals something very personal about how they feel. Each character has 10 self-revelations they can say during this beat, corresponding to which Dramatic Crisis Question (and therefore which backstory category) was previously spoken:

- 1) Grace\_feels\_controlled\_by\_everyone\_in\_her\_life\_Trip\_thinks\_he\_is\_helping\_her\_AA\_RM  
Grace: Goddamnit how can I be happy when you act this way Trip huh im miserable!  
Trip: Uhh I keep trying to help you Grace but you reject me you cut me off you cut me out of your life goddamnit!
- 2) Grace\_has\_disconnected\_herself\_from\_Trip\_always\_seems\_unsatisfied\_distant\_even\_when\_Trip\_tries\_to\_reach\_out\_RM  
Grace: You keep trying to tell me you love me Trip that youre so romantic but I know youre hiding something from me goddamnit!

- Trip: Uhh I try so hard to reach out to you Grace and you reject me youre cold youre distant I can't keep going this way its killing me!
- 3) Grace\_wants\_more\_out\_of\_life\_eg\_art\_but\_is\_suppressed\_by\_Trip\_and\_she\_is\_afraid\_of\_going\_for\_it\_AA  
 Grace: Our entire marriage Trip youve been holding me back suffocating me I can't do this anymore goddammit!  
 Trip: Uhh Grace you think that if I hadn't convinced you not go into art that youd be totally happy the truth is I saved you from that goddammit!
  - 4) Grace\_is\_a\_bit\_spoiled\_Trip\_reinforces\_it\_to\_make\_sure\_she\_still\_has\_flaws\_MF  
 Grace: Trip this marriage is all about you wanting to become some kind of high class guy with a beautiful wife and beautiful apartment thats what it is goddammit!  
 Trip: Uhh you think youre better than me Grace you had this rich upbringing and now you look down on me how am I supposed to be happy like that Grace goddammit!
  - 5) Grace\_is\_never\_happy\_because\_she\_is\_lacking\_more\_passion\_beauty\_feeling\_connection\_RM\_AA  
 Grace: There's no passion in our marriage Trip no beauty no anything its completely and utterly devoid of everything!  
 Trip: Uhh Grace you keep looking for something to satisfy you but thats what im supposed to be im supposed to be the most important thing and im not goddammit!
  - 6) Grace\_feels\_like\_their\_marriage\_is\_a\_facade\_all\_for\_show\_where\_is\_the\_real\_feeling\_Trip\_deep\_down\_knows\_hes\_putting\_on\_a\_facade\_MF  
 Grace: Don't you see Trip our marriage is a sham Trip don't you see that its all fake all pretend!  
 Trip: Uhh Grace you think im some kind of shallow person obsessed with money that I don't love you you think our marriage is all just a sham!
  - 7) Trip\_wants\_to\_be\_highclass\_to\_completely\_leave\_behind\_his\_embarrassing\_background\_MF  
 Grace: Trip I can't take this denial anymore youre suppressing yourself youre so fake I hate it!  
 Trip: Grace you won't let me be who I want to be who who I am this is who I am now goddammit!
  - 8) Trip\_has\_been\_hiding\_adulterous\_behavior\_RM  
 Grace: You keep trying to tell me you love me Trip that youre so romantic but I know youre hiding something from me goddammit!  
 Trip: Uhh Grace I love you youre my wife I love you and you are accusing me of I don't know what what are you accusing me of I love you don't you know that goddammit!
  - 9) Trip\_is\_a\_charmer\_thats\_what\_initially\_attracted\_Grace\_but\_it\_leads\_to\_flirtations\_RM  
 Grace: The real truth is Trip you flirt with everybody the clients at work our friends everybody you can't help yourself youre always looking around our entire marriage goddammit!  
 Trip: Uhh Grace I love you youre my wife I love you and you are accusing me of I don't know what what are you accusing me of I love you don't you know that goddammit!
  - 10) Admitting\_that\_theyve\_had\_an\_unhappy\_marriage\_RM  
 Grace: Just admit it Trip admit it we have an shitty marriage weve never been really happy from day one never goddammit! OR The truth is Trip I should never have said yes so fast to marrying you you totally manipulated me goddammit!  
 Trip: Uhh look its obvious were not happy Grace im not happy youre not happy and no matter how much I try I can't make us happy I don't know what to do goddammit! OR Uhh Grace any time I talk about our wedding or our engagement you hate it hate it how do you think that makes me feel what am I supposed to think Grace!

After the CrisisBlowup beat, the drama manager always sequences the **RecoverFromCrisisBlowup** beat. This is a short, minimally interactive beat where Grace and Trip (one of them having fled to the kitchen) are both extremely upset, and not very responsive to you, the player. Each will either be very upset and fearful, or angry. Grace or Trip is fearful if their total button push level (calculated in the previous CrisisBlowup beat calculus) is less than 4; otherwise they're angry.

### The Therapy Game beat

After the RecoverFromCrisisBlowup beat, the drama manager always sequences the **TherapyGame** beat. This is the largest, longest and most complex beat in *Façade*; it's actually a drama management system onto itself. For 5-8 minutes, this beat abandons the previously described decision-making logic of the drama manager, beat goals and global mix-ins, and instead performs its own custom sequencing logic, described in this section.

As mentioned earlier in the Story Values section, Grace and Trip are each keeping track of how much they've learned and realized about themselves and their relationship; how much they each realize will determine the ending of the drama. This is the closest thing to an overall "score" going on in *Façade*, described below.

### *Self-realization scores*

*Façade* keeps track of several levels of self-realization reached so far for Grace and Trip. Recall that there are three major story themes, artistAdvertising (AA), materialismFacade (MF), and rockyMarriage (RM), previously described in the Story Values section. The levels are:

- Grace’s artistAdvertising self-realization level, about herself (Grace\_AA)
- Grace’s materialismFacade self-realization level, about herself (Grace\_MF)
- Grace’s rockyMarriage self-realization level, about herself (Grace\_RM)
- Trip’s artistAdvertising self-realization level, about himself (Trip\_AA)
- Trip’s materialismFacade self-realization level, about himself (Trip\_MF)
- Trip’s rockyMarriage self-realization level, about himself (Trip\_RM)
- A shared artistAdvertising self-realization level about their relationship (Relat\_AA)
- A shared materialismFacade self-realization level about their relationship (Relat\_MF)
- A shared rockyMarriage self-realization level about their relationship (Relat\_RM)

When *Façade* begins, each of these levels, or scores, is at 0. After the Therapy Game beat is completely done, for each self-realization score that has reached its *threshold value*, a major Revelation will spoken, for up to three major Revelations. The threshold level for each self-realization score is only 1, to allow Revelations to happen more often (a design decision we made).

First, one of the scores will get updated during the Dramatic Crisis Question, part of the CrisisBlowup beat described earlier. If you gave a *constructive* answer to the question (see previous description), one or more of these self-realization scores are automatically set to its threshold level (which always happens to be a value of 1); a non-constructive answer decrements the score(s) by -1. Which score(s) are altered will either be Grace- or Trip-specific, i.e., not a relationship score – specifically, for whomever asked the Dramatic Crisis Question – and encompassing all story themes that the question’s backstory category related to; refer to one of the lists of backstory categories for their story-theme suffixes. For example, if a Dramatic Crisis Question of backstory category

“Grace\_feels\_controlled\_by\_everyone\_in\_her\_life\_Trip\_thinks\_he\_is\_helping\_her\_AA\_RM” had been asked by Grace, and you answered the non-constructive answer, it will cause both the Grace\_AA and Grace\_RM scores to become -1.

As its name implies, the gameplay of the Therapy Game is designed to alter the 9 self-revelation scores, based on what explanations and advice you offer, and how you answer the questions and challenges put to you by Grace and Trip. For each score that you increase to its threshold, you will later get a Revelation during the climax of the drama (up to 3 total), affecting which type of Ending occurs, and its details.

### *Therapy Game structure*

The Therapy Game is composed of a large collection of *therapy game tests* to be played. A therapy game test is a challenge put to you, the player, about a particular aspect of Grace and Trip’s relationship. For example, there is a test focused on Grace’s regret for “giving up painting”, challenging you to react in some way; another test is focused on Trip’s belief that Grace always wanted to have the lifestyle they have achieve, again challenging you to react; and so on. There are a total of about 100 individual therapy game tests, plus about 50 other short reactions, authored for the Therapy Game beat; any one runthrough of the Therapy Game plays somewhere between 12 to 20 of them. Each test is comprised of one beat goal speaking the test,

and two to four beat goals for the endings of the test. Each beat goal (as described earlier) is typically 1-4 lines of dialog from Grace and/or Trip. Each therapy game test as a whole (its initial challenge dialog, plus one of its endings) lasts anywhere from 15 to 45 seconds.

The decision-making of what therapy game tests happen in what order is quite open-ended and non-linear, but is not random. At any one moment, there is a current self-realization score being focused on (one of 9, listed earlier), which as mentioned earlier is comprised of a story theme (one of 3 – AA, MF or RM), and a character focus (one of 3 – Grace, Trip, or their relationship). If choosing a therapy game test to perform next, the beat tries to pick a test that stays within the current score's theme and character focus, allowing the narrative to stay coherent for stretches of time, and effectively “going deep” on that particular combination of theme and character focus. However, the player's input can easily change the current score theme and focus, as described below.

A therapy game score (one of the 9 scores) can be altered (incremented or decremented) in the following ways:

- you answer the challenge of the current therapy game test in a *helpful* way, incrementing the current score
- you answer the challenge of the current therapy game test in an *unhelpful* way, decrementing the current score
- at any time (during or in-between tests) you give some new helpful explanation, advice or topic reference, which may result in changing the current score theme and focus to match what you said (i.e., possibly switching you from the current score to one of the other 8 scores), and incrementing that score. This causes a *new matching therapy game test to begin*, regardless of if you were in the middle of a previous test, as if you changed the subject. Further, if you answer helpfully to the new test you triggered, you'll increase that score yet again.
- at any time (during or in-between tests) you say or do something very unhelpful, e.g. bad advice, obviously false explanations, strong insults, etc., it may decrement the current score, and cause a matching new test or upset reaction to occur.

When the Therapy Game first begins, the initial score character focus is set to be who had previously fled to the kitchen during the CrisisBlowup; the initial score story theme is set to be the theme matching the Dramatic Crisis Question (if that question addressed multiple themes, randomly pick one of them). The character in the kitchen from the previous beat storms back into the living room, and throws out an initial therapy game test challenge to the player about that theme and character focus; e.g., Grace's initial challenge for the ArtistAdvertising theme, focused on herself, begins with “Trip, it's your fault... ten years ago, freshly married and just out of college, you convinced me to go into advertising instead of art!”

Each therapy game test has two to four custom endings; an ending may increase, decrease, or leave unchanged the current score. (Recall that each therapy game test is focused on one of the 9 scores.) Each test is listening for *agreement*, *disagreement*, *tellMeMore*, or a *nonAnswer*; each test has custom logic for mapping one or more of these four types of player input to one of its endings, some which are helpful, some unhelpful, some neutral. Continuing the example from the previous paragraph of Grace's initial challenge in ArtistAdvertising, endings to this test include:

- player agreement (e.g., “you're right, Grace”): the Grace\_AA score is *decremented* by 2 (that was an unhelpful answer), and the test ends with Trip replying, “This is insane! Oh so your broken dreams are my goddamn fault?!”

- player disagreement (e.g., “no, Grace, that’s wrong”): the Grace\_AA score is *incremented* by 1 (that was a helpful answer), and the test ends with Trip replying, “Grace, I did not stop you from being an artist!”
- player tellMeMore (e.g., “why do you say that?”): the Grace\_AA score is *incremented* by 1 (that was a helpful answer), and the test ends with Trip replying, “Thank you! Grace, you wanted a real job – at the time you told me you didn’t want to paint anymore!”
- player nonAnswer (e.g., “I’m so bored”): the Grace\_AA score is *unchanged* (that was an useless answer), and the test ends with Trip replying, “That’s bullshit.”
- player silence: if the player doesn’t say anything at all, then none of the endings will occur, and we move on to a new therapy game test.

Some therapy game tests combine their endings together; for example, a test may use the same ending for agreement and tellMeMore; it varies from test to test.

### *Types of therapy game tests and short reactions*

In the Therapy Game, there are a total of about 100 individual therapy game tests, plus about 50 other short reactions, listed below. Any of these tests or short reactions can be triggered by the player at any time, by saying dialog that matches the label shown for the test. (Only the accusation tests cannot be triggered by the player; those are chosen autonomously by Grace or Trip if the story theme recently changed.)

Therapy game tests caused by the same dialog trigger (e.g., all tests triggered by "Grace, you seem depressed") have variation, among story theme (AA, MF or RM), and/or character focus (Grace, Trip, and relationship). A test's particular variation determines the score (one of 9) that the test affects. Therefore, there are anywhere from 1 to 9 versions for each type of test; the number of variations for each is included in the list below. Variations for a particular type of test are considered *siblings* of each other.

- Accusation tests made autonomously by Grace or Trip (player cannot trigger these)
  - Grace\_AA accusation – 1 variation
  - Trip\_AA accusation – 1 variation
  - Grace\_MF accusation – 1 variation
  - Trip\_MF accusation – 1 variation
  - Grace\_RM accusation – 1 variation
  - Trip\_RM accusation – 1 variation
- Explain/Advice that is true, of major importance (very helpful to say)
  - Trip is controlling / Grace is controlled – 4 variations
  - Grace is not loving / Trip is not loved – 3 variations
  - Trip is loving / Grace is loved – 3 variations
  - Grace is depressed / Grace should not be depressed – 4 variations
  - Trip is not communicative / Trip should be communicative – 2 variations
  - Grace is afraid / Grace should not be afraid – 9 variations
  - Trip is afraid / Trip should not be afraid – 4 variations
  - Grace/Trip not divorce – 1 variation
  - Grace/Trip not separate – 1 variation
  - Grace/Trip get therapy – 3 variations
  - Grace make art – 1 variation
  - Grace quit job / not quit job – 1 variation
  - Trip quit job – 1 variation
  - Trip slept with / loves / hates Maria – 1 variation
  - Grace slept with / loves / hates Vince – 1 variation
- Explain/Advice that is true, of minor importance (helpful to say)
  - Trip is depressed / Trip should not be depressed – 4 variations
  - Grace is communicative – 1 variation

- Grace is angry / Grace should be angry / Grace should not be angry – 6 variations
  - Trip is angry / Trip should be angry / Trip should not be angry – 5 variations
  - Grace/Trip not have kids – 1 variation
  - Trip make art – 1 variation
  - Grace/Trip have / not have pets – short reaction only
  - Trip is not depressing – short reaction only
  - Grace is depressing / Grace should not be depressing – short reaction only
  - Grace is not controlling / Trip is not controlled – redirect to other test
- Explain/Advice that is false, of major importance (very unhelpful to say)
  - Grace is loving / Trip is loved – 3 variations
  - Grace is lying – 5 variations
  - Trip is lying – 5 variations
  - Grace is to blame – 5 variations
  - Trip is to blame – 5 variations
  - Grace/Trip divorce – 1 variation
  - Grace/Trip separate – 1 variation
  - Grace/Trip have kids – 1 variation
  - Grace does not love Trip – 1 variation
  - Trip does not love Grace – 1 variation
  - Trip is not loving / Grace is not loved – redirect to other test
  - Grace is not depressed – redirect to other test
  - Trip is communicative – redirect to other test
  - Grace is not afraid – redirect to other test
  - Trip is not afraid – redirect to other test
  - Grace/Trip not therapy – redirect to other test
  - Grace not make art – redirect to other test
  - Trip not quit job – redirect to other test
- Explain/Advice that is false, of minor importance (unhelpful to say)
  - Grace is controlling / Grace should not be controlling / Trip is controlled / Trip should not be controlled – short reaction only
  - Grace is not depressing – short reaction only
  - Trip is depressing / Trip should not be depressing – short reaction only
  - Grace is not communicative / Grace should be communicative – short reaction only
  - Grace/Trip not have sex – short reaction only
  - Trip is not depressed – redirect to other test
- Advice that is false, and dysfunctional (very unhelpful to say)
  - Grace/Trip should be controlling, controlled, depressed, depressing, afraid, kill, revenge, suicide – short reaction only
  - Grace/Trip should not be loving, loved, communicative, kill, revenge, suicide – short reaction only
- ReferTo topic/object tests
  - marriage – 2 variations
  - divorce – 2 variations
  - sex – variations
  - infidelity – 2 variations
  - brassBull – 1 variation
  - apartment, couch, armoire, eightball – 1 variation
  - apartment, couch, view, story theme MF – 1 variation
  - weddingPicture – 1 variation
  - italyPicture – 1 variation
  - paintings – 1 variation
  - workDrawings – 1 variation
  - drinks / bar – short reaction only
  - Maria – 1 variation
  - Vince – 1 variation
  - GracesParents – 2 variations
  - TripsParents – 1 variation
- Other player input
  - hug, comfort, support Grace – short reaction only
  - hug, comfort, support Trip – short reaction only
  - how are you, are you okay, pacify – redirect to other short reaction
  - praise Grace – short reaction only
  - praise Trip – short reaction only
  - criticize Grace – short reaction only
  - criticize Trip – short reaction only
  - flirt with Grace or Trip – short reaction only

- oppose, kiss, vulgar or repeatedly flirt – get kicked out of apartment
- repeat any input – custom short reaction only

Some items listed above are not therapy game tests, but merely short reactions that occur instead of tests, including reactions to repeated player input. Also, some items listed below are *redirects*, meaning they map into some other test or short reaction, prefixed with a custom dialog snippet.

### *Selection logic for choosing the next therapy game test*

The player can cause a new therapy game test or short reaction to occur by speaking a new explanation ("you're unhappy"), advice ("Trip should listen more") or refer-to topic ("thought about therapy?") at any time, as described in the earlier paragraph about how therapy game scores can be altered by the player.

Note that once a therapy game test begins, its sibling tests immediately become deactivated for future selection. Sibling tests are variations of one another that are triggered by the same player input, as described in the test list section above.

However, if the player doesn't happen to say an explanation, advice or refer-to topic, then the beat needs to choose a new therapy game test to happen next. Here are the guidelines it uses when searching for a new test to choose:

- prefer new tests focused on the current score, that is, a test of the same story theme and character focus as the previously performed test
- prefer new tests that match the previously test's *tone* annotation – sad, angry, or furious
- prefer new tests that match the previously test's *past vs. present* annotation – whether it addresses something in the past, or in the present
- do not autonomously pick certain high-voltage tests that only the player can trigger, such as direct accusations to the other of lying or blame

Eventually the beat will switch to a new story theme and/or character focus, under the following conditions:

- if all of the tests of the current story theme and character focus have been used up (sibling deactivations accelerate this process)
- if we have been in the same story theme and character focus for too long

Before choosing a new test however, the characters may wait a bit, venting their current feelings, and coaxing the player to suggest some explanation or advice, to trigger a new therapy game test.

### *Therapy Game player feedback*

There are several ways the player is given feedback on the current values of the therapy game self-realization scores:

- If you cause a helpful therapy game test to begin (e.g., with helpful explain or advice) that causes an increase in a self-realization score, then the test will begin with a character excitedly saying something like, "Aha!"
- If you cause a helpful ending to a therapy game test, that increments its score, the ending dialog is preceded by Grace or Trip saying something like "Ah! See, that helps!" Specifically, if the current score is focused on Grace, the dialog will be something like



“that helps her”; likewise for Trip; if it’s focused on their relationship, the dialog will be something like “that helps us.”

- The higher that the current self-realization score is (one of 9), the closer Grace and Trip will stand to each other. If the score is Grace-focused, it will be Grace who will stand closer to Trip; vice versa if it is Trip-focused; if it is relationship-focused, they will both stand nearer to each other. If they suddenly walk away from each other, it's an indication that they've switched to a different self-realization score, with a lower current value.

The Therapy Game beat will finally end when one of the following conditions are true:

- 3 of the 9 self-realization scores have already reached their thresholds
- 25 therapy game tests or short reactions have occurred
- 17 therapy game tests or short reactions have occurred, and there is little sign that the player is able to increment any scores (e.g., the player is not trying, so we should cut the Therapy Game short)

### **The RevelationsBuildup beat**

After the TherapyGame beat, the *Façade* system now knows almost enough to determine the ending. The drama manager always increases the tension to very high, and sequences the **RevelationsBuildup** beat, which is the build up to the climax of the drama. In this minimally interactive beat, one of the characters repeats back to you, the player, a litany of the most provocative things you said over the past 15 minutes, followed by a final yes-no question.

<to be described>

### **The drama's climax – the Revelations beat**

After the RevelationsBuildup beat, the *Façade* system now knows enough to determine the ending. If one or more Revelations are to be spoken by Grace and/or Trip, the drama manager always increases the tension to its maximum level – the peak of the Aristotelian tension arc – and sequences the **Revelations** beat. For each self-realization score that reached its threshold by the end of the TherapyGame beat, a Revelation will be spoken in this beat (for up to 3 Revelations total). If there are no Revelations to be spoken, this beat is skipped.

<to be described, including the 9 different Revelations that can be revealed>

### **The Ending beats**

One of the following Ending beats will be chosen:

- EndingNoRevelations is chosen if no Revelations were spoken
- EndingSelfRevelationsOnly is chosen if solely Grace-focused or solely Trip-focused Revelations were spoken.

- EndingRelationshipRevelationsOnly is chosen if solely relationship-focused Revelations were spoken.
- EndingAlmostEnoughRevelations is chosen if some combination of Grace-focused, Trip-focused and relationship-focused Revelations were spoken, but not one of each.
- EndingRevelationsThresholdAttained is chosen if one Revelation each of Grace-focused, Trip-focused and relationship-focused Revelations were spoken

### **The EndingNoRevelations beat**

In this beat, Grace and Trip return to acting like nothing is wrong, and politely ask you to leave. But once the door is closed, they begin arguing again, and the drama fades out.  
<to be described>

### **The EndingSelfRevelationsOnly beat**

In this beat, either Grace or Trip leaves, depending on the nature of the Revelations spoken by one of them.  
<to be described>

### **The EndingRelationshipRevelationsOnly beat**

In this beat, either Grace or Trip leaves, depending on the nature of the Revelations spoken by one or both of them.  
<to be described>

### **The EndingAlmostEnoughRevelations beat**

In this beat, either Grace or Trip leaves, depending on the nature of the Revelations spoken by one or both of them.  
<to be described>

### **The EndingRevelationsThresholdAttained beat**

In this beat, Grace and Trip have realized so much about themselves and their relationship, that they think they have a chance to work things out together. They tell you that you really helped them, and politely ask you to go so they can keep talking together.  
<to be described>