# >JUSTIFY, HEIGHTEN, SAY YES: Interactive Fiction as Improv

> Interactive fiction is a magic trick, and it's always been a magic trick. It's sleight of hand to try and convince you that this pre-programmed robot that we built three months ago is actually telling a story that's changing for you right now. That's the goal, to make it come to life.
>
> Jon Ingold, Gamasutra

Renowned UCB performer Will Hines is also the author of a few IF works; one of these, *Harold Night*, is set during an improv performance, minutes before you're set to step on stage, and incorporates improv principles (and inside baseball). Its last scene, in particular, is very clever; it remarks that improv principles are generally given as verbs — "justify," "heighten," "say yes" — and makes parser commands out of them to create a sequence where you have to make an improv scene go forward using those principles.

As another practitioner of both IF and improv, the more I pursued those hobbies, the more I realized they had a lot in common; after all, one ancestor of IF is GMing in tabletop RPGs, which requires improvisational skills. The history of IF and IF criticism is full of theater metaphors — it's even there in the code itself, which deals in "scenes," and objects "on-stage" and off. And both fields involve telling a story while reacting to someone else's input — the player in IF, the other performers in improv. As such, they have interesting parallels.

Improvisational theatre — acting out a performance with no set text, dependent purely upon actors making decisions on the fly and audience participation — has been present in many cultures for several centuries, from the Commedia dell'Arte to 20th-century Western innovators like Konstantin Stanislavski, Jacques Copeau, Viola Spolin and Keith Johnstone. There are many aspects of improv that are of interest to IF: for instance, how to write interesting and efficient scenes, build stories, build characters, manage drama and manage audience expectations. I would like to focus here on attitudes towards your fellow improviser, what it means for the scene and the audience's enjoyment; I find there are interesting parallels with user experience in IF and in particular parser IF, which is what I do.

## IF as improv

Before starting, let's clarify the metaphor of IF as improv. The game is probably an actor on stage, telling a story; but then is the player also on stage or in the audience? I'd argue that in this particular case, the player is a bit of both: an audience member, passive and listening to the story you're telling them, but also an improviser, an active participant who directly interacts with the story and provides input. This rather vague answer is necessary to capture all the variety we can have in IF; one extreme might be on-rails games with minimal interactivity, the other puzzle-heavy sandbox games with no care given to coherence or story. Right away, this reframing of the problem makes those old heated debates of “games and interactivity” and “linear vs emergent storytelling” rear their heads, which indicates it is a pretty incisive one.

This analogy also highlights something that a lot of authors will tell you: how hard it is to create fully interactive and immersive worlds. Because obviously, what the previous analogy doesn’t capture is that an IF story is not literally an improviser: it is a computer program that you are creating to mimic one. We expect the work, an sophisticated automaton, to tell a changing story, to improvise with us; but so far, even with current knowledge in AI, we do not know how to do it. The reason is well-known; as Roger Giner-Sorolla puts it in *Crimes Against Mimesis*,

> … the live referee has a rather unfair advantage over the programmer: the game-master bases NPC output on a highly sophisticated interactive algorithm synthesizing years of social observation and literary convention: the human mind.

And to that, I would also add that it can take *humans* several years to learn how to improvise well! However, the situation is not quite that dire: being able to improvise in any on-stage situation is a much broader skill than what we’re really expecting to find in a game, since we’re willing to let the game pick the setting, the characters, and the situation, and then ‘simply’ require to be able to be part of this scene and influence it, or at least being able to play with it.

We will now discuss a few of the basic improv principles, in order of complexity. One of the first principles you encounter in improvisation is the following:

### Make your partner look good

In improv, you should ideally make the person who is on stage look like a competent improviser, or at least as competent as you are. After all, performers would rather play with people they can count on, and (most) audiences would much rather see two talented performers playing with teach other than one improviser mocking his poor partner. Doing so is simple: give them space to act, play with them and listen to them, value their ideas and reactions as being as important as yours, and work with them to catch mistakes and perhaps incorporate them into the scene. But failing to do so is also easy: out of fear or lack of self-confidence, a performer can shut another one’s ideas down, be unforgiving or cruel when they make mistakes, or even outright insult them. But this doesn’t mean every scene should be overflowing with positive sentiments and every relationship between characters be of love: you can absolutely make your partner look good even if you’re Pantalone beating Zanni up with a stick, if you listen to them and riff off their ideas.

How does that apply to IF? I believe that this concept highlights a major difference in modern-day IF compared to older works: modern-day IF truly “makes the player look good”. Indeed, it was common practice in older games to behave in ways that were directly adversarial to the player, like making fun of the player for entering the “wrong” input, or killing the player when they try the “wrong” thing, often while mocking them as well. The player is shut down and can’t play anymore, and sometimes they don’t even know why. Nowadays, this is more usually associated with first games by teenagers. Another issue would be fairness: using Andrew Plotkin’s cruelty scale, “cruel” games do not play with you, in that they don’t give you much feedback or work with you to catch mistakes, while “merciful” games will catch your mistakes and help you. Some players like this kind of challenge, for the satisfaction of coming out on top; however, the prevailing sentiment among players, increasingly, is toward pieces that work with them, value their input, treat them with respect, prove that they're trustworthy. This explains why many adventure games from the '80s have aged poorly, and why most of the canonical IF works of the past few years involve and immerse the player far more than in the past.

One way to make your partner look good, and one of the best-known principles of improv, can be stated as follows:

### Say 'yes' to your partner's offer

In other words, improvisers are encouraged to immediately accept whatever their partner is offering or proposing as true and part of the scene. This is a big part of the magic of improv, the one that makes people say "how did they know this?" or "this must be rehearsed." In theater, audience members always "say yes"; if an improviser says she's the Queen of England, then the audience will think "OK, this is the Queen," not "liar!" Good improvisers will also say yes, because they want to play along and build something. The opposite is to reject the offer, to say no: "What are you talking about? We don't have kids!" or "What? this is not your daughter." Effectively, this is pulling the rug from your partner's feet: they wanted to play along with you, offered something, and you shut them down. Your partner looks bad, the audience might laugh at their expense, and most importantly, the scene hasn't progressed at all. The audience will soon become frustrated and bored because nothing is happening; and they probably won't come back, because what they came for wasn't negativity and confusion but people collaborating and creating wonderful worlds out of an empty stage.

In IF, I would argue, the player *always* says yes: whatever setting you write about, the player will imagine; whatever object you mention, the player will add to their idea of the scene; whatever personality you give the character, the player will take into account. It is akin to suspension of disbelief: the player plays along. Of course, there's always the odd player who purposely acts out of character to test the game's reaction; but in general, players don't type >examine hippo if you've just described the interior of a rocket ship. However, parser games say no *a lot*: this is well-known. As Graham Nelson wrote in his *Craft of Adventure*, "most of the player's time at the keyboard is spent trying the wrong thing." One can't really blame parser games, given how hard it is to provide full interactivity and reactivity to input; however, it is worth exploring the different ways a game says no, and the consequences for the player's experience.

The effects of a game blocking a player are the same as blocking on an improv stage: the audience might not seem to mind too much at first, but after a while will become bored (because nothing is happening) and brought down by the negativity, and very frustrated (because the piece doesn't fulfill the implied "see, anything can happen!" promise). And the blocked improviser will be annoyed his ideas are not taken into consideration, and will not want to play with you for very long.

Blocking a player's offer, in this context, means that sensible input that seems to play by the rules of the game and the world is rejected — for example, when an object is mentioned in a room description but the game responds as if it wasn't there, or when a noise is mentioned but the game's reply to "listen" is the default parser message, or when the description of a room still mentions an item that's been taken. These are of course categorized as bugs, but it's worth highlighting that they create a negative experience for the player because they deny what's been previously established. Guess-the-verb problems are another instance of this, and they’re especially frustrating because they wouldn’t happen in real life. It would be akin to an improviser blocking by saying “you didn’t say the magic words!” Other ways of blocking the player include actions that seem to make sense in the context of the scene but aren’t implemented; solutions to puzzles that seem sensible, but don’t work, or worse, are arbitrarily forbidden by the game; and finally, hand-crafted responses that prevent the player from doing something and that prevent the scene from advancing if they occur too often.

Well-crafted responses, on the other hand, can be more than just blocking even if they don’t “work”; they could acknowledge it was a good guess, give a reason why the character wouldn’t do such a thing, or give more information or background at the same time, all of which will make the player feel like their input was at least taken into consideration. Furthermore, the player is likely to understand that the game cannot realistically allow them to do *anything*, and will probably not be too miffed by a few instances of blocking; if anything, the fact that the game has a tailor-made response may even impress.

The generalized blocking and negativity that can occur in parser IF should be treated seriously; compare choice-based games, where every single input from the player does something to move the story forward, and you can understand why this form is seen as more playable than parser IF. However, parser IF has the potential to deliver amazing experiences too: because the player is part audience and part improviser, the negative effects of blocking are compounded but the positive effects of accepting and saying yes are compounded too! The player can feel both amazed as a spectator at seeing all the offers accepted and integrated in a story that moves forward, and elated as an improviser to see that their ideas are actually taken into account and that the game is collaborating with them to tell a story together! There is ample proof that players (even novice) are very receptive to that; as examples, I would point to countless glowing reviews of *Lost Pig*, *Violet* and other “juicy” games, which put a lot of work into avoiding blocking the player.

The final notion, which furthers the concept of accepting offers, is the following:

### Justify offers made in the scene

This is the part that comes right after accepting; it is not just saying “yes”, but “yes, and…” — that is to say, integrating the offer in the scene and building upon it. It denotes anything from finding a reason why someone just said what they did, to building a coherent setting, to linking two apparently unrelated concepts; it is a crucial skill for accepting offers, and audiences are usually very receptive to it, and react with laughter or amazement as the improvisers weave a coherent scene from seemingly nothing.

The opposite situation would be to have a setting where elements have been accepted, but not justified; that is, the connections to other elements are not clear, and things don’t really seem to fit nicely together. This situation is well-known to IF authors; Giner-Sorolla described it as “any aspect of an IF game that breaks the coherence of its fictional world as a representation of reality”. Upon rereading *Crimes Against Mimesis*, one is struck by the similarity to the “justify!” imperative in improv. The chainsaw on the kitchen table is justified by the fact that it is a lumberjack’s kitchen; the sludge in *Theatre* is not justified by the setting of a theatre, etc. Similarly, red herrings could be seen as antithetical to what theatre practitioners know as “Chekhov’s gun”, and the (advanced) improv principle “fulfill your promises”.

But this is merely taking into account the almost static depiction of a world; what does it mean in terms of interactions with the player? We almost discussed justifying in the previous section, when talking about how well-crafted blocking messages could compensate the frustration with a justification that is coherent with the world or even adds details or texture to it. However, saying “yes and…” to the player’s actions is harder — it would require the game to justify why the character did this action, possibly by assigning a corresponding personality or history to the character. This is not always possible (e.g. why did the character decided to take all the non-scenery objects in the room?); furthermore, the sheer number of combinations, and the fact that a player might not stick to their “personality” at all times, creates a number of challenges. But we must note this is exactly the approach taken by *Aisle*, in which every single input is accepted and justified, which means that the personality of the character can vary wildly depending on the action performed. *Aisle* is a one-move game, for precisely the reasons we discussed; perhaps not coincidentally, it’s also been performed for live audiences. It would be very interesting to see more IF games that attempts to build a personality for the character which justifies the player’s actions, beyond “the restroom you choose determines your gender” conceit of *Leather Goddesses of Phobos*.

There are many more aspects of improvisational techniques which could be discussed in the context of IF; the craft and theories underlying improv are well-developed and well-rehearsed. I won’t attempt to deal with aspects of writing scenes and characters, which is a whole other article. However, I heartily recommend every SPAG reader to pick up a copy of Johnstone’s *Impro*, which is a must-read if you’re interested in telling stories; moreover, it’s interesting to re-read *Craft of Adventure* after reading this book and to notice the parallels. I believe that looking at improv in the context of interactive fiction could yield a nice framework and a few interesting observations concerning designing, writing and experiencing interactive fiction. Now it’s your turn — what next?