Challenging empathy, compassion, and other emotional skills through procedural rhetoric in games

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Emotional intelligence as game mechanics: how to use procedural rhetoric to encourage empathy
Romane RAKOTOVAO - Tokyo University of Technology research project

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Games are practice. Every game theorist and philosophers, every game designer knows that. If you read this paper, you probably know it.

I want to make a game using compassion to express lipo as easy to describe as a nervous shooting game about revenge. I want some words to describe a vision about feelings expressed through gameplay to a team. I want big groups of developers to be able to see a common objective about a game using procedural rhetoric to express a complex connection. I want to be able to describe it, as quickly and easily as I can describe a match 3 puzzle game. I want to be able to teach video game students about styles of games that do not challenge the player’s mental skills and physical skills, or even social skills, but their ability to connect to someone’s emotion.

Human experience extends from sorrow to joy, with thousands of in between and around. We may describe emotions and sentiments by taking a color wheel approach, devising it in main primary colors, like joy, sadness, disgust, anger and fear, as in the Robert Plutchik model, and yet, as the Dictionary of Obscure Sorrows tries to demonstrate, there is thousands of feeling that aren’t quite possible to pinpoint on a scale between those.

Modern day society, have valued strength and intellect, measuring and perfecting it by action, reflexion, design... and games.

But in recent years, maybe recent history, men, women, and everyone around and between, tried with variant amount of success to apprehend an overexplained, but underexplored aspect of the human experience: Pathos, feminine qualities, emotional intelligence or emotional litteracy... we hear every day about stories, poems and songs about the « illogical » part of the animal (and maybe vegetal) brain.

Psychology has at least six models to present it, storytelling makes its bread of our travels in and out of sorrow, joy, obsession, biais and fears... we try to analyze and dissects emotions as mechanisms, hidden and twisted, and accept some of them as plain and self-evident.

As a human being growing up, I always felt more and more like I was colorblind of emotions. People seem to know, to read the air, better than I could. For so many things I was
smarter, more curious than my pears, more akin to find flaws in systems and try to correct them, yet in so many situations I felt genuinely dumb, as if I was missing a color, even several of them.

When I was feeling so alien, so crazy, so overly emotional, or so disconnected, I was crying for someone, anyone to tell me: « what’s going on? Why is everyone so weirded out at me? Why do people think I’m angry when I’m just passionate, what did I say so wrong that it made a person I love dearly cry and resent me? »

Only to be met with... insufficient explanation, to say the least. At least, in a language I could not understand, in colors I could not understand, because the painting people were showing me was missing so many bridges that seemed self-evident to them and I just could NOT see it.

As a teenager I dismissed it as « people being dumb and illogical », and it worked fine, mostly.

I have been praised for being colorblind with emotion my whole life, because it made me « smarter ». The more I could not take anger, sadness, or joy as an excuse for other to slack of their explanations, their systems, their mental state, the cleaner I could get with my emotions, the more adult I was deemed.

Even following Buddhist influences to accept my emotions without letting it control my life, I manage to shut down so many things inside that I became incapable of recognizing my own emotions.

And I would have been fine like this. If it wasn’t for a person I love so deeply I wanted to learn to SEE.

This person is, on the opposite hand, so sensible to emotions, to other people emotions that it has become incessant noise in her life. She sees everyday a world I can only construct and imagine. A world made of feeling. I can only recreate the system where it happens, the signs, the visible mechanisms: micro expressions, body language, lengths of silences. Those are signs of the existence of the things she sees and I’m... stuck in those tracks.

I realized how poorly attentive I was to these cues... in a video game. Dontnod’s Life is Strange, first of the name, that I intended to « test », as a game designer, lead me to play it for myself.

Before playing, I was convinced I was an altruist person, generous and quite preoccupied by others and their wellbeing.

After I let a friend die for lack of empathy, of attention and care, after I was proven how much I valued my inner truth much more than the fate of NPCs I thought I felt for, I was proven wrong.

At least I was proven I was bad at caring about others.

And I wish more games and experiences could teach me how to see colors again, and how to give the opportunity to others to express theirs.

I wish I could train so much more to resonate with other people, to recognize not only their
sorrow when they need me to notice, but their joy, their warmth, small discomforts... speak this language.

Train my own empathy, just as 4X and puzzle games are training my mental skills and versus fighting games and rhythm games trains my physical skills.
And after training, maybe just try to be good at it.

There are tons of games already, tons of experiences that tried to convey feelings, sympathy, empathy, understanding, of oneself or others. Sadly, they are not really studied in a way I can make sense of.
Oregon Trails, Paper Please, Last day of June, Journey, Ico, The Last Guardian, the Last of Us, Yakusa, Final Fantasy, Passage and One Hour One Life, there is no end to examples of game developers who tried to express in a way no other medium could ever emotions shared with someone else.
These games tried to make us feel a connection.

Why is there no name to define those tricks and mechanics, when they are to become more and more prevalent as the future of gaming and experiences broadens to an extent it is impossible to ignore?

I firmly believe that humanity needs to give name and importance to concepts to teach it.

And one day I hope I can teach game design students that in addition to physic and mental skills, they have another muscle to make work:

If those are explored in games, and delivered to gamers around the world, I hope more and more people will be able to better understand themselves and their loved ones, their neighbors, and people more distant to their heart, morals, and place of living.
I hope we, game designers, can do what poems, books, movies have done to all of us: make us aware of not only a narrative, but also acknowledge feelings we never knew we were capable of, thoughts we didn’t imagine pulling, good and bad. Right and wrong.

My objective is to experiment and name mechanics that make the Pathos and ability for connection work as a muscle, just like memory, tactic, strength, speed, reflex, strategy, cleverness, and so many others.

Games are currently mainly used as the time being to make us feel primary emotions, but I do not wish to limit myself to those. It is now very common to get joy, pride, disgust, sadness, melancholy, and fear from games, but so rarely can we encounter the real spectrum of what it could do.

Let us broaden the horizon. For games, and for ways to let humanity express something more about themselves than what makes them useful to one another.

Romane RAKOTOVAO
Gamedesigner
Project introduction

Objectives

❖ Propose a simplified model of emotional skills based on existing game design theory, for emotional intelligence, easy to implement in games with metrics and atomic parameters.

❖ List several mechanics challenging emotional skills how they can be used in several context, with exempls in existing games and what other mechanics can they be associated with to form compelling gameloops enhancing the feeling of connexion.

❖ Prototype procedural rhetoric* mechanics coercing connexion and make people test it, so we can qualify weather or not it fits to our purpose.

❖ Offer a toolbox vocabulary for game developers so that the different experiments and experiences can be replicated and finetuned further, achieving the same complexity of game design and user experience as modern tripple A have been offering to other genres of games, such as action-aventures, strategy games and simulations.

Constraints

❖ Self-imposed no budget solo developing Althrough I’ll probably asked help, I am developing this prototypes alone with the Unity engine, and my limited skills as a C# programmer. I will tend to used ressources that are available for free.

❖ Time limit: six months I’ll try to develop every prototype level everymonth, on the span of the six months I’ll be in Japan. For the most part, two weeks each month will be dedicated to developing a single mechanic or fix distracting bugs. Each mecanic will be a level in a collection of the five others to try to get various takes on said mechanics. As there are many mechanics that have quite clear exempls in existing games, we’ll try to focus on the mechanics which potential has yet to be exposed.

❖ Writting supported by professional criticism For all mechanics, included or not in the prototype and there for tested, we'll try to have the perspective from as many professional as possible in different fields relevant to the discussed matter. Might they be game designer themselves, psychology professionals, or even behaviour and design experts on other fields of application of the concept of social and emotional intelligence, our goal is to harvest a broad reflexion around how we think of ‘skills’ our systems are supposed to emulate to ask the player to rely on and use said skills.

*For any technical term marked with (*), you’ll find a quick definition in the annex Lexicon and Vocabulary.
Technical context of the experimentation

Scientific...ish... process.

As I’m conducting this experiment on the fly while programming features, many of my tester will surely fall victim of the various distracting bugs, change of focus in questionnaires, and setbacks. Some mechanics won’t benefit effects of having a large enough sample of testers. Numbers are at risk to be as fluid as the methodology, relying on the biased analysis of the data.

As such, this essay is an attempt at compiling informations, and not a completely sound scientific paper. It exists primarily to answer a question about how we, as designers, construct our experiences when using emotional intelligence, and if we can start to streamline the production of games of a kind that rely on emotional intelligence, rather than be convinced that it is only possible with small teams of developers, or under the direction of an Author who ‘has’ the ability to tap into that, while his executionners won’t understand what they are trying to achieve exactly until the very end of the process.

Objectives oriented experiment

Every decision to pursue or not documentation and experimentation on an aspect of psychology will be made in function of time constraint, interest for the final objective, and personal biases for what serves the game designers’ community the most for the time this piece is written. Psychology and learning mechanics are a vast and interesting subject, which is way too complex to apprehend accurately in six months only in addition to what we are trying to do for game design.

Even if my objective, in regard to the use we can make of these games outside of the gamers and developers community, is to be as true as possible to the existing understanding of the human mind and social behaviour we are capable of in the right circomptences, and build upon than knowledge, this piece of writing will, admittedly, be only but a tiny part of what the community can learn about existing psychology theory and practices, social and associative initiatives, projects and knowledge aiming at a better understanding of human connection through media interaction.

Please keep in mind that there is much much more to discover and to share that what will be shared in those lines.

Community building

You can find at the adress https://romanerakotovao.wixsite.com/empathy-game/forum a place to discuss, protest, contest and evaluate the worth of the project, and you are very welcome to implement and share your own ideas on the subject of the treatment of emotion management, in games, out of games, in other media and in life. Not everything will be use to write this article, which is, after all, a personal expression of what I, as Romane Rakotovao, game designer, think would benefit the game industry. But your voice is important in this paper: not only to test, but also to discuss the format and the evidences presented in this document, share examples of existing games or activities that made you resonate with those themes, so I can make informed choices before putting the complete version of this paper as a finished piece.
Emotional intelligence skills

Self-awareness

Self awareness is the category of emotionnal intelligence skill about the subject’s lucidity about their emotions and self-worth. It is the ability to evaluate how we are feeling and what we can truly do. In the context of videogames, it is rarely challenge, as we tend to not questions wants and needs, and we can’t ‘evaluate’ their mental state. In psychology, you may find there 3 skills:

- Emotional awareness: Recognizing one’s emotions and their effects.
- Accurate self-assessment: Knowing one’s strengths and limits.
- Self-confidence: Sureness about one’s self-worth and capabilities.

In videogames, we can assume that we tend to use strategy and tactics to make the assessment of our own state, in form of bonus or malus states, leveling, etc. It is often mechanized, and stripped of the process of factoring emotions.

Boosting self-confidence is one of the great results of getting a good difficulty curve, but is, as of now, thought as a side effect by designers willing to invite the player to finish the game with a satisfying memory.

There is a ton of really interesting things to say about the mechanics providing tools to make player grow their own capacity at accurate self-assessment. Most of them take form of a form or another of UI interaction, information gathering, and by contrast, the clear absence of information to establish the need of the player to have a guess for themselves. It is best helped and enhanced of an excellent user experience design. Unfortunately, for the sake of the focus of your main objective, we will have to brush it aside for another paper.

The goal of our paper is to focus on games using empathy and compassion, we will focus on the skill Emotional awareness, and the mechanics that challenge it.

Self-regulation

Self regulation is controlling and redirecting disruptive emotions and impulses, as well as adapt to changing circumstances, their mental state. In our model, it contains 5 skill:

- Self-control: Managing disruptive emotions and impulses.
- Trustworthiness: Maintaining standards of honesty and integrity.
- Conscientiousness: Taking responsibility for personal performance.
- Adaptability: Flexibility in handling change.
- Innovativeness: Being comfortable with and open to novel ideas and new information.

Conscientiousness, Adaptability and Innovativeness are qualities that are simulated and cultivated in the very act of gaming: continue to play after a defeat is a choice developers are trying to encourage, and they often efforts to get the player to learn just by aiming at a decent gameplay loop. For the same reason as above, I’ll set them aside.

Now, Self-Control is nice one. We do have examples of game mechanics being removed from the player’s control to express loss of power over your own actions. More often than not however, if you loose your character to rage, it is generally considered a good thing in gameplay (American McGee’s Alice), and if it’s not, developers will never juge too much of being baited by completionist impulsion (Pin-up cards collection in Yakuza, Kokiri seeds in Zelda: Breath of the Wild). The hardest the system does could be to let it out and meet you with void (God of War, end of Zeus’s fight, where you can continue to beat him up indefinitely). But control it?
Trustworthyness, in games, is tested in detective games, like L.A. Noire from Rocket Games, The Council by Cyanide, Batman: Arkham Asylum by Rocksteady Studio, as it is a classical theme of movies from the genre, as well as appropriate to induce human moral failure and contradictions in games that, without it, would be less compelling stories, and more fact checking simulators.

Model of emotional intelligence to pick skills?

Let’s be clear. There is many, many, models to analyse emotions and emotional intelligence. To make convincing and non-harming game design around those features, we absolutely do not need to encompass every model ever in existance. We need to find and adapt one that will cover designers need to design challenges around it.

I’ll be using Robert Plutchnik’s dyades of emotion to assess for the complexity of emotion and his wheel of primal emotion to evaluate margin of intensity the methods will b able to cover, as a simplified tool to see if the mechanics can reach those «simple» nuances. Koenig’s Dictionary of obscure sorrows is certainly interesting in pushing the limits of emotional nuances, but it might be, for a start, too difficult to get there just yet.

![Diagram of emotions and emotional intelligence models]

Luckily for us, Marc Brackett and his colleagues, with the RULER approach, have made such work, and it already is usable because it has been MADE to be easy to learn. It is after all, a tool for real life education.

As for how to make emotion occur in videogames in the player, we can use Stéphane Bura’s work. It is useful regarding our endeavour regarding procedural rhetoric. Now that those emotion can be summoned, all we have to do, theoretically, is to force the player to assess the impact it has on them.

So those three frames will be our starting point. A quick introduction to the RULER approach, and how we would like to adapt it.
About methods of challenge
RULER APPROACH, SHADOW WORK

The shadow work* is the introspection one makes to understand their own reaction to event when emotion takes control of our actions, and not us. It is a work encouraged by lot of different spiritualities (Bouddhism for exemple) with many different names, and there is several methods to accepts one’s emotionnal complexity, and thus, said «shadows».

The RULER approach is a method invented in order to build up the ability of children to be able to do their own shadow work in order to live better in society and with eachothers as they grow up and develop mare and mare complex emotions. It used several tools, to achieve this, but first, is the established set of skills needed to process those emotions and share it with the community.

Children are taught to classify their own feelings in a grid according to intensity and pleasentness of it to gain vocabulary. We won’t be using this square model, as we will need to account for complex emotions, but the process of learning words prgressively will probably be useful.

They also are given blueprints to follow when they find themself in need of expression and regulation of said emotion in a group.
Emotions and Procedural Rhetoric

Stéphane Bura’s table about how to engineer player’s emotion through gameplay (http://www.stephanebura.com/emotion/) is a starting point to understand how we can guide the player in complex emotions, only possible with interactive medium. It however doesn’t cover the case where we need the player to assess, process and redirect their emotions and energy into the game world, and is, on the emotional part, a one way ride. It is a totally fine experience to give to player, just as it is done in other mediums, but we can acknowledge that it is not the only thing we can do.

<table>
<thead>
<tr>
<th>Game Induced Variable Change</th>
<th>Major Decrease</th>
<th>Minor Decrease</th>
<th>Minor Increase</th>
<th>Major Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary</td>
<td>Persistent</td>
<td>Temporary</td>
<td>Persistent</td>
<td>Temporary</td>
</tr>
<tr>
<td>Freedom</td>
<td>End of big action opportunity</td>
<td>Linear path, Difficult to find options (Confusing menus, Guis-modal controls)</td>
<td>End of action opportunity, Misleading cues, Temporary loss of ability</td>
<td>Avatar death and respawning, Local reset, Simulation conventions (Usable vs non-interactive objects)</td>
</tr>
<tr>
<td>Action</td>
<td>End of big advantage opportunity, Misleading affordance</td>
<td>Permanent loss of ability, Inappropriate controls, New controller (Quest Hero Skin)</td>
<td>Temporary loss of ability, Randomness</td>
<td>Difficulty increase</td>
</tr>
<tr>
<td>Mastery</td>
<td>Large resource loss</td>
<td>Inability to complete collection (One way Journey by Beyond Good &amp; Evil), Iconic / Symbolic content (Super Mario World)</td>
<td>Resource loss</td>
<td>Allow permanent world change (Broken things, NPC death)</td>
</tr>
<tr>
<td>Data</td>
<td>Non interactive scene, Railroading</td>
<td>Deadlock, Hidden depth (Negative feedback for early experimentation)</td>
<td>Guidance (Goal highlighted on map)</td>
<td>Clear session restrictions (Modern, NPCs have memory)</td>
</tr>
<tr>
<td>Freedom</td>
<td>Increasing difficulty of current challenge</td>
<td>Inappropriately complex, Cheating opponent or N. Hidden rules</td>
<td>Involuntary gameplay mode switch (Stealth / Fight)</td>
<td>Complexity increase, Negative feedback, (Catch-up), Inconsistent or random behaviors, Balance, Homeostasis</td>
</tr>
<tr>
<td>Mastery</td>
<td>Lack of structure, Large score penalty, Unusable</td>
<td>Preparation erosion (Time-limited buffs)</td>
<td>Score penalty, Hidden useful</td>
<td>Preparation (Buff) Choosing the right equipment for a given challenge, Tutorial</td>
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http://www.stephanebura.com/emotion/
Emotional intelligence as game mechanics: how to use procedural rhetoric to encourage empathy

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<tr>
<th>EMOTIONS</th>
<th>TOO LOW</th>
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<th>HIGH</th>
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http://www.stephanебura.com/emotion/
Empathy is the ability to feel what the entity we are faced with is supposed to feel. It can be genuine, or manufactured by a narrative.

Empathy in storytelling and in games is often used only for sadness, bitterness, and negative emotions, but it can be emulated for positive, subtle and complex emotions as well. It is not per say needed to gain emotional intelligence and can’t be verified.

From all this, we can decide how we will classify our skills, and with what kind of tools we can trigger them in videogames.

Let’s put the trustworthiness on the social side of the skills, and parallel the Goleman model with the RULER approach. We get a comprehensive list of skills, including the invisible one: empathy.

Empathy, to the game system and to any evaluator, will always be an invisible skill. People can fake it, and it doesn’t really matter that they do. We can only evaluate, and thus acknowledge, the exoteric manifestations of emotional skills. However, we can put it inside the Recognition/Awareness part of the skill tree of our players, whichpermit us to assess if a player recognized an emotion in oneself or in another.

As Cleverness is the skill of “knowing something from outside of the game”, Recognition is the skill of “identifying what is the emotion I’m presented with”. Some games ask of the player to recognize and acknowledge a character is sad, angry, bitter, or unwilling to cooperate, by indicating it with words, facial expressions, symbolic expression, etc.

It is rarely a learned skill, and is treated as it was a normal skill to have, at least for oneself. This is the first misunderstanding concerning emotions at a great level. The idea that having a feeling means you knows it exist within you, and that you just have to transpose it to others to feel empathy.

Empathy, the invisible skill

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Recognition, Emotional Awareness

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Compassion, Understanding

Compassion is the ability to understand where a person is mentally, and how they are feeling. It can help people to get the emotional state of someone into account in a decision making, as an information and not as an obstacle.

Videogames have this adventage on other mediums that it can use interactivity to push the player in situations of full control of what to do with the aftermath of several pics of emotions. Like long rening series, it can use leitmotives and time to layer emotions and associations.

In Undertale (Toby Fox), to spare an enemy, you have to understand their feeling according to their written dialogues and their tone, and then acting on it.

Labeling, give it a name

The brains operates on a schemes that tell it ‘if I can name it, I can handle it’, so it is very important for human beings to be able to conceptualise their feelings so they can assess them better and have better strategy to apply: stressed and overwelmed won’t mean the same thing, as stress is a tension and implies that the solution is to loosen the rythm or the power of things happening, while overweld indicates the person is already drowning under something, and ask for its removal.

Expand vocabulary about emotions can go from poor (bad and good) to rich (Dictionary of Obscure Sorrows), and give legitimacy to emotions, and better steps to regulation.

Expression

The ability to understand and make understand to another our wants and needs, by any mean available, is communication. It requires to learn and cultivate a kind of langage; be it spoken, written, color or sound coded, it asks people to associate a situation to a want, need, or feeling. The closer it is from the player known langages, the further we can get a complex communication accross. It doesn’t mean it’s better, just akin to complexity.

Communication could be squared up to a puzzle game, and in most cases, they are. When trying to transfer informations or follow up on instructions, and in interessant cases, trying to crossproof some informations, developers more often than not reduce the probléme to a very narrow problem, easily solvable when you have totally different skills; ability to recognise a color code, associate a description to a place on you map, associate complementary shapes...

It is not a technical problem on our part. We most likely restrain ourselves from the instinctive approch we have of the subject, because there is nothing to back up our understanging of how such things work on a really intricate level. But we try! Every mystery solving is an attempt to get the player in the middle of mixing signals and ask him to use his intellect to segway information from speach information to actions. We do know how to create imperfect communication the players have to get straight, but it is so much harder to do the otherway around!

Self-control, regulation

Ability to adjust your behaviour and adopt a appropriate strategy to get to your goals according and beside your emotional state, to stay your best self and staying in control of your actions. It’s about assessing your short term and long term objectives and acting on it.
Diverse mechanics about connection

Petting, tactile emulation and look

It includes washing and brushing, or painting on. If it’s done on a being with eyes looking at the player, a sense of connection is created. Examples of this mechanism to create links are Horselife, Alexandra Lederman (©Ubisoft), Pokemon (©Nintendo), Tamagochi (©BANDAI) and SPooNy (©SPooN.ai). The key is to have enough signs and feedbacks to get the feeling that something «alive» reacts to our complete attention.

Shared resources

Having two players or more sharing the same pool of a resource force them to be part of a team of two, willingly or not, making them both responsible of it, but also responsible of each other.

‘Join my party’ button

Joining a team, a party, a group, or a guild, is an active action to take part in a social interaction. It is asking permission to exist for another player, in their circle. It is an action of consent and an opening for vulnerability. The players of a multiplayer game or a social network get special rights to communicate with each other.

It implies that the default state is devoid of those privileges, such as direct communication and activity status monitoring.
Mechanics to discuss

A mechanic

What it is
Explain the principle of a mechanic

How is it used in other games
Find example in games and what it tells

If relevant, how went the test in prototype
Enter the mutual space

Giving feedbacks when the player avatar is entering a given space signifies the awareness of the place, NPC, or entity you are trying to depict. If it often used to explain to the player he is on the right path with friendly color palette and sound effects (like lights turning on, warming up or displayed dynamically), it is also showing the given space is hostile to it. In stealth games, entering a guard’s, a camera’s or an automatic turret gun’s space will, get you seen, and given time, killed. You already know how it will go before you experimented your first death thanks to the acting of those entities.

Feedbacks that reenforce this mechanic can be, of course, text, visual language (color and shape), sound effects, acting cues (animations of intents) ...

One of the most interesting and direct way to appeal to the emotional intelligence skills of a player is the look. If the player realized they are “watched”, by several pairs of eyes, by one pair, or by a ‘head’ shape, it will not tell them to watch out for action, or to prepare for a complicated puzzle: it will ask them to recognize their own presence, and the presence of “another”.

This principle is used by SPooN.ai on their social robot, Spoony, for a crucial moment of the interaction between the robot and the user : the meeting. It has been fine tuned so that Spoony reacts in a different way if their sensor percieve a human presence. It will simulate awareness, attention and interest the closer the human being gets. According to CEO and founder Jérôme Monceaux, this can make or break the magic of the interaction. Spoony has the potential to become ‘someone’ to talk to and not just another type of interface at this exact moment.
Hollow knight, © Cherry Team: Maskfly flocks flies away when you step close to them. The light path opens as you step into it, welcoming you as you has the key, giving an eerie presence around you.

Journey, © thatgamecompagny: getting closer, at hug distance, to a scarf creature or another player recharge our capacity to fly

Invisible Inc., © Klei Entertainment: guards have a life of their own, until you step in their awareness zone
Experiment results

[Space awareness] Consists of a top view moving avatar and other samelooking NPC, having different animations and colors if the player’s avatar gets close. They avec «eyes», and llok at the player when it comes by. It looks like this:

14 people answered the questionnaire linked to the level [Space Awareness]. [Space awareness] testers were asked their opinions and thoughts on what they did and how the game responded with close to no context but the title of the level:

Did you ever come across this mechanic before in games? -他のゲームでこのようなメカニズムを見たことがありますか？

14 réponses

2 people didn’t recognize the mechanic, even if this is a fairly common occurrence in games of every type possible, from the boss rooms closing behind you in métroidvanias and roguelikes to the look of inhabitants of your village in Nintendo’s Animal crossing and the AI of Splinter Cells. It might be because of two reasons: in one hand, it’s indeed a piece of «invisible design». The kind of system put in a game to enhance and support other mechanics, and rarely at the very center of your attention. It might not even be processed by most players as a proper mechanic. In another hand, the presentation, in attention to make it the center of the attention, with no other ulterior motive, no other fallback mechanic, and maybe the association with shape and color language to
As you can see, answers are mixed, with a slight favor to read it as something meaningful for connection. It is really interesting to look at what they saw.

“Arriving in the level, I noticed that some of the little characters seemed distressed, compared to my own character and those displaying the same sprite as mine. I tried to interact with the distressed characters to make them OK.”
- Y. Roirand

“[First,] I didn’t understand what to do. I can move close to «blobs», some are happy to see me and I’m happy to, some aren’t.”
- Aurélien Blanchard

They used the vocabulary of emotions, even without context or having been told explicitly what the ‘blobs’ body language was. Words like «happy», «distressed»... And the ‘need’ to «make them ok». It can then be qualified as a very powerful of piece of design for intrinsic motivation (cf. Lexicon and vocabulary).

At the question «Can you describe what you tend to feel when the mechanic activates?» - このメカニズムに触れて感じられたことを使言してください。, people have indeed responded with their guts, confirming that it feels like a meeting.

“It’s satisfying to get feedback on one’s movements, and it helps to understand the possibilities. There I felt like I could interact with the character.”
- T. Jemine

“[…] I didn’t have that much emotions. I was just a little happy when the «sad blob» was finally happy to see me.”
- Aurélien Blanchard

“I want to play with it.”
- P. aka. pifi77

„Un peu d’incompréhension, je ne sais pas si les blobs sont contents ou pas content de me voir approcher. Je m’interroge sur leur état de «mouvement» si c’est de l’excitation, de la conversation animée, ou quoi. J’aime beaucoup le
changement d'état ! Et puis ils ont tous le même «espace personnel»

[Translation] «A bit of confusion, I didn't know if the slimes were happy, or unhappy to see me come close. I wonder what is their «movement» state, if it's excitation, agitated conversation, or whatever. I like the change of state very much! Plus, they all have the same ‘personnal space’.

- Jennifer Ayme

«Makes me question and reflect upon how I interact with people around me in real life, character and personality matchups, those sort of things.»

- Y. Roirand

«[I feel]] It’s important to see the distance from the player character to other characters.»

- Hirokasu Yasuhara

«[here not much, since there is only that, but when there is alot more that you’re in the universe, and that character recognize you, interact with you without you even starting anything, it makes you part of it, it can also feel pretty good if you like the character, similar to real life when you’re notice by someone ^^»

- Thomas Aubart

As you can see, their imagination goes wild easily, weather or not they felt affected by the experiment itself. It indeed induce curiosity, the faculty to recognize not only your own presence, but the personnal space of the creatures.

In the following graphs, 0 means ‘absolutely no’, 3 mean ‘absolutely yes’.

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Does this mechanic makes you play differently? - このメカニズムはあなたのプレイを違うものにしますか？

14 réponses

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Do you think this mechanic can help saying things about connection? - このメカニズムは関係について話することに役立つと思いますか？

14 réponses

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<td>2 (14.3%)</td>
<td>4 (28.6%)</td>
<td>8 (57.1%)</td>
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When asked «If you had to get this mechanic in a gameplay loop (exposition, challenge, reward/Other mechanics responding to this one), how would you do it? - このメカニズムをゲームプレイのループ（説明、チャレンジ、報酬/このメカニズムに応答する他のメカニズム）に入れる必要がある場合どのように行いますか?», which put them in the shoes of designers, some of them recognize the difficulty of not making it ‘a mechanic’, but an experience relating to emotion more than cognitive signs and feedbacks.

«It's far from easy, as I think the feeling attached to space awareness is mostly due to spontaneusness. Making it a mechanic imply that it will somehow need to appear a lot, so I would think the feels would shorten each time. [...] In the end, I think there is a lot to do with it, I'm just not sure how much it is still [linked] to feeling. »
- Thomas Aubart

Even though, answers pretty clearly express that there is a need, even a craving for context.

«One idea that I got from your prototype would be some sort of puzzle game, let's say you can only talk a specific amount of time an there is a lot of character around, you’d have to use their reaction when you come across them to get hints on who to talk to. You could also observe them in different situation (either day/night or interacting with x or y characters). so that you have to care about their whole character than resuming them to a specific reaction.

Other idea, would be an adventure/plot heavy game, where you can’t talk, but people react to you differently depending on how close you get. instead of having to choose different answer to make the story progress in different direction, you’ll have to approach certain people. Example: let’s say you meet the princess of the castle, you can approach to a certain point, normal conversation, you approach more, she feels uneasy and «warn» you. if you go to far you end up in prison for not respect royalty.

I guess it could also be some sort of romance type of stuff too xD learning to respect when someone say «No» too xD»
- Thomas Aubart

«I think that this mechanic is seen in typical sneaking action games. Hiding from enemies, helping hostages and so on.»
- Hirokasu Yasuhara

«I feel it has potentiel being added to some regular challenges and quests that are well established in video games, where you have to interact with NPCs, run errands for them, solve their problems and whatnot - the challenge here, in my sense, is finding the equilibium: what character to go interact with, when, and all while trying to understand and respect whatever definition of personal space they have in regards to you - and introducing an understanding that sometimes, even with the best intentions, the best thing you can do, yourself, to help certain people you come across, is keep a healthy distance towards them - it’s tough but it’s very worthwhile a lesson in my books - also these relationships can evolve over time and depend on other factors that are also not set in stone - definitely lots of potentiel, here, I believe.»
- Y. Roirand

Some of them pretty much described gameplay straight from games like L.A. Noire, The Concile and Life is Strange, maybe without knowing:

«Les expressions faciales, les dialogues, les «détails» dans l’environnement. Le fait de verbaliser les émotions, de les expliquer peut-être. Peut-être de devoir revivre la scène en «boucle» pour comprendre (si on est guidé/explicité), comme si nous étions un voyageur temporel qui répare des soucis. Cela peut être un «mode de jeu» où l’on peut activer de l’aide pour pointer les «détails» (expression), ou jouer avec des «couleurs» autour des personnages (entre chaud/Froid etc.).»

[Translation] Facial expression, dialogues, details in the environment. To verbalize emotions, maybe explain them. Maybe relive the scene in loop to understand (if we’re guided, if it’s made explicit), as if we were a time traveler mending issues. It could be a game mode, where it is possible to get helped to have the details pointed at (eg., expressions), or play with ‘colors’ around the characters, from hot to cold...»
- Jennifer Ayme

Finally, some of them are sold on the idea that, maybe it’s enough.

«I love seeing environment react to my presence, no need to do thing, just be here is important enough, and it make movement and placement more important»
- P. aka. pifi77
When it is combine to physical skills, like speed, reflexes and anticipation, to almost resemble a rhythm game, a Simon Say is an attempt at synchronisation. This synchronisation can take many form depending on the gameplay system, but you can note that it doesn’t necessarily mean the player has to imitate the same thing as what is displayed: it is, simply put, asking the player to follow up after an action, ask to follow a pattern.

If it is only that, it could only be mimetism. What we are interested in is the synchronisation of the player with other, seemingly alive entities.

Is A Tale of Two Brothers a form of desynchronized and resynchronized mimetism? At least, it asks us to perform a set of movements that is asked by dependency.

Note that the imitation can be delayed as much as necessary so the pay off makes a deeper impression, can be used several times, and in different contexts. It structurally works as a pun, a Chekov’s gun or repetition. To make an emotional impact, positive or negative, and be used as a bound, it must involve at least the player avatar and a non-playable character or another player. If it involves several others, it can not only be a group signal, but also, displayed over time, express the notion of LEGACY.

Simon says «Hi» functions better used both ways: from the system to the player, and from the player to the system, NPC, etc. It could be really basic principal of signs and feedbacks, and it more rapidly effective if the feedback is close from an understood common language.
SPooNy (© SPooN.ai) uses this principle by mirroring the expression of the person in front of them.

In Influence and Harmonize, we try to bind this expression to our understanding of another that doesn't share the same codes as human beings or known animals, so that every player starts on the same foot. A multiplayer version would easily give us much more interesting patterns, but for the sake of simplicity in analysis, we'll keep it from the player to the machine.

We are asking to players to match colors with other NPCs, stay on their wavelength, and shift progressively so every member of the group reach the same coor at some point.

The color, symbolizing a mood, of every NPC having common ground with the player color is influenced to get closer to the player already, but everyone has a default color and an adaptation speed unique to themselves.
Experiment results

[Influence and Harmonize] allows you to change the color of your own avatar thanks to a color handle. There is two levels: one with a lot of NPCs, easy to influence, and the second one with only two other NPCs, much harder to keep in your wavelength. The goal is for them to have the same color. It looks like this:

7 people answered the questionnaire linked to the level [Influence and Harmonize]. [Influence and Harmonize] testers were asked their opinions and thoughts on what they did and how the game responded with close to no context but the title of the level. It has two:

- How many level did you succeed to finish? - いくつかのレベルを完全に終えることができたか？

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Mechanically, it functions very much as a game of tuning to a matching radiowave, or a picklock game. Nevertheless, the presentation made the mechanic seem rather unique, as stated in the following answers:
Did you ever came across this mechanic before in games? -他のゲームでこのようなメカニズムを見たことがありますか？
7 réponses

Test subject have described the first level as following:
«I was not sure to understand at first the direct impact of the slider, I [started] to understand on finishing the level.»
- S. Gaumin

«The NPCs align their color with ours once it is similar, and then keep changing according to us, except if we’re doing it too fast.»
- Henri Fagot

«Quand je bouge le curseur, mon personnage s’agite et change de couleur. Lorsqu’il est de la même couleur qu’un autre personnage, il s’agite aussi et change de couleur avec moi. Le jeu est réussi quand tous les personnages sont de la même couleur. J’en déduis que les personnages s’agitent quand ils sont joyeux, et que pour qu’ils soient joyeux, je dois leur ressembler (ou leur parler dans un langage qu’ils comprennent, ou de sujets avec lesquels ils sont d’accord, ou être d’accord avec leur point de vue). Bref, pour communiquer avec quelqu’un, je dois d’abord m’adapter à ce qu’il est, pour qu’il me reconnaisse comme son semblable. Ensuite je serais en mesure de le faire évoluer vers un autre point de vue car il m’écoute.»
[Translation] «When I move the slider, my character is agitated, and change color. When they are the same color as another character, it is also agitated and change color with me. The game is cleared when every character are the same color. I deduce from this that character are agitated when they are happy, and that in order to them being happy, I have to look like them (or speak in a language they understand, or of subjects they agree on, or adopting their point of view). In a nutshell, to communicate with someone, I first have to adapt to what they are, so that they recognize me as a kin. Afterward, I’ll be able to make his point of view change, because they will listen to me.»
- Automne

It is funny that the associated emotion to victory is ‘happiness’, even when there is no clue about what the characters are supposed to feel when adopting a pattern.
«I tried the slider to see what happened - if I could harmonize with the different NPCs - I tried to see what frequencies worked to harmonize with as many NPCs as possible - at the start I just slightly moved my slider then returned it to its starting position - and just like that NPCs got excited amont themselves and a wave of excitement grew among the NPCs, one at a time - though I had barely done anything - that was really intriguing to me.»
- Y. Roirand

What can we deduce from this results? The mechanic is far from being intuitive, yet some subjects were able to get excited by it. The UX could be improved upon, and maybe will be in the next weeks, so that people get more familiar with their choosen controlers. However it is hard to deduce if the meaning was conveyed by the mechanic alone, or if the title is the only thing giving context t it.

The second level, requiring more patience and precision, made them have other assumptions.
«It was the same idea, except it was harder to match the exact blob's color and so make it move with you.»
- Lisa Daudon

«The NPCs react when our color is similar to them, but only the right one keeps following our color right after (if we're doing it slowly).»
- Henri Fagot

«After 1 minute of trying influencing the green mob, I switch to the red one and little by little made it green.»
- S. Gaumin

«J'influence toujours les deux blobs autour de moi, mais nous nous synchronisant jamais tous les trois ensemble (ou je n'y suis jamais parvenu). C'était soit l'un ou l'autre, jamais les deux en même temps.»
[Translation] I still influence both slimes around me, but never synchronizing the 3 of us together (Or I never succeeded). It was one or the other, never both at the same time.»
- Jennifer Ayme

«After fiddling around with the slider, I realized that when I harmonize with an NPC, I can change their colour if I slide slowly continuously towards 1 side of the spectrum or another - so then I proceeded to slowly change the colour of the rightmost NPC so it matches that of the leftmost NPC and that the 3 of us have the same color.»
- Y. Roirand

«Cette fois, le personnage de gauche est joyeux quand on est de la même couleur que lui, mais se calme quand on change de couleur. j'en déduis que lui a un avis ou une personnalité assez tranchée et qu'il résiste à l'influence qu'on peut avoir sur lui. Le personnage de droite, lui, a une couleur changeante, donc s'il est un peu difficile de s'accorder à sa couleur, une fois fait, il s'accordera à la notre. Pour gagner en accordant la couleur de tout le monde, il faut d'abord rallier le personnage de droite puis revenir à la couleur du personnage de gauche. Je suppose que c'est une manière d'expliquer que chacun à son point de vue, et que si certaines personnes peuvent être influencées dès lors qu'elle se sentent comprises, d'autres restent campées sur leur avis premier. Cependant, les conditions pour «gagner» m'ont laissée perplexe. Est-ce vraiment une bonne chose que les gens influenciables se rallient à tout bout de champ à ceux qui ne changent jamais d'avis ? est-il vraiment nécessaire qu'on soit tous identiques (physiquement ou sur notre manière de pensée) pour vivre en harmonie ? Est-ce que dans cette partie du jeu, je joue un marchand sans scrupule qui tend à arranger avec un esprit influencable pour ensuite le tirer avec moi pour le rallier à l'avis d'un esprit rigide (une secte ? un parti fasciste ?). Mon interprétation est peut être mauvaise (peut être...sans doute...enfin j'espère).»
[Translation] This time, the left character is happy when we are the same color as him, but gets calm when we change color. I deduce that they have a strong opinion or personality and resists the influence we can have on him. The character at the right has, for their part, a changing color, so if it's difficult to atune to their color, once it's done, he'll will atune to ours. To win by atuning everyone's color, it is first necessary to rally the right character, to our point of view and then comeback to the color of the left character. I suppose it's a way to explain that everyone has their point of view, that some people can be influence as soon as they feel understood, some others will stand by their first opinion. However, the conditions to «win» left me perplexed. Is it really a good thing who can be influenced rally all the time to those who won't change their mind? Is it necessary to be all identical (physically or regarding our way of thinking) to live in harmony? In this part fo the game, do I play as an unscrupulous marketing staff member, ready to seem well adjusted to impressionable mind in order to bring them with me to an unflexible mind? (a cult? A fachist party?) My interpretation can be wrong (Maybe... Probably... Well I hope).
- Automne

The intersting part of the interpretation is that it brings questions about ethics, even with little context. According to Jason Rohrer, in a email interview he accepted to conduct for the sake of this experiment:

Romane RAKOTOVAO - Tokyo University of Technology research project
As I asked what people tended to feel and how they would make it a game mechanic, we get a wide range of answers backing up the fact that it still is, in the end, a matching game; people feel satisfied, but not really because of a feeling of community. Two testers described «Success & Relief» and «Satisfaction» without further explanation, and S. Gaumin described «A sentiment of control, progression». However there is still plenty of room to feel the potential they feel in it and how the presentation and context, the level design of this mechanic could change experiences drastically.

«I think it’s fine for games to evoke a broad range of emotions, including uncomfortable ones, but the goal should not be to make the player stop playing to fulfill some kind of moral duty. Games are not real, and thus they entail no morality. [...] There is a magic circle that both players have chosen to enter, consensually. [...] tackling someone in football isn’t wrong, nor is punching someone in the face in the boxing ring.»
- Jason Rohrer, email exchange, February 2021.

«I did not feel much. It was more of a color puzzle to me. I imagine it’s about everything touching group creation, common objectives, common motivations, etc.»
- Jennifer Ayme

«It’s nice to feel that you have to match something, as it’s kind of a challenge to succeed. Also, it’s nice to feel a part of something, of a group.»
- Lisa Daudon

«I have honestly no idea [how to make a gameloop out of this mechanic]; the only way I can remember seeing this kind of mechanic is when in a game you have to match something to be able to move forward, like in Simon Says, when you have to repeat the melody and click on the right colors, that’s the only way to continue the game.»
- S. Gaumin

«Je n’ai pas ressenti grand chose. Cela sonnait plus comme un «puzzle de couleur» pour moi. Mais j’imagine que c’est tout ce qui va être pour création de groupe, d’objectif commun, motivation commune, etc...»

«Influencer son entourage : des dialogues à choix multiples pour se «connecter» avec l’autre. Cela peut se traduire aussi par des gestes (préparer le café le matin à un collègue sous l’eau), cela peut être la possibilité d’avoir de petites attentions, ça peut être de découvrir l’état mental des autres via l’environnement, des journaux, des dialogues.»

[Translation] «I didn’t feel much. It was more of a color puzzle to me. I imagine it’s about everything touching group creation, common objectives, common motivations, etc.»
- Jennifer Ayme

«It’s nice to feel that you have to match something, as it’s kind of a challenge to succeed. Also, it’s nice to feel a part of something, of a group.»
- Lisa Daudon

«Je plonge dans des océans de questions philosophico-psychologico-sociaux. Oui, on peut influencer les autres quand on devient assez proches. Mais quel est l’usage légitime à faire de ce pouvoir ? comment se protéger de ceux qui en abusent ? quel est le bon équilibre à garder entre avoir l’esprit critique et être manipulable ? (ce n’est peut être pas le propos traité ici.»

«Pour cette même mécanique (où le but serait d’influencer d’autres personnages), j’aurais sans doute un sentiment très différents selon le contexte, en fonction des motivations qu’il y a derrière cette nécessité d’influencer.»

[Translation] «I dive in an ocean of philosophical, psychological and social questions. Yes, we can influence others when becoming close to them. But what is the legitimate use of that power? How to protect oneself from people abusing it? What is the good balance to keep in mind between critical thinking and be manipulable? (Maybe it is not the subject here).»

«For this mechanic (where the objective is to influence other characters) I could have a really different feeling according to context, motivations behind this necessity of influencing.»
- Automne

«I was intrigued and excited - I thought this was an interesting and novel challenge - though I wasn’t sure whether the «excited state» of the NPCs was a good thing or a bad thing - whether that state was desirable or rather that it should be avoided - what is being portrayed when they are in that state is somewhat ambiguous in my sense.»

«I could see how implementing such a mechanic while being conscious of the time and labour required could be a real challenge - what comes to mind is NPCs with a set of lines they say [--> written lines, à la graphic novel], facial expressions and body language [animations~idle animations] - through your interaction with them [multiple choice of dialogue options for the players or maybe a side quest panel where the one you choose to complete or the order in which you complete them matters], you can change their «state», which appears in the lines they say/their expression/body language - maybe the state you leave them in influences how these NPCs affect their village’s internal dynamics and politics when you’re away, which in turns can affect the state in which you find the village when you come back the next time around, and how the world/game’s overall story unfolds. Honestly, I mostly see comical/tragic use for this mechanic - the idea is that even with the best intentions, the influence you have on people [and how they then influence themselves subsequently] can very easily get out of hand - see Chinese Whispers or just your run-of-the-mill Simpsons...»
episodes [or any sitcom for that matter] - maybe that’s something that could be experimented on in a short game development cycle, like over the week-end, in 48 hours... hum...»

- Y. Roirand

«I would optimize the way I use the mechanic to get the best result of it»
- Henri Fagot

«It might be present on different states of the game loop: - Exposition: The player could be introduce by this mechanic by observing this mechanic on the environment around, or on other mobs - Challenge: The player could use this mechanic in order to resolve puzzle, influence a dialogue, collect items»
- S. Gaumin

As ever, for the following graphs, 0 means absolutely not, and 3 absolutely yes, while 1 and 2 are degrees of maybe.

If you had a challenge with this mechanic, do you think you would maintain the feeling that something or someone else is listening to your actions?

Does this mechanic makes you play differently?

7 réponses
It is yet quite funny to observe that, even if some testers declared that the mechanic was not really meaningful or pleasant to them, no one answered that it did say nothing about connection.

During the interview, the following was said by Jason Rohrer, who might be on to something as to why the experiment has such mixed answers.

«I also feel like I’ve moved on from the concept of procedural rhetoric. Again, games are meant to be played. If the main dish is interpretation, or understanding, then what happens after that dish is fully consumed? You have to stop playing, because the point has been made, and it can only be made once. There’s the old rule of thumb from film making that says something like, «If you want to send a message, use Western Union.» I’m now much more interested in the aesthetics of play itself. What does it feel like to play a given game, and play it deeply? What makes this game tick? What are the fibers of its warp and its weft? (br) Even poignant emotions, in this context, can be quite precious.»
- Jason Rohrer, email exchange, February 2021.
Compassion,
Understanding the schemes

The evaluation of the ability to recognize schemes in emotional behaviour can take many forms. In its simplest shape, it can be a QCM.

«Jon was sad, then guilty. What happened?»
A: «He got to accompany his gamma to the hospital»
B: «He missed his mother’s call and didn’t call back.»

In games like Life is Strange (@DONTNOD, SQUARE ENIX), The Council (©FOCUS) or L.A. Noire (© Rockstar), you are asked to pick up on behaviours and deduce what is the most likely truth behind how the person reacts to your saying. Sure, you are most likely to have to answer with an appropriate answer, and can skip the understanding part, but it is much more difficult if you are not able to assess what actions induce sadness, worry, happiness, or stress.

So it can be a dialogue tree. You can witness an action, or deduce it from the way people part from each other when you get in a room, and it becomes information you can use in later dialogues.

In Animal Crossing (@Nintendo), characters will be depressed for unknown reasons until you approach them and make them talk about their problem, and will be happy if a good thing happens. It might be a feedback for completing a quest with them or giving them a present.
In [Understand], the player has to approach objects and NPC to ask what they personally want. The NPC express their emotional state according to the Mood-O-Meter parameters.

The player can move around objects inside his personal sphere or inside the ones of others.

In the first level, the objective is to make oneself cheerful, while in the second is to have one NPC annoyed and the two others cheerful. Most of players didn’t understood the signs and feedback and prompts. They might have been unclear or disturbing, as the action of asking a question and wait for a response wasn’t the reflex of the players.
Regulate

As the work of imitation provide a fine sign to help the player understand their objective, another mechanic, [Regulate] use this principle to indicate what to do with visual representation. It uses animation and color coding to highlight the difference between a model, and the elements they can affect.

In [Regulate], the player affects a dot on a colorwheel. It has a default position, acting like gravity. The color the dot is on on the colorwheel is mirrored on the player avatar, in front of other NPCs. The goal is to imitate the state of the trio on the right.

Having an example is way more effective to convey objectives. The controls convey meaning, as there is an almost physical resistance between your default position and the color you want to become.

«右と同じ色になったときにクリアした
抵抗がありながらも右と同じように色を合わせたらクリアした
一致考えられた。不思議な達成感が得られた。»
[Translation] «I cleared the level when I made the colors match. I did the same for the second level, even if there was a resistance. It made me feel like there was a correspondence, and I had a strange feeling of satisfaction.»
- m0118068e5
Active Listening and labeling

Active listening is the action of focusing on understand the needs and wants of someone else. It is the action of reframing possible objectives or feelings according to the mental model provided by someone else. It asks of the person trying to listen to not try to insert their own views, worries, wants and needs in the explainations given by the person speaking.

It also asks to imagine a different framing of what's agreeable and what is not, and an expension of values and beliefs, with no intention to convert the wants and needs of the others to our own. It can be a difficult exercice for people who are not used to be challenge in their views, values and beliefs.

In the game [Active Listening], we are using a matching game to associate actions and concepts, appropriate words and appropriate strategies. A screen indicates the association of colors with complex emotions. We play the role of the listener, trying to define the real color of the NPC talking to us by looking at them and the colors of their 'words', devoid of meaning.

Colors are linked on the wheel, and the precise color we are looking for is touched by every other that is expressed.

The players has to actively ask a question, and deduce what is appropriate to call an emotion drawn in it's own expression. Is it annoyance? Is it guilt? Stress? Loahting?

Mechanics of Empathy, [Active Listening]. Awe is a combination of Surprise and Fear. The blue hues has no link to the pink the NPC is expressing with its body.
General thoughts and follow up

Main Discoveries

- Emotional skills
  - Exploration of those skills
  - Mastery of those skills
- Draw emotion from systems
  - Stéphane Bura’s Emotion
  - Applicable on all gameplay types
- Active Listening principle
  - Listening and understanding before demanding to be heard
  - Express explicitly we are trying to listen
  - Express it affects us
  - Make the other entity feel listened
- Create the space to feel
  - Breathers in games
  - Wow moments
  - Breaking the pace
- Blueprints
  - Course of action to get ok
  - Game UX can erase the challenge by choosing the blueprints before the player acknowledges the emotional situation
  - Imbedded in systems no matter the gameplay

Build up empathy in the player

- Give spaces to feel before providing blueprints
  - Journey, Celest
- Let the player get the ‘wrong’ blueprint
  - Life is Strange, Hollow Knight, Firewatch
- Limit the field of action/expression of the player
- Make the environment stronger than the player and peers
- Don’t trigger survival instincts
- Build a space of trust and vulnerability in the game
Tools for design

Bubble of disclosure

The Bubble of disclosure, the empathy trainer

- Action of the player
- Moment of assertive expression
- The game challenges and recognize their power

Game evaluation of feeling listened to (NPC, Player Character)
1. Acknowledgement of emotional existence labeling (can be custom label)
2. Understanding/Compassion (origin of emotion)
3. Permission to get into mental skillset
4. Strategy choice has to encompass the need expressed in the bubble
5. Constitute the blueprint

Designer’s parameters

- Stress level
  - Timed VS unlimited
  - No failure allowed VS endless search
  - Note that augmenting the stress level too much can make the player close off from the experience
- Focus and length
  - On mimicking VS On labelling
  - In the bubble VS At the blueprint
- Management of failure
  - Automatic blueprint/bypass mental VS player controls steps
  - Outcomes visible VS invisible
- Subject and emotion
  - Self introspection VS NPC/Other player
  - What emotion? What label? What blueprint?
The played empathy questionnaire

❖ Has the player an awareness of the Other?
  ▪ Did we signal to the player the existence of schemes they won’t be able to understand at first glance?
  ▪ Does the Other (NPC, System) give enough feedback to the player to hint toward a ‘living being’?

❖ Does your game make the emotional beats of the narration playable?
  ▪ Are your narrative beats playable? Is your narration inseparable from the gameplay?
  ▪ Does the gameplay of emotional beats implies the players’ ability to make someone feel listened?
  ▪ Is your emotional gameplay devoid of ludo-narrative dissonance?
  ▪ Is your emotional gameplay in tune with the tone and message you try to emulate with procedural rhetoric?

❖ Is your signs and feedbacks imbedded in universe?
  ▪ Has your HUD and UI an in universe explanation so the immersion of the player doesn’t break?
  ▪ Are you signs and feedbacks diegetic?
  ▪ Are the signs and feedbacks helping or unseparable from the emotional beat you can play?
  ▪ Are you signs and feedbacks diegetic?

❖ Does your gameplay prevent the player from overpowering the system?
  ▪ Is it mandatory to your player progression to accept his powerlessness toward a situation?

❖ Is the player able to deserve vulnerability?
  ▪ Do the player need to act to get explanation and feedback rather than all elements being given to them?
  ▪ Can the player give emotional support rather than get explanation?
  ▪ Can the player give space for something else than themselves to exist?
  ▪ Are your emotional beings in your game able to convey wants and needs that doesn’t coincide with the player’s fantasy?

❖ Is your game able to adapt to the emotional rhythm of your player?
  ▪ Has the player moments to be able to reflect on events without stress?
  ▪ Is the player avatar a tool for emotional expression as well?
Conclusion of the experiment

Even if the experience is far from complete in my opinion, the existence of games challenging emotionally and socially sensible skills is proof that there is an improvement to be made in the game design theory as taught in Game Designs schools to go further than Mental, Physical and Social skills.

Player language is built around agency, and agency, in most of designs and systems, is understood most of the time as power. It might be interesting to see that in some case of observation, the player was mashing the button, but did not expect the game to take time to answer to their action. Is it due to players habituation to better and better UX around the years, or is it a proportion of living being, outside the game, to be annoyed when something doesn’t answer by the known rules.

Built a system capable of overpassing the fear of the unknown to get players to the part where they are interested into empathic interaction might be the goal of my entire life. Be it in solo games or multiplayer games, the potential of understanding better how we are making people evolve into the Circle of Play might be a step toward understanding even better how to educate ourselves to real wanted interactions.

Even through precise data are missing from this investigation to get true conclusion to answer the question and the efficacy of the tools resulting from this experiment, I do believe we can teach each other to use current game design theory to take the emotional part of the human experience into games. Board games, video games, narrative experiences, are all settings where interactivity according to established rules can help get a better sense of self than ever before.

I’m looking for more development in the future, both in the videogame industry and psychology, of the valorisation of empathic response and knowledge for the world population. Even if the community building part of the experiment hasn’t been achieved, I hope discussing those matter with other designers in the future will help do the same, over trust and time.

I’m grateful for those months dedicated to tie the UX of little prototypes to the taking of action in games.

I hope to be able to make a better version of this text in the future, getting more tools, more words, more ways for us designers to get into the creation of empathic games.

Thank you for reading all of this.

Happy playing, happy designing.

With joy and excitement,
Romane RAKOTOVAO
Annexes and additional content

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**Compassion**: Understanding the pain of someone else. It doesn’t require to have empathy.

**Emotion**: Short spike of feelings, only lasting as long as you pay attention to a momentary situation. It’s a reaction to what’s happening to a person, and it’s immediate. It doesn’t last.

**Empathy**: Feeling what another person feels. (literally em-Pathos = feeling with). It doesn’t stop to real human beings. You can feel empathy toward animals, and for fictional characters. You don’t need to understand what’s going on to feel empathy. Hyper-empaths are ‘emotion sponges’; the youngest doesn’t know what’s their own emotions are, and what are those of the others.

**Inner child**: representation of one’s ‘shadows’ (cf. Shadow Work), to simplify and radicalize our perception of our primal needs and fear. The inner child constructed fears based on experiences in infancy, and came up with strategies to protect oneself. Those strategies need to be deconstructed when they no longer protect the real person, but only the inner child, and thus hinder one’s social and emotional life.

**Intrinsic motivation**: Used to qualify an activity a person does for it’s own sake, in opposition for one they do to get rewarded.

**Pity**: Feeling sad and sorry for the situation of someone. Viewed as condescending, as it is not always in sync with the reality of what the person being pitied can really do.

**Procedural Rhetoric**: What the system says, the message it reinforce by design, and, in consequence, the story the mechanics tells.

**Sentiment**: Long term feeling. It’s a state, it lasts for a long time. It lingers, no matter the emotions that come and goes.

**Shadow work**: active introspection to confront oneself with part of themselves they have a hard time to acknowledge, generally in pursuit of understanding mental blocks and one’s own pain and irrational reaction to events.

**Sympathy**: Appreciation of someone else.
Interview with Jason Rohrer, about social skills and games

This interview has been conducted via email between Feb. 13th 2021 and March 3rd 2021. Thanks to Jason Rohrer for giving permission to me to ask those questions and present this interview in this document.

> Q1: You have not only worked in games, but on systems and web experiences supporting copyleft, as well as Project December, a conversational AI. Do you make games for the same reason you developed those kinds of tools? Is there a ‘root’ problem or obsession that drives your creations? You talked a bit about doubting core values in the Game Design Sketchbooks: Idealism, but are there themes from your days as a web programmer that lingers on in your games?

JASON ROHRER:
I’m not sure about themes, but there has definitely been a build-up of know-how that dates back to those pre-game days. For example, many of my more recent games have involved networked system design, and protocol design, which builds on my experience from developing peer-to-peer file sharing systems. In terms of ideals, I’m still hosting all of my code on GitHub for the world to see, which is pretty unusual in the space of commercial games.

> Q2: Said work for a world wide web for all and the theme of community (among many very interesting other themes) is pretty recurrent in your games, and the theme of connection to one another is obviously linked. According to you, what comes first? Do you prefer showing community and the good connections we get from acting as one in a system, or do you think the first thing to do before considering a community system, is to establish, or learn to build, a one on one connection (as in Sleep is Death, and the parental part of One Hour One Life)?

JASON ROHRER:
I’m definitely an individualist, and interested in voluntary communities in real life. I see the individual as the fundamental unit in any community. We come together as different individuals, and we interact and sometimes lean on each other, but we can never become one. In the end, we inevitably walk our own road alone. You can see this in my work in the way that low-bandwidth interfaces separate players in my games. In Sleep is Death, the other player is a mysterious «man behind the curtain,» controlling a variety of different characters that the main player interacts with. In One Hour One Life, you can only communicate with your mother through very limited, text-based speech bubbles, and one of you will eventually die and leave the other behind, and there’s no way to connect with the player that was controlling your mother later, outside of the experience. You are anonymous, and separate, but still connected briefly by your in-game relationship.

> Q3: The Game Design Sketchbooks written for the escapist are a close format from what I currently try to do. In Crude Oil, Police Brutality, and other games, like the Cordial Minuet, you make a stance about how systems build interaction, more often than not showing how harmful systems get in the way of prompting the players to make a socially responsible decision. Do you think it’s easier or more needed as of now to show «by contrast» mechanics where the rules deny the outcome where players can show consideration for their counterpart, unless they flat out refuse to play? Or, as another exemple, marking the ‘lack’ of comforting emotions regarding...
connection, like the solitude felt in passage without our companion?

JASON ROHRER:
Over the years, I’ve become skeptical of the design gimmick that says, «the only way to win is not to play.» Games are meant to be played. I think it’s fine for games to evoke a broad range of emotions, including uncomfortable ones, but the goal should not be to make the player stop playing to fulfill some kind of moral duty. Games are not real, and thus they entail no morality. We might look at something like Cordial Minuet, where you can win real money from another person, and say that the game has reached out into the real world, and therefore becomes a subject of moral concern. However, it’s still a game. There is a magic circle that both players have chosen to enter, consensually. Winning money from someone else at the poker table isn’t ethically questionable. Stabbing the person who won money from you is wrong, however, because that falls outside of the rules of the game. Likewise, tackling someone in football isn’t wrong, nor is punching someone in the face in the boxing ring.

> Q4: About procédural rhetoric, now. Do you find a method, or a grammar designing game that speaks for you as an expression of the meaning you wish it to have? Do you rely on existing mechanics and tweak its context enough to make a new one emerge, or do you use other experiences and try to transpose them into gameplay? If you do both, when do you feel it is appropriate to use one or the other?

JASON ROHRER:
I also feel like I’ve moved on from the concept of procedural rhetoric. Again, games are meant to be played. If the main dish is interpretation, or understanding, then what happens after that dish is fully consumed? You have to stop playing, because the point has been made, and it can only be made once. There’s the old rule of thumb from film making that says something like, «If you want to send a message, use Western Union.» I’m now much more interested in the aesthetics of play itself. What does it feel like to play a given game, and play it deeply? What makes this game tick? What are the fibers of its warp and its weft?

Even poignant emotions, in this context, can be quite precious. For example, in One Hour One Life, you say goodbye to your mother at the end of her life when she dies, and you’ll never see her again. The first time this happens, it’s likely to hit you pretty hard. But what about the 100th time that it happens? As the impact of that moment starts to feel well-worn, it actually undercuts the impact, almost ruining it. And OHOL is meant to be played deeply over the long term, so for anyone who really plays it, this emotional degradation is inevitable. Fortunately, for OHOL’s sake, every mother is different, usually played by a different player, and the situation is always different, so there is a real loss each time, and some poignancy is preserved. Without that saving grace, however---if the goodbye really became rote---it would end up being awful.

For an example of an emotional impact that doesn’t work over and over, see Passage.

> Q4: You are one of the few game designers and programmers widely recognized as an artist outside of the Gaming Community. You are the only Game designer to ever have expositions of your work not for their art, but for their game design, on your name alone, and it might have to do with the fact that all your work is available for free and not bound to be ‘products’, contrary
to other developers recognized in the industry as authors (Jenova Chen, Fumito Ueda, Hideo Kojima). Some people have trouble calling some of your games ‘games’, and we are slowly, in recent years, reevaluating what is a video game, and what we can do with it, like in Kind Words for example. What do you think of the term videogame? Do you think we should change the word for a more fitting description of interactive experiences? If yes, what kind of wording would you use to describe what videogame can do as an artform?

JASON ROHRER:
I’m a bit of a purist when it comes to these words. There are things that are real games, and there are things that are something else. I don’t think we need to expand the definition of games to encompass these other things, though I understand why the confusion arises, because of how we tend to use language to group similar things together, especially when new things suddenly appear and need a name.

A game has to involve a well-defined challenge that you can do better or worse at. Your performance may or may not be fully under your own control, like in a game of chance, but there has to be some way to do well or poorly, as a player. If all possible outcomes are equally valued, then the experience that we’re talking about isn’t really a game.

I’ve been pretty careful when describing my own work. Passage is really a game. Project December is not.

I did slip up a bit and call Sleep Is Death a game. It’s definitely hard, but your performance isn’t measured. It’s really a storytelling experience, not a game.

One Hour One Life is a bit of an odd duck, because it’s very hard, but there’s no one, overarching success metric. There is a leaderboard for individual players in terms of the fitness of the lives they’ve lead and their own offspring, but there’s also a kind of group performance: how long can your family or village survive? There’s also something like a leaderboard for that. You can definitely do poorly at the game, though.

> Q5: As of right now, this project is trying to give a blueprint for game designers to use emotional intelligence as skills to overcome challenges. Are there examples of mechanics enabling shows of empathy and emotional self-discovery you particularly like, in your own work and in other games? Maybe both positive examples as well as, or even preferably to, examples by subtraction? Do you think we will ever be able to include them in a gameloop for its own sake, or do you even think it is needed to do so?

JASON ROHRER:
In a single player game, I think this is going to be a big challenge. In that context, it seems like any emotional challenge that the player faces is going to be a thinly-veiled «read the designer’s mind» type puzzle. Unless, of course, we bring a strong AI into the mix.

In a multiplayer context, however, I think the problem becomes much easier to solve. For example, players have to wield emotional intelligence all the time in a game like One Hour One Life, which involves navigating through village life, including family dynamics and politics, with other real people. How can I convince my baroness that my neighbor is guilty of a crime against me?
You said that to get a game, you should have a way to loose and underperform. The empathy game project exists to make it easier for teams to make games challenging emotional and social skills, applying metrics and ballancing just as it should be possible with puzzle games and action games (endurance, timing, cleverness, etc.). What kind of metrics would you find appropriate to measure the effectiveness or the progress of a player regarding the recognition of emotions, the ability to step as a social facilitator, or to express empathy?

JASON ROHRER:
This is tough.

If we’re talking about multiplayer games, then there’s obviously “real” skills that can be built, and real failure that can happen, because real social interactions are happening. For example, consider a case where a shopkeeper in a game is operated by a real, human player. If your character is desperate for food (starving, perhaps), but doesn’t have the means to purchase food directly, you might try to communicate your situation to the shopkeeper to evoke empathy. Successfully negotiating some free food will indeed be a social challenge.

However, in the realm of real social challenges, the hard part becomes measuring performance and providing explicit feedback. This is mostly because real social challenges are, almost necessarily, self-directed and self-chosen. You are hungry, as a player, as a kind of emergent condition, and you have chosen to solve that problem by trying to evoke empathy from the shopkeeper. You can fail, and then die of starvation, but it’s not like the game can really notice and measure this failure, because it’s an emergent failure.

If we’re talking about single-player games, then you can design “social challenges” manually, and then very easily measure performance, but I worry that designed social challenges won’t test real social skills. They will be, essentially, socially-dressed puzzles. For example, you might force the player to be hungry, and then given them a list of possible utterances that they can say to an NPC shopkeeper. As a designer, you would pick (ahead of time) the “right,” socially correct utterance. But you can see how the player is mostly succeeding at reading the designer’s mind here, and not really at evoking empathy from another person. Maybe the “skill” of picking the right answer will translate into real life social skills, but I’m skeptical.

Personally, I find the multiplayer approach more attractive, because then at least you have real social interactions and challenges happening. But you, as a designer, can’t really design or measure them directly.

> FQ2) You’ve talked about the Magic circle, and how morals doesn’t interfere with the inside rules both the players accepted. Do you believe that skills learnt inside the circle can come at play outside of it, or are those skills not the one challenged by the rules, and are merely overlap between the skills you already get to experience outside the circle? Therefore the ones you truely train inside the circle only applicable to this set if rules?

JASON ROHRER:
Skills learned inside the circle are absolutely applicable outside the circle. Using some of my previous examples, learning to detect a bluff in poker might help you detect a bluff in a legal
setting, where you get a cease and desist letter that in actuality has no teeth. Learning the punch in the boxing ring will definitely help you punch better in a street fight.

And in the case of a multiplayer social game like One Hour One Life, the social negotiation and cooperation skills are definitely applicable outside of the game. For example, you might need to convince your village leader (in the game) that a certain course of action is valid, which would be quite similar to convincing your boss of something at work.

The hard part here is that «social skills,» by their very nature, are applied in very broad and open-ended arenas.

If we design a game that seeks to build a reflex jumping skill, we can set up some jumpable obstacles and stick the player at one end of the course, and require that they make it to the other end. It’s not hard to design the course in such a way that jumping skills must be employed to reach the other side. It can simply be impossible to make it across without precise jumping. And you’re either «good at jumping,» in that you can make very precise jumps, or you’re bad at jumping, where you miss lots of your jumps. We can measure it clearly, and it’s very well-defined.

But what is «social skill,» exactly, and who has it? There are so many different social approaches, even to the same problem, and many of them are effective in their own way. Devising a real social challenge requires a wide-open possibility space, and within that space, there are going to be loads of ways that players can «route around» the intended social challenge entirely.

> FQ3) Ultimately, I’m trying to apply a model of games theory to a skill that has been theorized to exist in fairly recent years. No fixed model exists yet even in psychology and some of them are accused to become too close to a morality scale. Is there an experience in your life where you think you had to use those types of skills, even if you think you failed to? Did you ever faced something similar in a game, alone or in multiplayer? If not, how would you try to reproduce it? Would it even be a game?

JASON ROHRER
I’ve faced loads of social challenges in my life, and failed lots of times. One prominent example comes from a time when I was volunteering at our food co-op grocery store. I worked during the week, so I came in on Sunday morning for my 2-hour shift. I had been working that same Sunday shift for a few years, but all of a sudden, we had a new volunteer coordinator and a new store manager, both at around the same time. The volunteer coordinator and I didn’t get along all that well, and she decided that I «needed more supervision» in my shift, and that since she didn’t work on the weekends, I needed to change to working during the week, so she could supervise me. I ended up in a pretty heated meeting with her and the new manager, where they explained the problems that they had been having with my work, and I was forced to speak in my own defense. I ended up feeling like I was going crazy, as these two people seemed to have come into full agreement, behind my back, that I was some kind of problem that needed mitigation. I was clearly failing socially in this particular situation.

I also recall a situation in One Hour One Life, where I was building a little fenced in area for my children to inherit. My son and I went exploring together, and we found an abandoned village with lots of valuable tools, including a few hand carts. We loaded up the carts with valuables and
brought them home to our fenced in area. Soon, a village leader came around and noticed our fenced possessions, and said something about how village tools should be shared by all, and we were stealing, and that we shouldn’t lock the tools up like this. I tried to explain that we found this stuff abandoned far away in a different village, so these tools were rightfully ours, and we weren’t stealing. She didn’t believe me, and eventually rallied a posse of villagers to come after me as a thief, and they managed to kill me. This was an in-game situation where I was forced to speak in my own defense and failed.
Thanks and acknowledgments

I would like to thank my fiancée, Jennifer AYME, for appearing into my life and asking questions about my profound lack of empathy or ability to relate to anything anymore on an emotional level, getting deeply emotional, and remind me that it’s ok, thus changing my definition of ‘normal’ in the human experience.

I would like to thank my father, Serge RAKOTOVAO, born in 1966 and passing away while I was writing this piece, in May 2021, for letting me be a person before the daughter of someone. Thanks you to my mother, Maryline RAKOTOVAO, for raising me to be as free and complicated as the human experience can get, even when she had no longer the tools to deal with her very ‘special’ child.

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