

The Thirteenth Annual Game Design Think Tank Project Horseshoe 2018



Group Report: Towards Consistent Social Game Design - A Glossary and Toolkit

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Introduction

The biological foundation of play is social. Play is primarily about understanding how people think, how they emote, and how they cooperate or conflict with one another. Through play, players signal to others their willingness - or hesitancy - to form social bonds. We believe that games designed to work with the natural process of human relationship development can help players create and nurture real, meaningful connection.

Modern games often offer some formal system design to facilitate player-to-player interactions. However, within our industry the term "social" has been burdened with a wide assortment of social features and needs. As a result, any lack of context can create a great deal of confusion. What we need is a collection of terms that can extricate the specific nuances and needs buried within the term "social". With this paper, our aim is to begin constructing a more robust lexicon of social terms and give us a starting point for communicating the specific social contexts of our game features more effectively. As a result, we hope that designers will use more nuanced language when defining social needs for their development teams.

Important note: We are not referring to "games on social networks." These principles apply to all multiplayer games, regardless of platform or presentation.

The Language of Social Design

The Challenges in Talking About Social Features

Players love social features. With the rise of games as a service, we've seen how social features massively impact engagement. Guilds, gifting, trading, friend assist, raids, leaderboards, events, even friend points. While social play isn't for everyone, when you want it, it's a game changer.

However, getting social game design right is difficult, for three main reasons:

- There's no consistent language defining players' social needs
- Social features are often an afterthought
- Social is hard to test and polish

No Language: Social design is a vast and complex academic topic. But, in game development, we have little understanding of it. Even the term “social game design” is not agreed upon! It is reminiscent of the challenges that Animators faced in the 90s, or User Experience designers faced in the 00s (and still face in some studios). There is a lack of critical discussion, common terms, and reliable, well understood design models for game designers to work from.

Hard to Make: Social features are also hard to deliver. Unless part of the initial vision, they are tricky to justify, and easily dropped off the schedule. Every product decision that involves multiple players impacts social culture and social play. Often, problems are not detected until very late in development, when it’s easier to pull features out of the game than to fix them. This need for every developer to understand how social behavior interacts with their system is a major challenge. It limits the effectiveness of the single “social designer” on a team. Solving this requires design leadership across the team, significant vigilance, and constant communication about social goals and social design principles throughout the team.

Hard to Test and Polish: Unfortunately, unlike other systems, many social designs are extraordinarily difficult to test and polish. Getting feedback from the team is very difficult - tests rarely last longer than an hour, let alone the multiple months it takes to test guild systems. And team members know each other! How can you fairly test the emergence of your social culture, when everyone is already well known to each other (and will see each other the next day)? Why would they even use your social features, when they are sitting next to each other? It takes substantial effort to get large groups of playtesters together one time, let alone multiple times. And you have to account for differences in skill levels, control familiarity, and social networking effects. Once you get the feedback, of course, you’ll want to make changes. But cause and effect can be tricky to establish in social systems. Did people have a bad time for social reasons, or because they just aren’t highly skilled? Was that trolling caused by a game system, or a bad tester? And once you do make changes, you’ll have to start testing all over again. Because of all of this, social designs tend to be the least tested and polished of any in the entire game. The lack of a quick iterative cycle means clear, effective design thinking and communication is even more critical in development.

To solve these challenges we need an easier way to communicate. We need to define and break down the social design space. Each part of the space works differently, but without definitions clarifying them, it’s impossible to develop best practices that work for each specific part of the space. This paper provides a glossary, and an example application that breaks down social features, in order to anticipate future problems.

Disambiguating “Social”

Social is an expansive word, that has a number of different meanings. A search for “social” and “game” and “design” will almost certainly include results with the word “Dunbar”, and might lead you to Self-Determination Theory, Maslow’s hierarchy of needs, or the work of game research firm Quantic Foundry. The needs of one kind of social design challenge can easily be the opposite of another. Without clear communication, developers can find themselves in unexpected misalignment with their team.

The word “social” needs to be disambiguated. To that end, we offer two sets of terms:

1. **Social Needs Glossary** - to help clearly define the game’s social goals, and align the team / stakeholders on a common vision, particularly during pre-production and market planning
2. **Social Implementation Terms** - a list of foundational concepts to help communicate how the above needs will be mechanically designed and implemented

By adopting these terms, we hope developers will be better equipped to articulate their goals and more easily explore the particular challenges of social design with their peers.

Social Needs Glossary

What are Social Needs?

As social animals, humans have a deep-rooted need to experience a rich variety of emotions with others. We took a survey of emotional needs that are met through social interactions, and came up with the following list:

- Company
- Affiliation
- Adoration
- Acclaim
- Bonding
- Nurturing
- Organizing
- Compersion
- Novelty
- Laughter
- Self-Improvement
- Contribution
- Alternate Identity

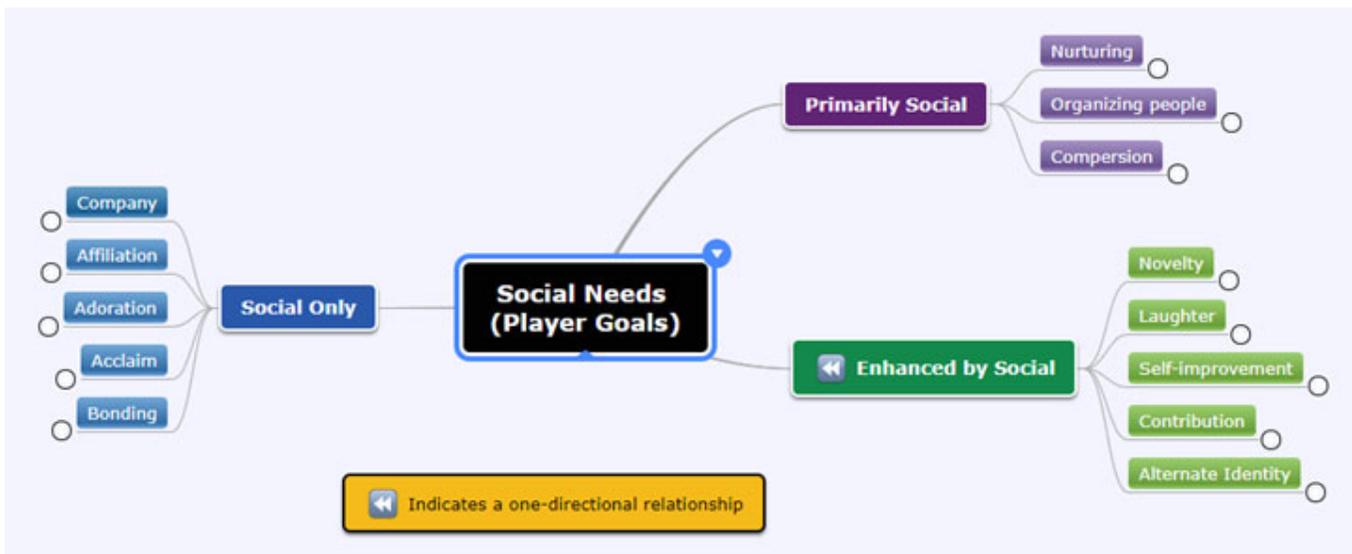
Why these words?

1. *Player Centered*: By being player-focused, these words are useful across genres and problem spaces.
2. *Motivating*: These are goals that players desire to solve. They are social needs. Thus, they will always be relevant.
3. *Significant*: These are engaging on the 30-60 minute time scale (or longer). People will often orient their time around one or more of these goals.
4. *Useful to designers*: Game designs can provide these experiences.

We encourage you to redefine and expand these terms, to fit your own needs.

Taxonomy

Social Needs are broken down into 3 categories, depending on how 'purely social' (vs. the potential to experience outside a social context) the emotion is:



Social Only

These needs only exist in a fully social setting and usually require shared transactions between players.

Social Need	Definition	Examples	Anti-Pattern
Company ^[1]	The desire to be around others. Companionship.	Low trust: Parallel play in an MMO, writing in a coffee shop, drinking in a bar High trust: Dinner parties, working together to defeat a boss, communal living	
Affiliation ^[2]	The desire to be part of a group. Comraderie. Ritual following.	Low trust: Rooting for your favorite sports team, poker night, cosplay, anthem singing, guilds High trust: High school sports team members, cults, esports teams, top-tier raiding guilds	Ostracization
Adoration ^[3]	The desire for others to recognize your relevance. Fame.	Low trust: Getting “likes” on social media, being watched on streams, getting applause at a sporting event High trust: Receiving thanks from a friend, being guarded by a teammate, sincere praise from a parent to a child	Narcissism, Psychological entitlement
Acclaim ^[4]	The desire for others to recognize your mastery. Winning competitions.	Low trust: Gaining rank, tournaments, getting picked first High trust: Receiving “good job” from a peer, election from a group of peers to a leadership position, winning a tournament at a higher level than before	Domination
Bonding ^[5]	The desire to learn about others and to be known. Chatting. Disclosure.	Low trust: Small talk, gossip, lurking on social network feeds. High trust: Disclosing sensitive problems, sharing secrets, support groups.	Gossip, Stalking

Primarily Social

Usually with other players, but not required. These motivations can happen with NPCs in games, but are usually identified with player to player social interactions.

Social Need	Definition	Examples	Anti-Pattern
Nurturing[6]	The desire to care for others.	Low trust: Teaching, soup kitchen, baking cookies for friends, doing a small favor for someone. High trust: Parenting, volunteers at an elderly care facility, hospice, helping someone move	Griefing, Spitefulness
Organizing[7]	The desire to optimize others so that the group can accomplish things at a level greater than the sum of its parts.	Low trust: Trade, diplomacy, organizing playground kickball teams High trust: Guild leaders in MMOs, coaching a sports team, executive of a company	Machiavellian manipulation
Compersion[8]	The desire to see others succeed.	Low trust: Watching your children perform, teachers helping students do well, players who write guides and “How To” content. High trust: Being in your friend’s wedding, mentor / sponsor recommending someone for a job / promotion, attending a friend or family member’s graduation	Sadism

Enhanced by Social

Found in non-social games as well, but changes its nature in a social game.

Social Need	Definition	Examples	Anti-Pattern
Novelty	The desire to have new experiences.	Low trust: Playing against a new deck in a CCG, watching a tricky move, giving a gift High trust: Riffing on a design together, creating a minecraft world, escape rooms	Pranking
Laughter	The desire to be amused.	Low trust: Watching Twitch streams, shooting the breeze at someone’s house, watching a friend play a funny narrative-drive game High trust: Friendly-fire (friendly-griefing), inside jokes and bawdy “in-group” nicknames, teasing, cracking a joke at someone else’s expense	Trolling
Self-Improvement	The desire to make yourself better.	Low trust: Team training, attending class, reading (educational) forums, debate High trust: Paired figure skating practice, setting aggressive goals publicly, learning high-risk skills (parachuting, rock climbing)	Using the others exclusively for your own advantage

Contribution	The desire to contribute to a larger goal that requires coordinated execution by the team.	Low trust: Making a tutorial, doing a daily guild quest High trust: Following a Thanksgiving turkey recipe, following military orders, loaning someone something of great value (giving your friend your car for a week)	Leeching / Parasitic behavior, Secretly benefiting above others (pyramid schemes)
Alternate Identity	The desire to be someone else.	Low trust: Avatars, role-playing, pretend play High trust: Nordic LARP, acting in theater, public speaking to a large or intimidating crowd, dressing in drag	Impersonation, Identity Theft

Relationship Context Types

Once the social needs of a game have been agreed upon, the next step is to identify which types of relationship contexts will be present within the game. Relationship contexts are the specific situations or parameters within which social interactions take place. Each context presents different challenges that can prevent players from further exploring and strengthening their relationship. As designers, having awareness of these challenges, coupled with the interaction dynamics between each relationship type, can help shape the outcome of features.

- **Identity/Self** - The understanding of who a player is and the rules for self-expression within the game. The player's identity and behavior is first influenced by the context of the world and the content available for player expression.
 - **Problem to solve:** Lack of Uniqueness
 - **Why this matters:** If the player lacks tools with which to create a unique player identity, they may have difficulty establishing their individuality which can become a barrier for other players to identify them for initial and subsequent interactions.
- **Friend to Friend** - A relationship bond that exists between individuals and extends beyond the transactional realm of gameplay. The ability for players to further this connection in-game is contingent on synchronicity and any latency encountered can introduce a decay in the strength of the connection.
 - **Problem to solve:** Lack of Synchronicity
 - **Why this matters:** If friends lack synchronous states, these players may find themselves having less need to interact and transact within the game as they pursue objectives that are not shared. Finding mechanisms that allow players to share state, even if asynchronously, may help sustain their bond.
- **Stranger to Stranger** - Starting from a point of no trust in their interactions, any opportunity introduced for players to build toward friendship will gradually close that gap and potentially advance Social Penetration for both individuals. (See also: [Game design patterns that facilitate strangers becoming "friends"](#) and [The Trust Spectrum](#)).
 - **Problem to solve:** Lack of Trust
 - **Why this matters:** Ignoring this context can effectively lead to players being treated as interchangeable, disposable or abusable. Providing mechanisms to improve trust between strangers can build stronger player relationships, stronger communities as well potentially better retention and improved monetization because you are creating value for your players.
- **In-group:** Within a group, the player's interactions amongst other members is moderated by the group's defined culture. Group cultures are often defined by shared identities, goals and spaces. The

culture becomes a razor against others that do not share their values or beliefs. The depth of the interactions among members will change as group size changes (See also: Dunbar's Layers).

- **Problem to Solve:** Lack of Shared Identity
- **Why this matters:** In-group relationships can be strengthened with the availability of tools that enable members to express their group's identity, values, pride, loyalty, and cohesiveness.
- **Individual to groups:** Outsiders observing a group will evaluate and guide their interactions based on the outward expression of the group's culture. The group's culture acts as a razor for whether the individual feels a sense of affinity or dissimilarity based on whether there is alignment or conflict with the individual's identity.
 - **Problem to Solve:** Othering
 - **Why this matters:** The goal here is to match like-minded or similar players with groups, so providing tools that allow that group to convey information about their culture is recommended. Ideally, creating mechanisms that allow a player to experience a group's culture first-hand, can be more effective and potentially arm that player with the ability to make a more informed decision.
- **Group vs. Group:** The combination of in-group behavior and out-group othering can be powerful for in-group bonding, as groups can be challenged and reinforced most when coming in contact with another group. It may or may not be desirable to use tribal behaviors for the reinforcement of culture in small groups. While most friendship-bonding will occur in smaller group sizes (see Dunbar's Layers), there may be a desire for groups to organize at larger scales for shared goals.
 - **Problem to Solve:** Othering + Lack of Shared Identity
 - **Why this matters:** Cross-group relationships can be bridged with the availability of tools that address commonalities and alliances across groups.
- **Community at large:** While "in-group" will maintain separate cultural norm defined by the leaders of the self-organizing groups, the larger Community, or "fandom", will have social norms defined by elements from the game itself, the community managers, or influential members.
 - **Problem to Solve:** Lack of Culture
 - **Why this matters:** The Cultural norms that players have with one another at the "Community" scale will initially be primed by how characters in world interact, but specific language and cultural elements can be elevated and primed for adoption by community managers and prominent members through user-generated content, such as shared language, memes, behaviors, etc

Social Implementation Terms

Once the social needs for your game have been defined and the available Relationship Context Types established, talk will inevitably begin to transition more towards how those needs will be mechanically designed and implemented. When this happens, the language you and your team use will likely change. This is by no means a comprehensive list of social design terms and concepts, but merely a selection of things to consider as a place to start those discussions.

- **Dunbar's Layers** - A theoretical limit on the maximum number of people with whom any individual is able to sustain a stable or meaningful social relationship (usually considered to be roughly 150). Studies show these friendships are split into distinct groups or layers of more intimate, higher trust connections. People average 5 intimate friends or family, 15 best friends, 50 good friends and 150 friends. There exist non-friend groups outside the 150; people have an average of 500 acquaintances and 1500 faces they recognize.
- **The Trust Spectrum** - A mapping from Dunbar Layer to game design & mechanics
- **Relationship Context Types** - A selection of specific player groupings within which social interactions can take place. Upon identification, these groupings can be used to guide the selection of

relevant social features for a game.

- **Social Penetration Theory** - An objective theory which states that relationship development occurs primarily through self-disclosure, or intentionally revealing personal information such as personal motives or desires, feelings, thoughts, and experiences to others. Through this self-disclosure, relationship development follows a trajectory that moves from superficial layers of exchanges to more intimate ones.
- **Tribes / In-group out-group** - The concept of a social division or community with a common culture and language whereby members may exist within the division or outside of it. In-group favoritism is an effect where people give preferential treatment to others when they are perceived to be in the same ingroup, whereas outgroup derogation is the phenomenon in which an outgroup is perceived as being threatening to the members of an ingroup.
- **Synchronicity** - The principle of being in a synchronized, shared state, where two or more players can bond through a meaningful coincidence, such as being online at the same time, or participate in the same questline, etc.
- **Synchrony** - A ubiquitous activity by which social bonding can occur through the in-time coordination or mimicry of actions
- **Mediated Communication** - Communication that relies on a technology channel in order to send a message between two entities. Mediated forms of communication are predominantly used in online games, while board games typically utilize face-to-face interpersonal communication.
- **Proximity** - The likelihood of players seeing and having the opportunity to interact with one another in a game space.
- **Similarity** - A process by which players share various aspects of their personality and background with other players while filtering out dissimilar people based on factors that can include, but are not limited to, visible traits, affiliations with known social groups and any values inferred based off of stereotypes.
- **Reciprocity** - A process that involves players using iterative exchanges (not necessarily material) that are bi-directional with benefits to both parties, to negotiate social norms and build trust.
- **Disclosure** - The act of sharing personal or secret information with another player at the risk of vulnerability.
- **Consent Mechanisms** - A method by which a player can make a request to perform an action (typically something emotive) unto another player at which point that player is given the means to either consent, reject or ignore the request.
- **Parallel Play** - A form of low trust play where players inhabit the same social space, are often interested in what other players are doing, yet rarely attempt to influence one another's behaviors.
- **Symmetric Games (Team Based)** - A game in which all players have the same actions, strategies and symmetric payoffs given each individual's action. These games offer maximal parallel play, which is a low trust social activity, but can encourage early engagement.
- **Asymmetric Games (Team Based)** - A game in which strategies adopted by players are different and can provide greater benefit to one player over another. Often times these types of games include interdependent classes which result in high trust situations that can lead to social bonding.
- **Resource Pool Sharing** - A common pool of resources whose usage often requires coordination between two or more players
- **"Quarterbacking"** - An issue that often arises in cooperative games where a dominating player begins to orchestrate the decisions for the group.
- **Player Roles** - Found in asymmetric games, these players utilize a specific strategic approach to play but do not have access to unique abilities. In the absence of player classes, these generally allow for low trust interactions and high parallel play.
- **Player Classes** - Found in asymmetric games, these players have access to a fixed set of abilities (verbs) that may or may not be shared amongst other classes. Specialized classes can lead to interdependence and encourage high trust exchanges.
- **Player Agency** - The ability for a player to make meaningful decisions about their actions while participating in a game or event.
- **Success Metrics** - A measurement of success, either against peers or against a predetermined target. Depending on their context, (shared, symmetric, asymmetric, etc.) they can affect player trust.

- **Player Identity** - Methods by which a player can distinguish themselves from other players in an effort to create their own unique identity, experiment with new roles and make it easier for other players to identify them for repeat interactions.
- **Group Identity** - A core shared identity amongst a collection of players. Many games provide tools to visually reinforce an identity and help distinguish players who belong to the group from others who do not.
- **Proximity (Social Density)** - The amount of distance between players which influences how likely they are to encounter one another and have an opportunity to interact.
- **Persistent Spaces** - Environments or abstract spaces that are consistently available for players to repeatedly visit and maximize their opportunities to interact with other players.
- **Shared Events** - A method by which a game can incentivize players to gather at the same time/place for a common event, in an effort to increase player density.
- **Persistent Social Groupings** - Opt-in social groups that frequently require a greater commitment from their members to play, but create an environment that often results in more frequent interactions within a denser social space.
- **Elastic Instancing** - A process by which a game can attempt to maintain an optimal density of players through the creation and merging of online servers.
- **Artificial Friendships** - Automated or manipulated relationships that have been encouraged or created for purely utilitarian or reciprocal reasons and are therefore of low social value to the player.
- **Social Cues** - A verbal or non-verbal hint, which can guide conversation, inform social interactions and ideally reduce ambiguity around meanings and intentions.
- **Othring** - To view or treat (a person or group of people) as intrinsically different from and alien to oneself.
- **Shared Experience** - A unique and oftentimes emotionally intense event, that is experienced between two or more players which can lead to increased social bonding.
- **Signaling** - The concept that a player / group credibly conveys some information about itself to another player / group.

The Social Game Design Toolkit (SGDT)

Note: The SGDT can also be [downloaded as a separate, standalone doc](#).

Overview

We offer a toolkit to guide designers of social game features, game researchers, and others in the industry. The goal of the toolkit is to offer a clearer, more consistent and precise language and lens for assessing the quality and quantity of interpersonal connection realized by game systems.

Instructions

Toolsheet Overview

Please use the [accompanying sheet](#) to analyze a game's social dynamics.

Take a moment to explore the pre-populated mechanics shown in the sheet - it is well commented with hopefully illustrative examples. Hover over any cell with a comment to learn more, including all cells in the header. Note that this is not meant to represent a game's full mechanics list. It is a collection of individual mechanics from a number of games (traditional MMORPGS, gardening games, etc.) chosen at pseudo-random to try and create a useful spread of mechanics.

When starting a new analysis, make a copy of the sheet, clear out the rows under the headers in the first sheet (“Mechanics”), and start entering your data from there.

Note: This toolkit is based on an entire field of scientific study. For a deeper understanding, see the [References](#) section.

A Word On Griefing and Anti-Patterns

One of the challenges with using this toolkit is how to deal with the difference between a system being used as designed, and one being used to grief.

Our recommendation is to create a second copy of the sheet, label it “Anti-Patterns”, and begin tracking mechanics as used by griefers and trolls. For example, there might be a line for a Drop Trade that’s betrayed because the other party doesn’t drop their goods, or they drop something that they lied (by omission) about (ex: it is the sword you wanted, but it also happens to be cursed, or almost out of charges, etc.). The reasoning is that you don’t want to mix up positive and negative experiences in your charts and giving the wrong assessment of a game’s social fingerprint.

Structure

Mechanics

Mechanic	Vulnerability			Emotion - Exclusively Social			Emotion - Primarily Social			Emotion - Enhanced by Social			Context												
	Aesthetic	Opportunity	Temporary Impact	Permanent Impact	Outcome	Company	Affiliation	Adoration	Acclaim	Bonding	Nurturing	Organizing	Competition	Novelty	Laugh/Mem	Self-Improvement	Contribution	Alternate Identity	Stranger / World	Group -> Group	Group -> Individual	Me -> Other Group	Large Group (45)	Medium Group (15)	Small Group (5)

The general structure of the sheet is a table of mechanics, one per row. For each mechanic, you’ll score it in three areas: Vulnerability, Emotion, and Context.

To get the most out of the SGDT, each row needs to be its own, distinct representation of a social interaction. For example, if you start describing a mechanic, and think “Well, it depends, if I do it one way, then it’s low vulnerability, but if I do it another way, then it’s more like a medium vulnerability thing”, then you should break it out into two or more rows.

Vulnerability

Vulnerability				
Aesthetic	Opportunity	Temporary Impact	Permanent Impact	Outcome

According to Social Penetration Theory, humans progressively disclose increasingly intimate details about their preferences, beliefs, and self image. It is this progression from shallow to deep sharing and openness that define the arc of a human relationship.

Game mechanics, too, can be placed along this axis, from Low Trust (interactions that can cause little loss - and usually little gain - between players) to High Trust (extreme levels of vulnerability, where the game's very outcome can depend on tight coordination between extremely skilled players).

Vulnerability is the potential for loss. In the context of this toolkit, we refer specifically to situations in which our loss comes as a result of another player's action.

Emotion

Emotion - Exclusively Social					Emotion - Primarily Social			Emotion - Enhanced by Social				
Company	Affiliation	Adoration	Acclaim	Bonding	Nurturing	Organizing	Competition	Novelty	Laughter	Self-Improvement	Contribution	Alternate Identity

If Vulnerability is a quantitative measurement, Emotion is qualitative. The goal is to go beyond just 'how vulnerable am I' and dig into what socio-emotional drivers are satisfied by the mechanic. As humans, we have a rich, complex set of needs beyond just "be vulnerable and have friends who won't betray me".

These emotions are discussed more thoroughly in the accompanying [Report](#).

Context

Context						
Stranger / World	Group -> Group	Group -> Individual	Me -> Other Group	Large Group (45)	Medium Group (15)	Small Group (5)
						Me to Friend

Context refers to the increase in intimacy from left to right:

- **Stranger/World** - mechanics in which I interact with the world at large
- **Group -> Group** - mechanics that allow my group / team / guild to interact with another group / team / guild
- **Group -> Individual** - how my group interacts with external individuals
- **Me -> Other Group** - context in which I'm engaged with a group to which I don't belong
- **Large Group** - internal dynamic to a large (45+ people) group to which I belong
- **Medium Group** - dynamics internal to groups of about 12-25
- **Small Group** - interactions within small (3-8 player) groups
- **Me to Friend** - 1:1 interactions with someone I trust

Example Application to Games Development

In Vision Casting / Conception Phase

Game directors and consumer insights teams should target specific social needs to identify the player

segment and profile they are designing for. When the player persona is clearly defined by what motivates them to seek out social experiences in their games, a high level list of features can be mapped out. Understanding these needs also help act as a razor against features that tend to conflict with the desired goals.

Example:

For fictional game X, the Target Persona is built from Quantic Foundry's player segmentation chart. The persona's social needs identified are: **Adoration, affiliation, self-improvement, novelty.**



Pre-production:

Teams can use the social design toolkit in the process of defining feature sets and determining feature priorities. Coupled with the SGDT, these features can be quantified and prioritized within development roadmaps.

With the priorities determined, PM/Producers can assign the Definition of Done (DOD) or Level of Quality (LOQ) to each feature, and map out various tech and implementation dependencies.

Design leads can assign mid level design briefs and one pagers that provide more clarity to the features as the blueprint of the game is being defined.

Example:

With the social needs for the Target Person being **Adoration, Affiliation, Self-improvement, Novelty**, features proposed have to allow and facilitate these needs to be fulfilled.

Below is a sample of how the social needs could look in development when passed through the SGDT to evaluate the impact of features, and prioritized based on how much they contribute to the pillars defined by the vision in Conception phase. The total on the far right column of the table shows the total score accrued by the feature and how many different areas it contributes to.

	Vulnerability					Emotion - Exclusively Social					Emotion - Primarily Social			Emotion - Enhanced by Social			Context										
Mechanic	Aesthetic	Opportunity	Temporary Impact	Permanent Impact	Outcome	Company	Affiliation	Adoration	Acclaim	Bonding	Nurturing	Organizing	Competition	Novelty	Laughter	Self-improvement	Contribution	Alternate Identity	Stranger / World	Group -> Group	Group -> Individual	Me -> Other Group	Large Group (45)	Medium Group (15)	Small Group (5)	Me to Friend	
Totals	2.0	2.5	0.5	0.0	0.0	0.8	2.0	2.0	2.8	0.7	1.2	1.0	1.4	1.0	0.0	2.5	2.5	0.5	3.2	2.0	2.0	2.0	2.0	1.0	0.6	1.0	Totals
Player Prestige	1.0							0.8	0.8							0.5			1.0							0.2	4.3
Clans		1.0				0.8	1.0	0.2	0.2	0.7	0.7	1.0	0.4				0.8	0.5		1.0	1.0	1.0	1.0	0.5	0.3		12.1
Clan Emblems	1.0						1.0												0.2	1.0	1.0	1.0	1.0	0.5	0.3		7.0
UGC levels		0.5	0.5					1.0	1.0					1.0		1.0	0.7		1.0							0.5	7.2
Community level tutorials		1.0							0.8		0.5		1.0			1.0	1.0		1.0							0.3	6.6

The next steps are identifying documentation needed, assigned product owners to drive the development of said features, its priorities, and the expected delivery for each feature for production purposes.

Social needs	Feature	Description	Documentation	Stakeholders	Priority	Delivery
Adoration	Player Prestige	Medals attached to the player's profile page that shows how many accolades they have received for UGC levels	ProjectX_PlayerPrestige_DesignBrief.slsx	Product Owner: YYY Tech Owner: YYY	P3	Post launch: Season 2
Affiliation	Clans	Player created groups of up to 50 players. Allows for self-defined hierarchy and rules	ProjectX_Clans_DesignBrief.xlsx	Product Owner: XXX Tech Owner: XXX	P0	Vertical Slice
Affiliation	Clan Emblems	2D badges for Clans that players can create with a client and web-based tool	ProjectX_ClanEmblems_DesignBrief.xlsx	Product Owner: xxx Tech Owner: XXX	P1	Vertical Slice
Novelty	UGC levels	Players can download community created levels to play. These levels are curated to	ProjectX_UGCLevels_DesignBrief.xlsx	Product Owner: YYY Tech Owner: YYY	P1	Vertical Slice

		highlight the best and popular ones.				
Self-improvement	Community level tutorials	In the level builder, players share tutorials on how levels built to the rest of the community	ProjectX_Community-LevelTutorials_DesignBrief.xlsx	Product Owner: XXX Tech Owner: XXX	P2	Post launch: Season1

Production:

Throughout the process of development, feature designers are able to iterate with a clearer understanding of the cross-relational impact and outcome of each feature through user testing. The SGDT helps break down social beats into smaller, testable units. When playtesters are brought in for feature testing, it allows for validation that it is producing the desired outcome. If so, designers can systematically move on and check it off the chart. This provides a much clearer, actionable outcome than a reactionary approach of just having people play the game a lot, and see what happens.

Alongside analysts, designers will define metrics that help inform the if the features are working, how players are using them, and how often. During user testing, playtest experts will help define what can be tested and replicated in a lab setting, during internal team playtests, or in a live environment.

Example:

With the given list of features above, analysts define tracking and metrics needed to measure the impact per feature. These metrics are derived from the definition in the [Social Glossary](#), and the academic literature that supports them.

Social needs	Feature	Feature Goals	Metrics / Dashboards	Test Environment
Adoration	Player Prestige	Players gain the attention and respect from other players, They are able to establish their status and fame	Menu: Time spent in player profile page Interactions performed viewing each other's profile pages	Lab testing, live environment
Affiliation	Clans	Players are able to find membership in groups and thrive in them	Gameplay: % of player population is a member of a clan Clan members interaction rate / frequency Clan activities participation rate Number of clans created	Live environment
Affiliation	Clan Emblems	Players want to outwardly display their clan affiliation	Menu: % of clans that have and display their emblem Time spent in emblem creation page	Team playtests, lab usability testing

			% of players who wear their clan's emblem	
Novelty	UGC levels	Players are interested in both creating and trying out new content.	Level Editor: % of player population using the editor % of players downloading and engaging in the levels Player retention vs engagement with UGC levels	Team playtests, lab testing, and live environment
Self-improvement	Community level tutorials	Players are able to leverage the game's community to improve themselves.	Level Editor: %of player population viewing tutorials % of player population creating tutorials Number of new levels being created	Lab testing, live environment

Post Launch:

Dev teams can use the understanding of social needs to address key community requests. It is a challenge for post launch teams to be reactive to feedback from its most engaged of players; but crafting a message to help players understand why certain requests cannot be accommodated because of its impact on the pillars of the game is equally as important. The introduction of features that contradict the game's goals can upend its social ecosystem, not unlike key gameplay systems (e.g.: introducing an LFG feature for high trust activities)

Conclusion

This is a working paper, and we welcome further discussion, contribution, and collaboration.

Language

Just as there is little agreement on the language around the social aspects of games amongst designers, the ways in which games are researched and talked about can vary greatly across disciplines (and even within disciplines). The glossary we present here represents an opportunity for developers, teachers, and researchers from various fields and perspectives to use a common language when discussing social design in games.

Other future work to consider:

- Missing terms from prior works/literature
- We haven't done extensive testing of diagramming anti-patterns
- There may be other ways to organize social needs in the hierarchical view (i.e., one-way/two-way/group, supersets, semantic graphs, etc)
- Testing language on existing games (with the goal of separating notable "social" games with more nuanced language)

Toolkit

The toolkit itself represents a potential common method, which could be adapted for different needs, for analyzing the social aspects of games.

Other future work to consider:

- validation of system
- development of a common system of units / data format for the SGDT

- evaluation of SGDT applicability to aesthetics, theme, genre
- creation of 'golden examples' - standards against which to triangulate analysis
- adapt to player's relationship to NPCs in a single-player game
- analysis and diagramming of anti-patterns

Appendix

Academic Research on Social Needs

A preliminary review of academic literature both suggests support for a number of these terms and points to areas that require further attention. Academic research on games is split across numerous fields of research, including computer science, humanities, education, mathematics, medicine, psychology and many others. This literature review focuses primarily on research in social sciences; as such, the main focus of this review was on the "social only" terms, as well as those that were "supported by social."

[1] *Company*. The desire for company (that is, not being alone) is a fundamental human need, especially as loneliness is inversely coordinated with life satisfaction ([Schultz & Moore, 1988](#)) and can have severe consequences on mental health ([Heinrich & Gullone, 2006](#)). Video games may provide a means of informal socialization; for example, they provide a space for "hanging out," especially for youth ([Ito et al., 2009](#)). Video games have also been suggested as a potential "third space;" that is, a place that today serves a similar function to once-popular social spaces such as bowling alleys ([Williams, 2006](#)). The relationships formed in and around games do not necessarily need to be deep, as game-related interactions can be satisfying even though they may not lead to more meaningful or long-term connections ([Olson, 2010](#); [Yee, 2006a](#)). This suggests that the desire for company and for being around others, not necessarily deep friendship, can itself be motivating for players.

[2] *Affiliation*. Membership in a group is an important psychological need, as it reduces uncertainty in how to behave and is essential to identity formation ([Reid & Hogg, 2005](#)). In video games, this might manifest as guild membership, which can provide consistent pleasant socialization and might itself be a primary motivation for playing ([Yee, 2006a](#)). Affiliation with groups, including in video games, is also associated with developing ways of thinking, acting, and behaving that signal "in-groups" and "out-group" ([Gee, 2007](#)).

Why many aspects of affiliation can be positive, the notion of affiliation or group belonging is also closely linked to tribalism and negative interactions between groups ([Sherif, 1961](#)). This could go a long way toward explaining toxicity among players and fans, as liking particular games, characters, or factions are strongly linked to identity ([Madigan, 2015](#)).

[3] *Adoration*. This term could also be thought of as recognition. Maslow suggested recognition as a basic human need in the category of esteem, where it is closely associated with other needs related to seeking respect from others, such as status, fame, and attention ([Maslow, 1943](#)). As humans, we seek to compare ourselves to others, preferably people that are similar to ourselves in order to contextualize our social status ([Festinger, 1954](#)). Video games not only give players a way to compare themselves to others and gain recognition for achievements, but can easily allow for social comparisons and recognition amongst one's peers or existing friend groups, which is ultimately more psychologically satisfying than comparisons with strangers ([Madigan, 2015](#)).

[4] *Acclaim*. As with recognition, humans desire mastery, and this is a salient motivation for gaming ([Ryan, Rigby, & Przybylski, 2006](#)). Competency and mastery of video games can relate to social status in a number of ways, especially among youth. [Tarrant et al. \(2001\)](#) found that mastery of video games was one of the most valuable traits that a group of 14-15 year old boys sought in potential friends (n=149). [Funk et al. \(2006\)](#) found that 4th to 6th grade children mentioned accomplishment and pride achieved through winning were a key motivation to playing video games. Similarly, achievement and the recognition that related to

power specifically are major themes identified by [Yee \(2006a\)](#).

[5] *Bonding*. Bonding around video games is most well-studied in the context of family members playing together, as numerous recent studies have demonstrated that video games can affect bonding and familial relationships ([Gee, Siyahhan, & Cirell, 2016](#); [Siyahhan & Gee, 2017](#); [Takeuchi & Stevens, 2011](#); [Tran, 2018](#)). Games can promote interaction and talk, both shallow and deep, that contribute to positive social bonds. [Hickerson & Mowen \(2012\)](#) found that in some cases, playing games can lead to deep social bonds which can extend into out-of-game contexts and over longer periods of time. [Olson \(2010\)](#) also noted that video games can also create common ground that leads to connection, and the notion of bonding and forming friendships as a motivation for play appears across the work of [Ryan et al. \(2006\)](#) and [Yee \(2006a\)](#).

[6] *Nurturing*. While parenting and video games would seem a natural fit for researching the motivation of nurturing, the family studies mentioned above tended to focus more on bonding, routines, and learning. Instead nurturing, or the desire to care for others, has been regarded more in the context of caring for NPCs. For example, the games *Nintendogs* and *Animal Crossing*, which involve virtual animals, might trigger a desire to nurture ([Järvinen, 2008](#)). Indeed, a number of researchers have examined leveraging this desire to nurture a virtual pet in order to engage students in learning activities ([Chen, Liao, & Chien, 2011](#); [Liao, Chen, & Cheng, 2011](#)), and the appeal of virtual pets and creatures such as *Tamagotchi* could possibly be explained by the way that the creatures mimic sentient beings that need to be cared for ([Bloch & Lemish, 1999](#)).

[7] *Organizing*. Leadership in games is a topic of a solid amount of academic interest. Hettrick's [\(2012\)](#) research on college students suggested that video games and MMOs in particular could be valuable for developing leadership skills, while [Lisk, Kaplancali, & Riggio \(2012\)](#) investigated the potential of a number of MMOs, such as *EVE Online* and *INFINITE ARMS*, for developing leadership skills. [Patrick \(2010\)](#) compared the leadership styles of *World of Warcraft* guilds with leaders of real-life organizations, and the development of leadership skills, as perceived by players, was a focus of Yee's [\(2006b\)](#). In most of these cases, researchers were interested in how leadership in games related to leadership skills in real-world settings. The fact that this phenomenon has been picked up by news outlets, such as [Rubenfire's \(2014\)](#) piece in the *Wall Street Journal*, suggests that leadership in games is a topic of interest in academia and the business world alike.

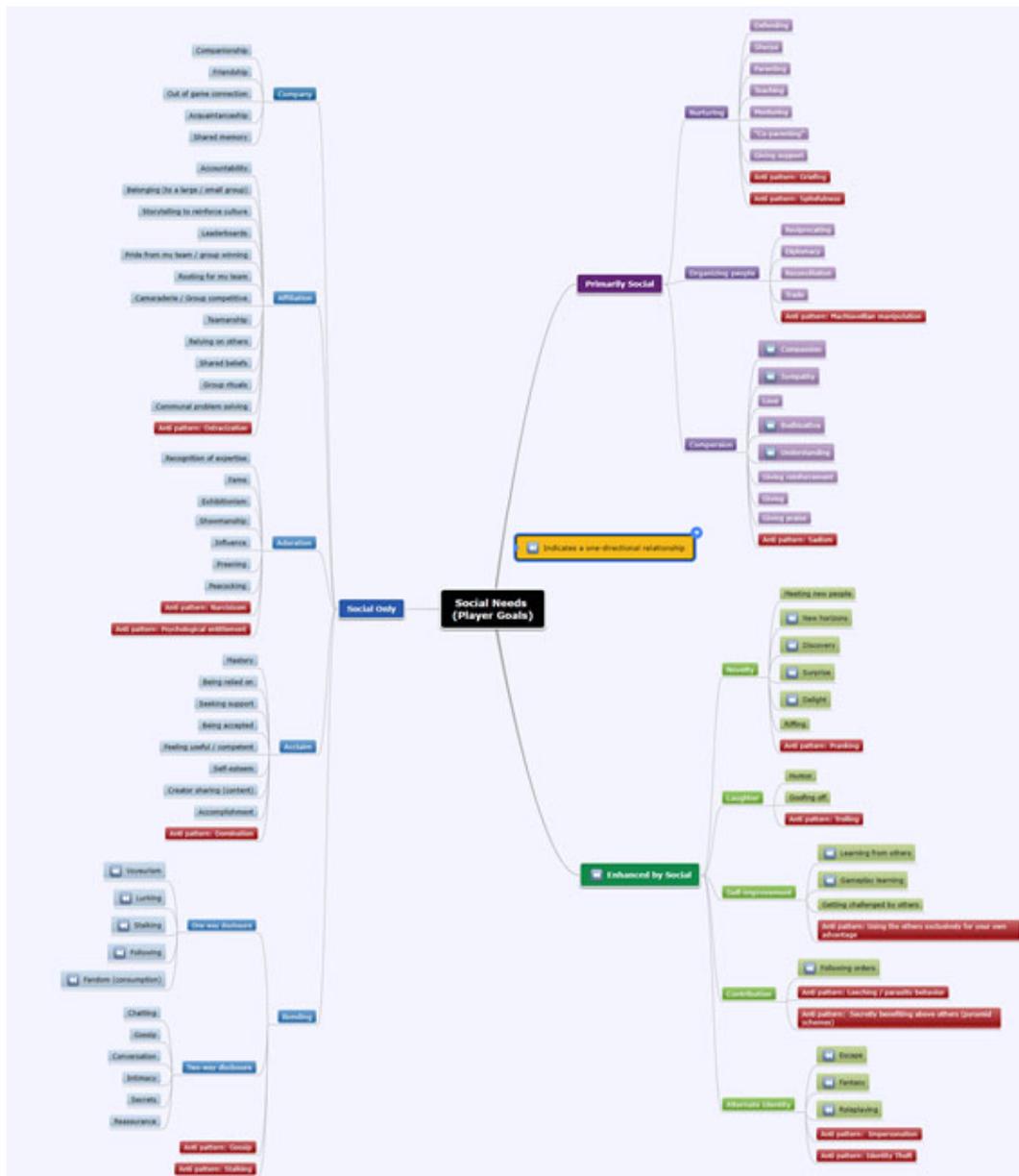
[8] *Compersion*. The desire to see others succeed falls under the category of what [Järvinen \(2008\)](#) calls fortunes-of-others emotions, which he notes can be felt for either NPCs or other players. Although he suggests that players might feel pleased upon seeing the success of a whole virtual community, such as the villagers in *Animal Crossing* celebrating together for achieving a communal goal, this differs from the notion of compersion among players as we have used it here, and there appears to be a dearth of research on this topic.

Conclusion

It is important to note that many of the studies here focus on youth, as this is where much of the academic interest (in social sciences and education) around gaming is centered. Additionally, some academic research has focused more on men and boys, and it is important to keep in mind gender as an important sociocultural context of interactions within and around games.

Glossary Word Groupings

A word map to help visualize the Social Needs Glossary



Interactive Mindmap

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