

The Critical-Glossary

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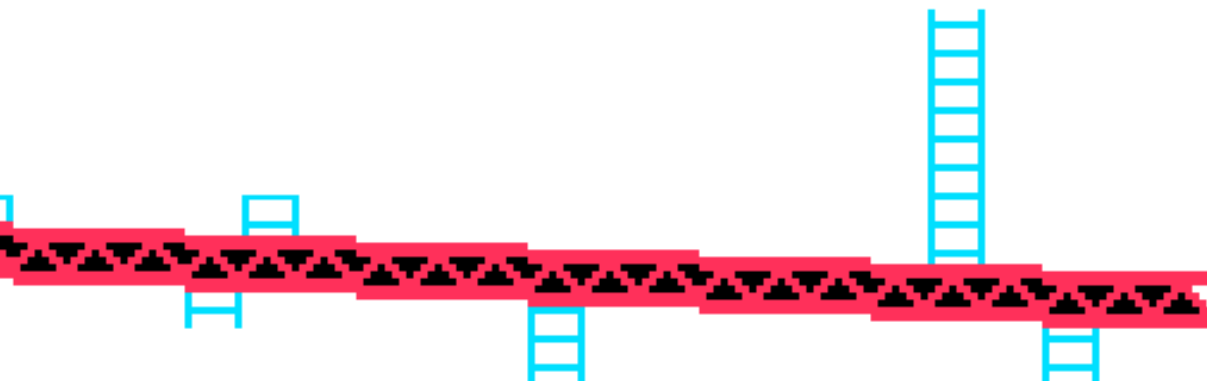


Table of Contents

#	3
A	3
B	5
C	6
D	11
E	13
F	15
G	17
H	18
I	19
J-K	20
L	21
M	22
N	25
O	26
P	27
Q	30
R	31
S	32
T	37
U	39
V	39
W	40
X-Y	40
Z	40

The Critical-Glossary is a collection of terms and definitions on game design. The field of game design is vast. To sufficiently cover it this glossary includes terms from other fields such as story design, educational psychology, and neuroscience. I have also coined many terms as well as improved the definitions of many commonly used terms.

The glossary is the product of four years of blogging and research at critical-gaming.squarespace.com. In addition to the definitions nearly every entry features a link to the blog article where I discuss the term in detail. Do visit these articles for examples, images, videos, and interactive demos.

All of the definitions in this document are the most up-to-date versions as of 11/11/2011. Keep in mind that some terms are now obsolete and the exact wording of definitions may be slightly different than what you'll find on the linked blog articles.

Feel free to use, reference, and share this glossary with anyone (as long as you do not charge for it or gain any monetary value). If you have any questions, comments, or concerns I can be reached via the contacts found on the [critical-gaming about me](#) page. Also visit the page to download the first four years of the blog in two specially formatted PDFs. As always, everything is free and your feedback is always appreciated.

~Richard Terrell (KirbyKid)

#

3 rules of eureka

See “slow eureka,” “simultaneous discovery,” and “conceptual platform.”

16 basic desires

See “Reiss’s theory of 16 basic desires.”

A

abstract counter

When a counter is designed that blatantly ignores the rules of form fits function, it can be considered an abstract counter. Many times, these counters are designed to balance gameplay and are “last minute” alterations. In such cases, fixing the forms of the game would take too much work, time, and/or resources away from development. And so we’re stuck with simply memorizing how these counters work individually despite how they look. In this way, abstract counters are very similar to special case counters.

[~ see article](#)

abstract game

An abstract game has rules, but no fictional world. Many traditional non-electronic games are abstract, but very few video games are abstract. Half-Real, chapter 4.

[~ see A Dictionary of Video Game Theory](#)

abstracting

Arbitrarily simplifying a virtual element that represents anything concrete from real life. Anything short of a 100% functional recreation of a real-life element means there is some part of the representation that is missing or simplified. Instead of judging whether this difference in representation is significant, we simply categorize it as abstract. A game designer must abstract nearly everything within a video game. See “digital truth” for the exception. He/she may choose to do so for stylistic effects, to work

better with the other game elements, or for ease of understanding and use.

abstract key

These keys have no spatial definition or physicality within the game world. These keys are usually an item that is merely indicated in your inventory. The game tells you that you picked up a key, and afterwards a certain lock will be opened for you. Abstract keys conceptual like having to do a specific action like clearing the room of enemies.

[~ see article](#)

abstract mechanic

A mechanic that has no spatially defined effect on other spatially defined gameplay elements. Also a mechanic that is not consistent with the established style or fiction of the game.

[~ see article](#)

accel (timing)

Short for acceleration. The ability to execute static or complex timings through a steady increase of tempo.

[~ see article](#)

accordion level design

Folded level design that folds back and forth at multiple creases that creates some kind of pattern.

[~ see article](#)

accuracy (controls)

Input device terminology. The degree of closeness of an outcome to the declared target. Accuracy is only useful for comparing the ranges of input of different devices of the same type of input. e.g. the value range of pressing all the way up on the analog stick of a 360 controller versus a PS3 controller.

[~ see article](#)

action frequency

The rate the player inputs mechanics to real time. A high action frequency occurs when the speed of input exceeds one’s ability to process the actions and reactions consciously. A term that applies mostly to spamming non-continuous mechanics. e.g. button mashing. A cluttering, emergent quality of action games.

[~ see article](#)

adaptation (skill)

The skill of adjustments and change. One of the 5 types of DKART skill. One can adapt within a single DKART skill or facet of these skills (tier.1), between 2 skills (tier.2), or across the entire skill spectrum (tier.3). With each increasing level the complexity and difficulty of the adaptation significantly increases..

[~ see article](#)

adjacent possible

See "conceptual platform."

advanced technique

Shorten to ATs. Any application or combination of mechanics beyond the most straight forward individual use of game mechanics. ATs can be very useful, functional, or have little practical purpose.

adventuring

Any combination of the following: Having a goal (clear or vague) to achieve without knowing the exact steps you need to take to get there. Exploring the unknown motivated by curiosity. Dealing with the unplanned and the unexpected on your way to your destination. Getting lost, distracted, or following a hunch that ultimately leads you to the main goal. Being transformed along the way.

[~ see article](#)

agency

Exerting effort or control over the state of a game. This involves using one of the core skills (DKART) to create agency. See "effort."

aggressive (playstyle)

This style of play mainly involves executing moves that are designed to lead one to victory most quickly. If the point of the game is to attack like in fighting games, then the aggressive style means using attacks almost exclusively. In a more general sense, being an aggressive player means setting the tempo of a match. Setting the tempo means playing in such a way that greatly influences the opponent to constantly respond.

[~ see article](#)

alternate path

Any path other than the main path. When there is no clear main path (perceived or defined), alternate paths are not possible.

[~ see article](#)

analog variables of change

More commonly called analog variables or properties. Properties of game mechanics or elements that can be adjusted to a fine degree or on an analog scale.

[~ see article](#)

And-lock

A lock that requires multiple keys to open. If the player doesn't have all the pieces, nothing happens. If you've ever collected 3 pendants, 7 crystals, or any other number of special items to progress in a game, you've experienced an and-lock.

[~ see article](#)

apples and oranges

"A comparison of apples and oranges occurs when two items or groups of items are compared that cannot be validly compared.

The idiom, comparing apples and oranges, refers to the apparent differences between items which are popularly thought to be incomparable or incommensurable, such as apples and oranges. The idiom may also be used to indicate that a false analogy has been made between two items, such as where an apple is faulted for not being a good orange." ~wikipedia

[~ see article](#)

arbitrary limitation

Typically hard-coded exceptions to the established game rules/systems to limit some possibility of emergent gameplay.

[~ see article](#)

artificial dynamics

An obsolete term and concept. Judging whether a game dynamic is artificial is a foolish pursuit considering that nearly everything in a video game is an abstraction, arbitrarily created, or abstract. Trying to figure out what is more or less artificial will always result in an endless spiral due to bias, semantics, and poorly defined criteria.

asymmetric multiplayer game

The types of game where players start the game with different sets of options. Sirlin.net
~ [see article](#)

asynchronous time (async)

A B.E.S design innovation applicable to real-time games. First we take the idea of real-time and define it by actions and concepts understanding that it's the coherency of these details that create our sense of time. Then we break down this newly defined version of time dividing it in specific contextual ways. From here new timelines can be created and presented to players in an asymmetric way only to be reassembled into a master timeline.

~ [see article](#)

attachment

The player's experience of emotional attachment to the outcome of a game. Attachment is the prerequisite for the joy of winning and the sadness of losing. Half-Real, chapter 2.

~ [see A Dictionary of Video Game Theory](#)

attack-attack-heal

The all too familiar, overused, overpowered tactic that involves merely attacking away, taking damage, and healing to maintain the pressure. This tactic is very common in RPGs. It can be found in other genre as well.

attackers (playstyle)

See aggressive (playstyle).

avatar (story)

[Acting] based on the player's understanding of the avatar's principles and limited perspective, independent of their own.

~ [see article](#)

B

back and forth counters

Interplay encounters where mechanics are used initially to achieve some kind of functional advantage over an opponent or gameplay element. Then the opponent or element takes the opportunity to use

mechanics to counter you. The longer this back and forth continues, the deeper the interaction, system, or game, as long as the parties can continue without repeating the same moves or resetting the gameplay conditions back to the state defined by the initial conditions. Only applies to reactionary counters.

~ [see article](#)

bad 3D

When the position of an element in a video game is ahead in the view so that the player cannot make or easily make informed decisions about distances to and around the element. Being informed is relative to the challenge at hand and the aims of the player. Bad 3D is an emergent issue that occurs more frequently when the game system lacks sufficient "monocular depth perceiving" elements. Also notated as "ba3D/ BA3D"

~ [see article](#)

baiting

Putting yourself in a situation that appears vulnerable to lure the opponent into making a mistake by attacking, moving in, or acting in some way. Baits are often single steps in more elaborate mixups.

~ [see article](#)

balance

All design elements within a game are in some kind of balance. A game can be balanced for different effects. When we talk of video game balance we generally mean of gameplay or even a sub system of gameplay. And by balance we generally mean so that there are interesting choices.

However, there are countless to balance a game. Understanding what kind of balance (whether toward a specific skill, character, playstyle, etc) is a much less subjective and much more thorough method of understanding a game's design than Sirlin's definition which conflates the term with concepts of interesting choices, design space, and move viability. Sirlin's definition is decent for the general use of the term.

~ [see article 2](#)

A multiplayer game is balanced if a reasonably large number of options

available to the player are viable--especially, but not limited to, during high-level play by expert players. --Sirlin, December 2001

[~ see article 1](#)

beginner's luck

Refers to the supposed phenomenon of novices experiencing disproportionate frequency of success or succeeding against an expert in a given activity. ~wikipedia

[~ see article](#)

behavior-fits-function

When emergent gameplay behavior aligns with the fiction of the game. The term is typically used to describe cases where the behavior is contrary to the fiction.

[~ see article](#)

bias (controller design)

Input device terminology. The difference between the mean of the outcomes and the target value. Only relevant when discussing accuracy.

[~ see article](#)

binary variables

Properties of game mechanics/elements that only have an on/off either/or state. Sometimes called "either/or variables (properties)."

[~ see article](#)

blind mixup

Blind encounters occur whenever a player is put into a situation where he/she must make an uninformed choice (often without the opportunity to ever gain this information) that results in one of at least two outcomes. Basically, being in a situation where the best you can do is make a guess. The mixup happens when the game or another player forces a player into a blind encounter to influence a mistake. Examples include calling a coin flip (50%). Guessing right in Rock Paper Scissors (33%).

[~ see article](#)

blindness

The limited vision/perspective of a player. Typically applies to games played under a fog of war. Can apply to 3D, 2D, and 1D games.

[~ see article](#)

blind spot

see functional blind spot

brain stamina

The brain is a complex organ. Though the exact science of memory storage eludes neuroscientists, we do know that the mind can be over worked. At such a point, one's mental acuity drops sharply. The longer you can go and the more stress you can put on your mind before experiencing this drop the more power to you. Furthermore, the quicker you can recover from a mental "brain lock" the better.

[~ see article](#)

brute force (solution)

The opposite of an elegant solution. Generally, brute forcing a problem involves buckling down and solving a problem despite there being a significant element of chance, lots of trial and error, and/or very strict action based execution. Abiding by the classic struggle between brains and brawn, brute forcing a problem is definitely the brawn; the opposite of thinking deeply or critically about a problem to find a solution.

[~ see article](#)

buffer (input)

A software feature that extends a player input. So if a player hits a button early, if the hit is within the buffer window the action is still executed as if the button was pressed exactly on time. Buffer windows are typically extended in front of timing windows. Some games (Guitar Hero) allow players to hit notes after the timing windows have passed by extending the buffer window after the fact as well.

[~ see article](#)

button mashing

Inputting commands rapidly and possibly mindlessly. Can lead to a high "action frequency."

[~ see article](#)

[~ see article 2](#)

C

callouts

Gameplay information communicated verbally between teammates.
~ [see article](#)

camera (controls)

An input device that senses light. By analyzing pictures or video the system is able to recognize patterns and track movement, shapes, colors, and even depth.
~ [see article](#)

camping (playstyle)

See “defensive (playstyle).”

cancel (mechanics)

The ability for a player mechanic or a player input to force a state change of a gameplay element from a non-continuous state. Similar to “interrupts.”
~ [see article](#)

cause and effect counter

Some counters occur when game elements change from one state into another. With each state comes new effects, lines of contrary motion, and nuances.
~ [see article](#)

CED system

A universal system for analyzing and comparing stories of any type. It stands for “content,” “execution,” and “discourse.”
~ [see article](#)

challenge mode (puzzle)

Levels that take a puzzle gameplay systems and incorporate real-time elements into the challenge. The simplest examples involve completing puzzle mode levels in a limited time.
~ [see article](#)

challenging

When a player uses some level of DKART skills beyond their comfort level or past their limits. Obviously, this quality varies with each individual and should be supported with statements describing the particular skills/abilities of the player(s) involved. “Unchallenging” is often used to refer to gaming experiences that are too easy.
~ [see article](#)

channels

A sub-facet of knowledge skills. Knowledge is one of the DKART skills. The ability to

think in or process multiple streams of information simultaneously without crossing the information.
~ [see article](#)

cheater (playstyle)

See meta man/gamer (playstyle).

chekhov's arsenal

A playful extension of the concept of Chekhov's gun applied to game design. The coined phrase highlights that not only are there many elements that need to be evaluated on necessity to the game as a whole, but the value of these elements are measured against each other.
~ [see article](#)

chekhov's gun

A literary technique that is the equivalent to foreshadowing. The author has explained the phrase to also mean “do not include any unnecessary elements in a story.” In other words, if you're going to put a gun on the stage in a play, you better have that gun go off at some point.
~ [see article](#)

choice (reflex)

This reflex test features multiple stimuli with multiple matching responses.
~ [see article](#)

chunking

See “coding & decoding”

When players learn or improve their playing a game by learning not to process the individual pieces or states of the game, but rather thinking in terms of high-level chunks (collections of pieces and states) instead. (Newell & Rosenbloom 1981, 42)

“The master [of chess] has acquired an immense memory for chess positions, organized as a collection of chunks. His ability for immediate perception and short-term memory of chess positions depends directly on how many chunks are used to encode a position. [...] By implication, master players must spend an immense amount of time with the game, in order to acquire the large number of chunks; this seems to be well supported by historical data.” (Newell & Rosenbloom 1981, 50)
Half-Real, chapter 3.

[~ see A Dictionary of Video Game Theory](#)

clean (design)

The opposite of cluttered design. Cleanness describes emergent gameplay that maintains a clear information flow between the game and player. Cancels, simultaneous actions, high action frequency, strange emergent behavior, arbitrary limitations, static-space, and excessive complexities are all design elements that can contribute to a cluttered gameplay experience.

[~ see article series](#)

cleanness

See "clean (design)"

climax

The most meaningful, difficult, or intense level, challenge, setpiece, or moment in a game.

[~ see article](#)

cluttered design

The opposite of clean design. Design elements or decisions that communicate obscure or ambiguous information in emergent gameplay. Cancels, simultaneous actions, high action frequency, strange emergent behavior, arbitrary limitations, static-space, and excessive complexities are all design elements that can contribute to a cluttered gameplay experience.

[~ see article series](#)

co-author (story)

[Acting] based on the player's understanding of the avatar's principles or perspective combined with their own.

[~ see article](#)

coding & decoding

A way to increase your ability to store information beyond the 7+/-2 bits by organizing the information into more meaningful chunks. This can be done by grouping data like when remembering a 10 digit phone number in 3 parts, or by using another coding system. Any coding system can work as long as it's memorable or meaningful to you.

[~ see article](#)

combat

A fight [or] struggle, as between two persons, teams, or ideas (from dictionary.com)

[~ see article series](#)

comeback mechanic

A feature "in which being behind [or disadvantaged] actually gives you [access to] an advantage." ~Sirlin. Sometimes referred to as negative feedback.

[~ see article](#)

command

A timed sequence of controller inputs. e.g. Ryu's fire ball in every Street Fighter fighting game.

[~ see article](#)

complete matrix

A matrix that works to achieve a victory of the game, set, or match played.

[~ see article](#)

complete save freedom

See "save freedom"

complete strategy

Only applies to solvable games or solvable gameplay challenges. A complete strategy is a specific plan of action that players can use to achieve 100% guaranteed success (ie. no mistakes, no guessing, and reasonable skill) without, making mistakes, or having to make a guess of any kind.

[~ see article](#)

complex (timing)

The ability to subdivide, syncopate, and execute elaborate, irregular, and layered timings.

[~ see article](#)

complexity

The rules, parameters, stats, or data of a system

[~ see article](#)

complexity hump

The minimum amount of complexities one must process in a given problem/challenge before being able to reliably visualize the correct solution/path.

[~ see article](#)

conceptual platform

One of the 3 rules of Eureka. Quoted directly from the Radiolab podcast... "At any given time both in evolution of life and in the evolution of technology, given the state of the current system there are a finite set of moves possible. You cannot invent a microwave oven in 1650. You [could] imagine one, but it is remarkably hard to imagine one [in that time]."

Another way of phrasing this idea is that there are conceptual platforms that shape the way we think and consider variables for developing innovations. We can only innovate to the next step (a leap) based on the conceptual platform we're currently on. It's impossible to leap 2 steps into future innovations. It's improbable to think that far as well.

[~ see article](#)

conceptual variation

Adding or subtracting a different elements than what was modified in the previous step.

[~ see article](#)

content (story)

The foundation of a story and the first step in the CED story analysis system. A story is nothing more than a series of events, which is really just a collection of details. These details include setting, characters, plot, complexity-simplicity, and theme.

[~ see article](#)

contingency

A factor that affects the effectiveness of shaping behavior via consequences (reinforcements or punishments). "If a consequence does not contingently (reliably, or consistently) follow the target response, its effectiveness upon the response is reduced. But if a consequence follows the response consistently after successive instances, its ability to modify the response is increased. The schedule of reinforcement, when consistent, leads to faster learning. When the schedule is variable the learning is slower." ~wikipedia

[~ see article](#)

continuous (design space)

A design space that is filled with many analog variables or many elements that differ only slightly in function from each other.

[~ see article](#)

continuous (mechanics)

A gameplay or player state that will continue without end until acted upon by an outside force, which includes player input.

[~ see article](#)

continuum (design space)

A game (series of levels/challenges) with a directed or fairly linear progression through its content. Only applies to games with continuous design spaces.

[~ see article](#)

contrary motion

The designed intent of a game element that is functionally against the intent of at least one other element. Basically, an obstacle or enemy.

[~ see article](#)

control (dexterity)

How slowly, smoothly, accurately, and precisely one can execute a motion or a series of motions. Also refers to the coordination and manipulation of individual muscles as opposed to chunking actions into large groups of muscles.

[~ see article](#)

controller feel

The feeling (mostly physical) of manipulating a controller while playing a game.

[~ see article](#)

controller input redundancy

Different inputs that are mapped to the same function or mechanic within a single control scheme.

[~ see article](#)

controller standards

A set of conditions or rules concerning controls and controller design. Can be applied to the console, system, hardware, or genre-to-genre level.

[~ see article](#)

controls

Input device hardware and the mapping of mechanics and other actions to the input device.

[~ see article](#)

co-optional level design

A type of layered level design created to offer some combination of co-op challenges, co-unter-op challenges, and solo challenges. Of course, this requires that the level design and challenge conditions remain the same for all options to qualify as being layered. Like the name implies, co-operating is optional. The more unique and distinct each layer of challenge is from each other, the stronger the co-optional design.

core dynamic

See “core gameplay dynamic.”

core gameplay dynamic

A gameplay dynamic that is key in creating most, if not a significant amount, of the gameplay challenges for a given game, challenge, or level.

~ [see article](#)

core mechanic

See “primary mechanic.”

core mechanic key

For these locks, the player's core mechanics are the keys. Just JUMP, GRAB, SHOOT, PUNCH, etc in the right place, with the right timing, or in the right way and you're in.

~ [see article](#)

corner (design space)

A somewhat abstract concept for when relatively little interactive content efficiently fill much of the vast potential of a game's design space. By designing elements that are as different as possible from each other functionally within the design space, the coverage is more efficiently well-rounded. Thus creating elements that hit these far away points, creates corners.

~ [see article](#)

counter

A forced/influenced change in the line of motion of a gameplay element by another gameplay element.

~ [see article](#)

co-unter-op design

Elements, mechanics, or systems in a co-op game that allow players to work against a teammate or against the group.

~ [see article](#)

counterpoint

In music, Counterpoint is the writing of musical lines that sound different on their own, but harmonize when played together. How the melody of a song interacts with the other lines is the focus of Counterpoint.

Counterpoint, in gaming, is a word for the layering of sets/systems of gameplay elements into a cohesive, dynamic whole. When interacting with one layer influences or changes the parameters of at least one other layer very dynamic, emergent, and variable experiences are possible. Counterpoint is an important part of the design of the Super Mario Bros. 2D platformers and a concept called “entropy.”

~ [see article](#)

crease

The point at which a level folds upon itself. See “folded level design.”

~ [see article](#)

critical-conversation

A structured debate with a lot of flexibility. Ultimately, the purpose of these debates is for gamers to better understand and inform one another. Part of the core incentive and flexibility design uses all of the principles and lessons of game design including concepts like points, upgrades, feedback, reinforcements, and fun. Also notated as “C-C.”

~ [see article](#)

curiosity

One of Steven Reiss's 16 basic desires that motivate intrinsic desires. Curiosity is the need to learn. This need is very easily stressed in video games because games create learning environments or systems because they're interactive and have goals.

~ [see article](#)

cut-scene

Non-interactive (often cinematic) moments in a gameplay experience. These scenes can convey a game's backstory, fiction, or convey any kind of information. Cut-scenes can even be scripted out of real-time gameplay. (Half-Real, chapter 3. with modifications by Richard Terrell (KirbyKid))

Cut-scenes are controversial in that they are non-playable parts of a game, but they have also been defended for providing context for the playing of the game (Klevjer 2002).

[~ see A Dictionary of Video Game Theory](#)

cycle

The decay and refilling of a virtual resource in actual gameplay. When this cycle is made possible completely using concrete space (2D/3D) and organic interactions, the cycle can be described as "organic."

[~ see article](#)

D

dead zone

A programmed zone positioned around the neutral state of an analog stick that does not activate a response from the game system. Dead zones are possible with non-analog stick input devices as well like the Wiimote or Kinect.

[~ see article](#)

decay (dynamic)

The diminishing effectiveness or potential of a gameplay element or mechanic.

decay counter

In games featuring mechanics with limited resources, counters of decay are possible. Whether you put an opposing element/player in a situation that influences them to use a limited resource, or you force them to use a limited resource, the idea is that by doing this enough the opponent's resources will run out and their strategies that rely on the decayed resource will no longer be a viable option.

[~ see article](#)

decel (timing)

Short for deceleration. The ability to execute static or complex timings through a steady decrease of tempo.

[~ see article](#)

deep

The term "deep" only applies to games with many back and forth counters. Put another way, the gameplay must sustain many pushes and pulls between the opposing side (generally where each side tries to achieve

victory). Any other use of "deep" to describe an interplay system of a game must be explained explicitly. See "back and forth counters."

The following definition describes the use of the term "deep" as it is commonly used for competitive multiplayer games. It is not a sufficient definition for gameplay analysis.

A multiplayer game is deep if it is still strategically interesting to play after expert players have studied and practiced it for years, decades, or centuries. --Sirlin, January 2002

[~ see article](#)

defensive (playstyle)

Playing defensively can involve anything from blocking a lot, moving back, jumping away, running away, hiding, reacting to the opponent's moves/tempo, or playing in such a way that appears to be vulnerable but is actually in the perfect position to counter attack.

[~ see article](#)

degenerate strategy

According to Salen & Zimmerman (2004, p.271), "A degenerate strategy is a way of playing a game that takes advantage of a weakness in the game design, so that the play strategy guarantees success."

[~ see A Dictionary of Video Game Theory](#)

depth

See "interplay."

design space

"Design space is best described as the canvas that the designer can paint on."
~Damion Schubert

A way of organizing and understanding the range of content and potential content (typically interactive) in a game. It takes into account a game's primary function(s), mechanic(s), core dynamic(s), and fiction.

[~ see article](#)

design-space-time continuum

Games with a design-space-time continuum force players to start at one part of the continuous design space and slowly work

their way through the content via smooth, difficult to discern increments.

[~ see article](#)

dexterity (skill)

The skill of action. Writing. Running. Jumping. Etc. One of the 5 main types of skill. The facets or subcategories include speed, control, harmony, efficiency, stamina, and power.

[~ see article](#)

difficulty

How challenging a task, action, or solution to reach a goal is. Games can be challenging in a variety of ways. Typically, we measure and discuss challenge in terms of objective skill using the DKART system.

digital truth

Phenomena of our universe that can be wholly captured in computer code. For such phenomena incorporating them into a video game is not an abstraction.

[~ see article](#)

diminishing trend (variation)

An obsolete term previously used to describe a trend in variation where gameplay challenges become easier. It's much more clear to simply state the kind of trends you find instead of concerning yourself with terms such as this.

[~ see article](#)

direct (mechanics)

A measure of how the changes in the method of input are paralleled with an in game action according to the form and fiction of the mechanic.

[~ see article](#)

director (story)

[Acting] based on the perceived expectations of the developers or authors.

[~ see article](#)

discourse (story)

How a story compares to every other work, event, and concept in the world. Topics include creativity, series, and transmediality.

[~ see article](#)

distinct section (variation)

Breaking down gameplay challenges, levels, or events into arbitrary sections when no

clear system is given. We tend to break things down by individual gameplay ideas, which we intuit from direct experience.

[~ see article](#)

DKART system

DKART is an acronym for the 5 core types of skill: dexterity, knowledge, adaptation, reflex, and timing.

As a pun on René Descartes' "Cognito ergo sum/I think, therefore I am," the DKART system is rooted in the fundamental concept of video gaming. Being a uniquely interactive medium, players have the power to influence the game state, presentation, or art form. This act of influencing is our agency. To act we must use some facet or combination of our skills. Therefore, we can express the idea of selfhood or agency in a virtual environment as, "I DKART, therefore I am."

[~ see article](#)

dominant strategy

Strategy that is always better than all other strategies. Dominant strategies are generally considered flaws in a game design.

[~ see A Dictionary of Video Game Theory](#)

double blind encounters

A double blind encounter is when both (or all) players take action simultaneously (or nearly so) like when throwing hands in RPS. Can occur in real-time gameplay. Is most clear with turn-based gameplay like the Pokémon battle system.

[~ see article](#)

double blind mixup

Influencing the opponent to make a mistake through a double blind encounter. Because both you and your opponent(s) must make a decision simultaneously, there is no opportunity for either party to react and choose the best option. Therefore, the situation is ripe for a wrong guess on your opponent's part. Think Rock Paper Scissors. A double blind mixup doesn't necessarily have to put all parties at risk. The situation can still be very one sided.

[~ see article](#)

double layered reading

Instead of simply trying a move or a combination, failing, and trying another combination (repeating this process until a solution is reached), double layered reading involves reading non-solutions to give you significant insight to the real solution(s). By reading non-solutions, or failed attempts to solve puzzles, it's possible to cut down on the amount of trial-and-error. It can also help circumvent the "complexity hump" by resetting the point where the player branches off of to create "trial-and-error trees."

[~ see article](#)

double-tapping

When players who don't know the exact timing window for an action increase their chances of success by inputting the input (generally a button) multiple times quickly in succession. If the first input is too early, the second one might do the trick. Some also triple-tap. However, anything beyond this level is impractical because the timing window would be much more lenient in the first place or the player has a very poor sense of timing.

[~ see article](#)

double translation

A term that describes how tier.2 adaptation is significantly more complex than tier.1 adaptation. For tier.1 you only have to consider the challenge/context and the skill being used. That's two factors. But with tier.2, you have to consider the context and 2 skills being used. With 3 total factors to consider, there are more elements that influence each other to take into account.

[~ see article](#)

dynamic (mechanics)

An measure of how a mechanic (player action) affects the various elements, systems, or properties in a game. According to the form of the game world and the mechanic, does the world react as expected? Are the effects of the mechanic special cases or do the resulting actions continue to effect the game world?

[~ see article](#)

dynamic encounter

A simple and somewhat obsolete term that describes dynamic, emergent gameplay. Typically used in to describe gameplay

featuring interplay loops and how the flow of these loops is determined by many different gameplay factors.

[~ see article](#)

dynamic visual acuity (reflex)

The ability to clearly track moving objects. A facet or subcategory of reflex skill.

[~ see article](#)

E

early attacks

See "meaty attacks."

efficiency (dexterity)

A facet or subcategory of dexterity skill. How few muscles, motions, and how little strength one can use without sacrificing the other facets of dexterity. This facet is determined by the minimum dexterity level required to successfully execute a target motion.

[~ see article](#)

effort

See "agency."

When playing a game that is not purely random, a player exerts effort in order to influence the outcome of the game.

[~ see A Dictionary of Video Game Theory](#)

either/or variables of change

See "binary variables."

elegant solution

Any solution to a challenge with multiple solutions that is also one of the most efficient, effective, or easiest solutions to execute.

[~ see article](#)

elements

A general term for any part of a videogame. Includes, characters, cursors, avatars, HUD, stage components, enemies, bullets, sound effects, music, etc.

[~ see article](#)

elemental variation

See "conceptual variation."

emergence (gameplay)

In the simplest definition, emergence is gameplay in non linear games. Emergence is the result of gameplay rules that govern (not absolutely dictate) many possible outcomes.

Often times, emergent cases are thought of as ones that the player uniquely and personally creates or cases that the designer(s) don't anticipate. This view is problematic. After all, the emergent possibilities of most games far exceed count. The more complexities (rules) in a game and the more dynamic their interactions the more possibilities are possible. Therefore, any one possibility out of many is an emergent possibility. Just because a designer doesn't anticipate one possibility doesn't make it more special than any other possible outcome.

[~ see article](#)

emergent dynamic

Gameplay dynamics created from the freedom of play and the limitations and player choices/strategies. These dynamics are not hard coded into the basic rules of the game. Rather, they're the combination of rules and other core gameplay dynamics.

[~ see example](#)

emergent structure

the design layers that allow for a few rules to come together in "unexpected" ways.

endless mode (puzzle)

This mode is like challenge mode except that the level arrangements/challenges are randomly generated. Every time you play, the level is different. Keep in mind endless mode doesn't mean you play until you lose. Rather, compared to the very limited replayability of puzzle mode, endless mode has endless replayability.

[~ see article](#)

engaging

When a player uses the DKART skills in response to a game's presentation, rules, or system. The more types and sub-types of skill the player uses, the more engaging the experience. Relating emotionally to an

experience is the result of relating to its concepts (ie. using Knowledge skills)

[~ see article](#)

entropy

The potential for emergent gameplay to significantly increase in difficulty and complexity due to gameplay actions. Typically the snowballing domino effect of entropy is started by player actions.

[~ see article](#)

ergonomics

"The study of designing equipment and devices that fit the human body, its movements, and its cognitive abilities."
~wikipedia

[~ see article](#)

error

Input device terminology. Error is random variability.

[~ see article](#)

execution (story)

How the content of a story is presented. Execution includes concepts of efficiency, coherence, pacing, style/language, medium, and dynamics.

[~ see article](#)

expanded gameplay idea

An obsolete term originally designed to categorize gameplay challenges and systems based on required player action. If the challenge requires players to combine primary and secondary mechanics then the idea is consider expanded

[~ see article](#)

exploit

"...a case where a player knowingly uses a flaw in a game to gain an unfair advantage. In many concrete cases, it can be difficult to distinguish between cheats, exploits, and players who optimize their strategies for playing."

[~ see A Dictionary of Video Game Theory](#)

external (timing)

Having a sense of external timing involves using visual, auditory, or touch sensory inputs to time actions. This mostly involves extrapolating the timing of moving visual elements. Examples include anticipating the collision of two objects moving at a constant

speed or anticipating when an object will hit the ground when falling due to gravity. A facet or subcategory of timing skill.

[~ see article](#)

extinction

“The lack of any consequence following a behavior. When a behavior is inconsequential (i.e., producing neither favorable nor unfavorable consequences) it will occur with less frequency. When a previously reinforced behavior is no longer reinforced with either positive or negative reinforcement, it leads to a decline in that behavior.” ~wikipedia

[~ see article](#)

extrinsic motivation

“Motivation that comes from outside of the individual. Common extrinsic motivations are rewards like money and grades, coercion and the threat of punishment. Competition is in general extrinsic because it encourages the performer to win and beat others, not to enjoy the intrinsic rewards of the activity. A crowd cheering on the individual and trophies are also extrinsic incentives.” ~wikipedia

[~ see article](#)

eye movement (reflex)

The ability to rapidly switch focus between targets. A facet or subcategory of reflex skill..

[~ see article](#)

F

fail-safes

See “self-balancing forces.”

fairness

“Players of equal skill have an equal chance at winning even though they might start the game with different sets of options / moves / characters / resources / etc.” Sirlin.net

[~ see article](#)

feminist criticism

Like Marxist criticism, the most successful Feminist critique of a game involves analyzing how the range of player functions

that affect female characters directly or indirectly reveal the operations of patriarchy. When the player is encouraged or forced to play in a way that depicts men as strong, rational, protective and women as weak, emotional, submissive, and nurturing, then the game can be said to support and reinforce patriarchal genders roles and ideologies. Patriarchal values work to oppress women, and all feminist theory and criticism works to promote women’s equality. A Feminist analysis can become more complex when finding examples of actions toward women if a game doesn’t feature any women or the game allows for limited interaction with women. Writing essays about such games often leads to finding evidence by absence. In other words, a Feminist critic’s central piece of evidence may be what can’t be done to women instead of what can.

finger gymnastics

The complex, technical, and dexterous effort of inputting or manipulating a gaming controller. This term has a negative tone.

first run's best one

See “beginner's luck.”

flow

flow zone. The concept of flow (Csikszentmihalyi 1990) describes an optimal mental state where a person is [completely] occupied with a task that matches the person's skills, being neither too hard (leading to anxiety) or easy (leading to boredom). Flow has seven traits:

- 1) A challenging Activity That Requires Skills
- 2) The Merging of Action and Awareness
- 3) Clear Goals and Feedback
- 4) Concentration on the Task at Hand
- 5) The Paradox of Control
- 6) The loss of Self-Consciousness
- 7)The Transformation of Time

[~ see A Dictionary of Video Game Theory](#)

fog of war

In a game like Star Craft or Advance Wars, fog of war is a shadowy veil that obscures vision of units or other activity. You can see the terrain through this veil.

[~ see article](#)

folded level design

Level design that reuses a space with the second use containing an extra layer to the gameplay challenge/experience that builds on the skills and experiences established in the first layer. A basic type of folded level is a fetch quest where going and obtaining the item is one kind of challenge, then returning the same way you came is more difficult because you have the item.

[~ see article](#)

folding moves

When two or more moves are strung together in a sequence that increases the effectiveness of the later move(s), then these moves are considered to be folded.

[~ see article](#)

form fits function

Form fits function is a powerful game design principle used in many of Nintendo's greatest games. Using familiar, intuitive visuals, games can use their form to communicate key information to the player about how the interactions will play out (function). If there is a ball resting on a tee and the player avatar has a golf club in its hands, you instantly get an idea of what kinds of interactions and function will play out in this scenario.

FPSHuffle

An emergent behavioral occurrence where two players in a first or 3rd person shooter dance back and forth shooting at each other yet both failing to effectively do damage or kill one another. Some of the factors that help facilitate this dance are a lack of player skill, high maneuverability, weak weapons, high health, excessive cover, etc.

[~ see article](#)

frame

"Frame rate, or frame frequency, is the frequency (rate) at which an imaging device produces unique consecutive images called frames." ~ wiki

Furthermore, for video games, the image is refreshed every frame and the game conditions are checked every frame. In a 60 FPS game, there are no computer calculations or "thinking" happening between frames.

frame trap

Timing your actions against an opponent very precisely to bait them into reacting and thus putting themselves at a disadvantage (usually because of the start up frames from their attacks). Typically the baiting gap, the opponent's action, and the start of your counter action all occur within a few frames (1-10).

[~ see article](#)

freestyle

To play a video game primarily using tactics or actions of self expression rather than using strategy or a playing to win attitude. To explain it using the DKART system, freestyling involves little LTM and analyze knowledge skills and relies mainly on STM, MM, reflex, Tier.1 adaptation, and dexterity skills. Freestyling is the opposite of playing with a strategy.

[~ see article](#)

fun

Whatever you are willing to do or subject yourself to free of coercion. This is a very simple yet immensely practical definition of "fun" that allows us to clearly tell if someone is having fun or not by observing their behavior.

[~ see article](#)

While fun is an elusive concept, the most popular school of thought claims that video game fun comes primarily from the enjoyment of problem solving.

--Sid Meier claims that "A [good] game is a series of interesting choices" (Rollings & Morris 2000, p. 38).

--Koster (2005) claims that fun arises from trying to understand the pattern of a game.

--The idea of fun as a result of problem solving is also present in the concepts of interesting choices and aesthetic index.

A second school of thought describes video games as a combination of a number of different types of fun, where different games emphasize different types of fun.

--Hunicke, LeBlanc, and Zubek (2004) list 8 types of fun: Sensation, Fantasy, Narrative, Challenge, Fellowship, Discovery, Expression, and Submission.

--Gameau (2001) list 14 forms of fun: Beauty, Immersion, Intellectual Problem Solving, Competition, Social Interaction, Comedy, Thrill of Danger, Physical Activity, Love, Creation, Power, Discovery, Advancement and Completion, Application of an Ability.

--Concerning game design, Shelley (2001) emphasizes that "The Player Should Have the Fun, Not the Designer, Programmer, or Computer".

[~ see A Dictionary of Video Game Theory](#)

functional blind spot

A space in a video game relative to the player that is difficult to interact with due to a combination of the player's mechanics and the level design (arrangement of level and enemy elements). Sometimes notated f(x) blind spot or f(x)bs.

[~ see article](#)

function creates form

When game mechanics or ergonomics inspire, shape, and define the creation of the fictional (mostly non-interactive) parts of a game. e.g. story, setting, premise, characters, music, audio.

[~ see essay](#)

funomaly

A humorous term that is the product of the words fun + anomaly. Applies to people, notions, and cases of fun (real or theoretical) that operate under any number of fun fallacies. More so, it's not that these examples are impossible. It's that they are so rare, they should be consider anomalies.

[~ see article series](#)

G

gambit

Highly risky strategies. Generally, the riskier the gambit, the bigger advantage the player will gain if successful.

[~ see article](#)

game

Half-Real, chapter 2: "A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome... and the consequences of the activity are optional and negotiable."

[~ see A Dictionary of Video Game Theory](#)

game design

According to Salen & Zimmerman: "The focus of a game designer is designing game play, conceiving and designing rules and structures that result in an experience for players." (2004, p.1)

[~ see A Dictionary of Video Game Theory](#)

game idea

The theme, concept, direction, or idea that governs and is communicated through the design of a challenge, distinct section, level, etc.

[~ see article](#)

gameplay

"A game's gameplay is the degree and nature of the interactivity that the game includes, i.e., how the player is able to interact with the game-world and how that game-world reacts to the choices the player makes." (Rouse 2001, xviii) Gameplay can be seen as independent of graphics or fiction, but fiction plays a large role in helping players understand the game. (Half-Real, chapter 5.)

[~ see A Dictionary of Video Game Theory](#)

gameplay dynamic

A system where one action has a range of influences on other gameplay elements, features, or challenges.

[~ see article](#)

gameplay idea

The theme, concept, direction, or idea that governs and is communicated through the gameplay of a challenge, distinct section, level, etc.

[~ see article](#)

game state

A game can be seen as a state machine, a system that at any time is in a given state, and which has laws for how it will react to a given input. In a board game, the state of the game is stored in pieces on the board. In a video game, the state of the game is kept in the RAM of the computer.

~ see [A Dictionary of Video Game Theory](#)

gimmick

"A sometimes hidden innovation intended to attract attention and increase the unique value of a product or work." ~dictionary.com

goal

What the player of a game has to strive for. A goal is an assignment of value to the possible outcomes of a game. The goal refers to the game as an activity, not to the game as an object. (Half-Real, chapter 2.) Additionally, some games enforce goals, while other games have optional goals. (Juul 2006)

~ see [A Dictionary of Video Game Theory](#)

goal-setting theory

Based on the notion that individuals sometimes have a drive to reach a clearly defined end state. Often, this end state is a reward in itself. A goal's efficiency is affected by three features: proximity, difficulty and specificity. The enhancement of performance through goals requires feedback. Goal setting and feedback go hand in hand. Without feedback, goal setting is not likely to be effective." ~wikipedia

~ see [article](#)

griefing (playstyle)

"A griefer is a player who plays a multiplayer video game to irritate and harass other players, rather than in pursuit of game objectives." wiki

~ see [article](#)

grouped (mechanics)

A mechanic that shares the same input as another mechanic for a particular game mode, level, or challenge. The opposite of individual mechanics.

A mechanic is grouped if...

...it's possible for its input (button press) to result in at least one other simultaneous mechanic if the mechanics can be executed independently. (Mario's RUN/SHOOT fire ball)

...the mechanic requires a command, which is a timed sequence of controller inputs, and this command does not force a change in the interactive gameplay state. (all special moves in Street Fighter 4)

...it can be executed with a combination of buttons that are mapped to one or more other mechanics. (Street Fighter 4's two button grabs).

...the same input can result in one of two or more different mechanics depending on the context, and the context is determined by gameplay factors outside of the player's control (e.g. NPCs, proximity to items/level elements, other players). This context does not change the player/character state.

~ see [article](#)
~ see [article2](#)
~ see [article3](#)

gun-to-hand

A type of combat where one party must use melee or hand-to-hand attacks against an opponent who uses ranged projectiles.

~ see [article](#)

H

hand-to-hand (combat)

Close range melee combat between to characters/bodies.

~ see [article](#)

harmony (dexterity)

How the execution of one muscle motion affects the execution of another muscle motion. The more negatively resulting motions are affected, the less harmony one has.

~ see [article](#)

harmony (story)

See "resonance."

hit pause

The distinct pause in the game or localized action due to a particular interaction of game elements.

~ [see article](#)

hit spark

A graphic or visual effect that helps players see exactly where two hitboxes meet. Collisions can occur in the blink of an eye, so sparks mark the point of collision and linger briefly.

~ [see article](#)

human dynamic

Dynamics that only come into play in multiplayer gameplay. Also see “team skill.”

~ [see article](#)

hybrid game

Two wholly different types of gameplay challenges (most likely from two different genres) designed to be played at the same time or alternately in a gameplay challenge.

~ [see article](#)

**immediacy**

A factor that affects the effectiveness of shaping behavior via consequences (reinforcements or punishments). After a response, how immediately a consequence is then felt determines the effectiveness of the consequence. More immediate feedback will be more effective than less immediate feedback.

~ [see article](#)

individual (mechanics)

The simplest definition is when a mechanic is mapped to an input device (usually button) that is not mapped to any other mechanic or function.

~ [see article](#)

~ [see article2](#)

information reduction

The process where user improves performance at a task by learning to ignore

irrelevant information (Haider & Frensch 1996).

In video games, related to the tendency of players to ignore fiction in some games. (Half-Real, chapter 4.) See Retaux & Rouchier (2002).

~ [see A Dictionary of Video Game Theory](#)

information warfare

Gameplay challenges that involve fighting for information or fighting to restrict information from your opponent(s) when the information is necessary for making key, strategic decisions. See “fog of war.”

~ [see article](#)

inorganic (level) design

Inorganic design is very similar to abstract design. Abstract mechanics often influence level design that diverges from organic/concrete forms, mechanics, and gameplay. The main difference between inorganic and abstract design is that inorganic design is made up of concrete, organic game elements. However, it's the arrangement of these elements that work against the fiction and established norms of the game.

~ [see article](#)

interactive

Actually executing actions (dexterity) that the game system recognizes and responds to. Can be measured by action per unit time (APM) or in any other manner.

~ [see article](#)

interesting choices

According to Sid Meier, a [good] game is a series of interesting choices. In an interesting choice, no single option is clearly better than the other options, the options are not equally attractive, and the player must be able to make an informed choice. (Rollings & Morris 2000, p. 38.)

~ [see article series](#)

~ [see A Dictionary of Video Game Theory](#)

internal (timing)

The ability to accurately execute on a range of timings using a mental sense of timing. Whether you keep track of time in seconds, beats, or with audio memory, the more

accurate you are at keeping time in your head the more internal timing you have.

~ [see article](#)

internal energy

The motion and the direction of the brain as it receives, processes, and stores data in response to a odd, irresolvable stimuli. For example, optical illusions, literary ambiguity, and puns all have some kind of internal energy.

~ [see article](#)

interplay

Counters or the continual chain of back and forth counters between any two gameplay elements. The essence of gameplay.

~ [see article](#)

~ [see article 2](#)

interplay barrier

A level of play or a counter strategy that one player can force another to embrace or else suffer a significant disadvantage. In other words, a highly effective counter strategy.

~ [see article](#)

interposition

A monocular depth perception technique. When one object blocks another by existing in front or on top of it.

~ [see article](#)

intrinsic motivation

“Refers to motivation that is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on any external pressure. Intrinsic motivation has been studied by social and educational psychologists since the early 1970s. Research has found that it is usually associated with high educational achievement and enjoyment by students. Students are likely to be intrinsically motivated if they:

[1] attribute their educational results to internal factors that they can control (e.g. the amount of effort they put in).

[2] believe they can be effective agents in reaching desired goals (i.e. the results are not determined by luck).

[3] are interested in mastering a topic, rather than just rote-learning to achieve good grades.” ~wikipedia

~ [see article](#)

intuition gap

Any lack of knowledge or understanding created by any learning method. A blind spot for the mind. Occurs frequently from trial-and-error learning methods. ~ [see article](#)

intuitive (mechanics)

A measure of the degree to which a mechanic functions according to universal, common, or learned expectations. The more familiar the mechanic, the more intuitive it is. Intuitive design is a great way to lower initial learning barriers.

~ [see article](#)

inward innovation

Looks at existing conventions and redesigns them for the purpose of making elements more intuitive, dynamic, analog, organic, or engaging.

~ [see article](#)

izanagi memory

The rare and involuntary act of memorizing a piece/string of data (large or small) instantly. Techniques to induce izanagi memory are temporary or hard to repeat because one's mind can learn that you're trying to "trick" it into learning. Named after a similarly powerful and somewhat limited technique from Naruto.

~ [see article](#)

J-K

key

Any element or system that can be used to open a lock.

~ [see article](#)

knowledge (skill)

One of the 5 DKART skills that includes the facets or subcategories of LTM (long-term memory), STM (short-term memory), MM (muscle memory), code & decode, analyze, and channels.

[~ see article](#)

knowledge base

A general term for all information pertaining to a game including everything from the interactive to non interactive elements. Includes a game's complexity and metgame.

[~ see article](#)



law of frames

A video game can only be played or interacted with to a degree equivalent to its frame rate (fps). In other words, time and space are not infinitely divisible in a virtual world. The frame is the quantified measure of existence and therefore interactivity for game elements. This law mostly applies to simple, singular game systems as opposed to networked system with multiple coordinated CPUs.

[~ see article](#)

layered level design

When a single level, section, or area of a level is designed to facilitate different challenges (some optional). Keep in mind that having different versions of the level or altering it after the start to create different challenges doesn't count as layered. All the layers must exist together and be accessible to each other.

learner (playstyle)

See "R&D (playstyle)."

learner's mixup

When a player makes a mistake based on a false assumption or any other quirk from their learning process.

[~ see article](#)

learning barrier

See "skill barrier."

level design

The design of a interactive game challenge with a distinct goal, which includes the arrangement of environmental objects, enemies, the sequence of enemy spawns, and any other interactive elements.

Level design can also refer to the physical layout of a game (the environment).

linear lock

These locks are hard coded to only open after a single key is used in a specific way. Just try getting into the key hole in Super Mario World without the Key.

[~ see article](#)

linear perspective

A monocular depth perception technique. Parallel lines seemingly converging at the horizon.

[~ see article](#)

linear variation

Adding or subtracting a single game element or by a fixed group of elements. e.g. Level 1 has 1 enemy. Level 2 has 2 enemies. Level 3 has 3 enemies. And so on.

[~ see article](#)

line of motion

The functional intent, potential, or action of a gameplay element. For games with spatial core gameplay dynamics, the line of motion can often be expressed as an arrow line. Since most games feature space (2D or 3D) as a core gameplay dynamic, it is convenient and illustrative to think of function in this way.

[~ see article](#)

lobbying

When a player intentionally puts him/herself into a disadvantaged situation in a free-for-all match in attempt to help another non teammate player gain an advantage. All of this is generally done to eventually come out on top. For example, when a player allows a losing player to kill him/her to avoid letting the lead player get the points.

[~ see article](#)

loci, emotion, and repetition

Various coding systems for building long term memory.

[~ see article](#)

lock

Any object/system that restricts or redirects player progression or access. All locks must be able to be opened with a key. Locks can

be in a locked, temporarily unlocked, or permanently unlocked state.

[~ see article](#)

lone wolf (playstyle)

A player who refuses to work with teammates or follow any team strategies. Such a player plays his/her own way as if playing a single player/non team based game.

[~ see article](#)

long term memory (LTM)

Memory that can last as little as a few days or as long as decades. It differs structurally and functionally from working memory or short-term memory, which ostensibly stores items for only around 18 seconds (Peterson and Peterson, 1959). -wikipedia

[~ see article](#)

look-alike mixup

Influencing a player to make a mistake because two or more attacks, moves, or game elements look identical to each other but act very differently.

[~ see article](#)

LTM

see "long term memory."

ludonarrative dissonance

When the coherency of the gameplay and story content in a video game contradict each other.

[~ see article](#)

M

main path

The most common, guided, "safe," easiest, developer intended course through a game.

[~ see article](#)

manual buffering

Controlling the window of execution for a mechanic typically through some kind of extended analog controller input.

[~ see article](#)

marxist criticism

Like Psychoanalytic criticism, Marxist criticism can seemingly critique a game by looking solely at its fiction. However, both of these critical modes, in relation to videogames, achieve a deeper, more profound level of analysis when the elements of interactivity between the game and player are taken into consideration. Many Marxist critics of literature believe that film, literature, art, music, and other forms of entertainment such as videogames are the primary bearers of cultural ideologies. While we're being entertained by these medias, our defenses are lowered making us all the more susceptible to ideological programming. A Marxist critic of videogames looks for how a game supports or condemns capitalist, imperialist, or classist values. Perhaps the best and most obvious place to look in games is the role and function of money. Some games represent money with U.S. dollars or some other form of real world currency. Others use fictional currency from bell, to gil, to star bits, or even points. What the player can purchase, how these items or services function, and how the money circulates within the game world all become important areas of analysis.

[~ see essay](#)

[~ see example](#)

matrix

A Matrix is a specific kind of strategy that continually reduces the opponent's viable options until all of the opponent's choices are either completely locked out or can be countered without the aggressor needing to enter double blind encounters.

[~ see article](#)

meaty attacks

As known as "early attacks." Executing an action aiming for the middle or tail end of the action to "hit" the desired target. Typically done to gain frame advantage.

[~ see article](#)

mechanic (gameplay)

Player initiated actions from controller inputs as designated by the game designers. These actions have effects on the gamestate in terms of the variables and dynamics of the gameplay system.

[~ see article](#)

The hardware and software combination of gameplay actions

[~ see article](#)

mechanical balancing framework

A list of positive and negative properties that any mechanic within a set can have based on the primary function(s), core dynamic(s), and the most common type of counter in a game system.

[~ see article](#)

mechanical balancing formula

The general formula or rule of thumb when designing moves according to the mechanical balancing framework. For example, for every positive property a move also needs to have a negative property.

[~ see article](#)

memory span

A measure of the amount of information or "bits" of data that one can store in their short term memory. Depending on the type of data, this number can go up or down. Some think the magic number is 7 give or take 2 bits.

[~ see article](#)

mental channels

The ability to take in multiple distinct streams of data or maintain separate simultaneously trains of thought.

[~ see article](#)

[~ see article2](#)

metagame

The evolution of strategies and trends that mainly revolve around counters and interplay barriers.

"A broad term usually used to define any strategy, action or method used in a game which transcends a prescribed ruleset, uses external factors to affect the game, or goes beyond the supposed limits or environment set by the game. Another definition refers to the game universe outside of the game itself. In simple terms, using out-of-game information, or resources, to affect one's in-game decisions" ~wikipedia

[~ see article](#)

meta man/gamer (playstyle)

Playing in this style requires strategizing outside of the game at hand. Some methods are completely fair and ingenious. Others not so much. Examples include listening to

the sound of opponents controllers to anticipate their actions. Sitting in the only spot available that's outside of the glare of the sun at your assigned station. Claiming that you don't know where your opponent is even though you know that he/she went to the bathroom in hopes that they'll be disqualified. Spreading the word about how to counter your techniques that actually makes opponents more susceptible to your tricks. And pulling out your opponent's controller cord.

[~ see article](#)

mind game

A general term for influencing a human opponent to make mistakes typically by paying attention to their expectations to make informed decisions. Includes mixups as well as anything outside of the game rules, mechanics, and interactions. In other words, mixups are a subset of mind games.

A term for setting up and executing mixups on human players. Like Yomi (reading the mind of your opponents), winning successive mixups involves repeatedly guessing correctly. With enough successful guesses, one player may appear to be reading their opponent's mind. By feeding the opponent information through baits and patterns, it's possible to significantly influence an opponent's thoughts and actions.

[~ see article](#)

[~ see article2](#)

mini loop

A loop of interplay that's contained entirely inside of an point or branch in a larger more dominant loop of interplay for a game system.

[~ see article](#)

minimum difference

The smallest degree of change needed for a change to be significant for a particular mechanic. Also known as "minimum degree of difference." This is an arbitrary amount that should be stated up front in any discussion of a game's variation.

[~ see article](#)

misplaced memory phenomenon

The occurrence of drawing a blank when trying to access information while still in the

process of learning/memorizing it. When information is being coded/decoded it is neither in one's STM or LTM, hence the feeling of misplacing memories.

[~ see article](#)

mixed-generational design

When a game contains design elements from at least two different generations of design conventions or trends that conflict with each other in some way.

mixup

A general term used to describe the effort of influencing a player to make a mistake through game mechanics.

[~ see article](#)

MM

See "muscle memory."

mob consciousness

The collective will of a group of free-for-all players. Also called "mob mentality."

[~ see article](#)

mob mentality

See "mob consciousness."

momentary vision (reflex)

The ability to instantly identify objects that come into your vision. A sub-facet of reflex skill.

[~ see article](#)

momentum

See "entropy."

monocular depth perceiving techniques

A collection of techniques humans commonly use to judge depth and the distances of elements in 3D space. These techniques do not rely on analyzing the difference between two offset eyes (binocular). There are 6 techniques total: "linear perspective," "interposition," "shadows," "texture gradient," "motion parallax," and "size constancy."

[~ see article](#)

motion controls

Input devices that use at least one of the following technologies designed to sense motion and position: linear accelerometers, gyroscopic sensors, rotation sensors, rate sensors, and magnetometers.

[~ see article](#)

motional parallax

A monocular depth perception technique. Perceiving how objects at different distances move past your view at different speeds when moving.

[~ see article](#)

multi-element whole

A somewhat obsolete and convoluted term to describe emergent gameplay.

multi-fold level design

A level that is designed with multiple layers and creases that fold onto each other more than once.

[~ see article](#)

multi loop

A game system that has multiple interplay loops that each govern, more or less, the dominant mechanics and interactions of a game.

[~ see article](#)

multiple goals

Not the same as gameplay challenge sustaining multiple options, tactics, strategies, gambits, or paths to achieve victory. Instead, a gameplay challenge with multiple goals (multiple ways to win) is one where victory is achieved absolutely by reaching any one of the multiple goals. This design makes it hard to evaluate gameplay actions and strategies because each goal can offer a completely different context for what makes an action or strategy advantageous or disadvantageous.

[~ see article](#)

muscle memory

Also known as motor learning... a form of procedural memory that involves consolidating a specific motor task into memory through repetition. When a movement is repeated over time, a long-term muscle memory is created for that task; eventually allowing it to be performed without conscious effort. ~wikipedia

[~ see article](#)

N

narrative bullet

An example of ludonarrative dissonance typically used to describe violent actions. For example, in gameplay, if the violence is more cartoon-like allowing characters to sustain multiple hits that would otherwise be extremely deadly or crippling, during a narrative sequence, like a cut scene, the style shifts seemingly for the purpose of advancing the plot. Suddenly the same bullets you could take many hits from with no problem kill instantly.

narratology

The study of storytelling. Also: The study of games as story systems (for example, Murray 1997). See Chatman 1978.

~ [see A Dictionary of Video Game Theory](#)

natural counter

A natural counter is created from the limitations of time or space. This counter includes everything from dodging out of the way of an attack, taking advantage of "laggy" animations, to positioning elements in such a way as to prevent immediate retaliation. For games designed around spaces 2D or 3D, natural counters are almost always the most prevalent, inherent, and dynamic type of counter.

~ [see article](#)

natural dynamics

Gameplay dynamics of space or time and sometimes decay. Also known as "organic dynamics."

~ [see article](#)

negative edge

An aspect of mechanics and controls design. When a mechanic is designed to activate when a button is pressed and when the same button is released.

~ [see article](#)

negative feedback

The obsolete and somewhat confusing term for "comeback mechanics."

negative space

In game design, the obsolete term for what is now called static space.

In art, "Negative space... is the space around and between the subject(s) of an image. Negative space may be most evident when the space around a subject, and not the subject itself, forms an interesting or artistically relevant shape, and such space is occasionally used to artistic effect as the "real" subject of an image. The use of negative space is a key element of artistic composition. The Japanese word "ma" is sometimes used for this concept, for example in garden design" ~wikipedia

~ [see article](#)

new classical criticism

New Classical criticism focuses on identifying a game's primary function/action that sums up all of the player's actions, functions, and abilities into a single mode of expression. This expression can be thought of as the interpretation of the game or what the gamer is actually doing when he/she plays. Sometimes the primary function can be encapsulated in a single word. For example, the primary function of the Super Mario platforming series is "jump".

After the primary function is identified, the New Classical critic then looks at a game's formal elements to analyze how they promote the primary function. The formal elements include Sound, Music, Art style, Story, Graphics, level design, enemies, etc. Because the New Classical critic privileges interactivity over passivity (especially when focused into a limited number of rules and actions), such a critic is only concerned with how these elements shape the gameplay experience, and assumes that any formal element in a game is only meaningful when it supports the primary function and exists in a lower state of priority to that function. In other words, elements like story can't be more stressed and more important to a game than the gameplay.

~ [see essay](#)

~ [see essay 2](#)

non-individual (mechanic)

See "grouped mechanics."

non objective (playstyle)

A player that's not in it to win it, lose it, or to experiment.

~ [see article](#)

nonre

Pronounced [non-ruh]. A term to describe a poor, inaccurate, misnomer of a genre classification. Example. The Super Smash Brothers series doesn't belong in the party genre. It's a fighting game.

Also, a new genre of video game for a game that appears to be of one genre because of its visual presentation and gameplay mechanics, but eventually emerges into a completely different genre. For example, a kart racing game that, when played at a high level, emerges to be a turn based strategy game.

nuance

Any effect, property, or detail of a gameplay element that is not mandatory or obvious. Typically, if understanding and using a property is mandatory for progression, then the property is far more likely to be obvious. It's the optional, or non-required, properties that are less likely to be used, framed in context to the gameplay, and therefore learned. So if power is defined by beating a game, it's mandatory goals/challenges define the scale of power. This is why an optional, nuanced property can be difficult to place on this power-value-scale.

Depending on the set of challenges you wish to group, a given property can be more or less nuanced. For single player games, it's common to consider the entire game.

~ [see article](#)

~ [see article 2](#)



obsessed (playstyle)

See "specialist (playstyle)."

obstacle

A general term for any gameplay challenge that the player can only overcome by using mechanics.

~ [see article](#)

one true style (playstyle)

Having the one true style is a lot like being Superman (I imagine). You have so many powers and abilities that you can pick what's best for any given situation. So all playstyles could be at the disposal of a gamer with the one true style.

~ [see article](#)

open variation

Doesn't look at examples from a game's levels, rather it focuses on arbitrary arrangements and groupings. Open variation can also consider possible scenarios.

~ [see article](#)

option select

An advanced mostly used by competitive multiplayer. This technique involves inputting two or more sets of mechanics or actions near simultaneously in such a way that the game picks the best option for the situation and executes. Option selects often rely on a strong understanding of the nuances of mechanics. Non-individual mechanics increase the emergent likelihood of option selects.

~ [see article](#)

organic decay-cycle

See "cycle."

organic dynamics

See "natural dynamics."

organic key

The opposite of abstract keys, these keys are an organic part of the game world that's defined by space (2D/3D). Depending on what dynamics a game is designed with, organic keys play by the same rules. The keys in Super Mario World, some in LittleBigPlanet, and many of the keys in The Legend of Zelda: Phantom Hourglass are organic keys. This means to get them from one place to another, they can't simply be stashed away in an item menu. They must be pushed, picked up, or otherwise moved from point A to point B. Organic keys can turn a basic fetch quest into a dynamic challenge. From simple level design to the much more advanced folded level design.

~ [see article](#)

organic lock

These locks are much more lenient than strict locks. Organic locks are created out of gameplay rules and dynamics. Because dynamics foster emergence, multiple solutions are also probable. For example, if you need a certain amount of weight on a switch to unlock a gate, for an organic lock it's possible to use a variety of game objects as a weight. In LittleBigPlanet, all the objects in a level have weight and physicality to them. To weigh down a switch you can jump on it, get you and 3 of your friends to stand on the switch, drag an object over to the switch, push down on the switch using a jetpack, or even flip the switch upside down so it weighs down on itself.

[~ see article](#)

origami level design

A type of multi-fold level design where the creases and layers are so flexible or dynamic that the possible paths within a single level are interconnected and complex. I visualize the complex web of possibilities as the creases in the paper of an origami figure unfolded.

[~ see article](#)

or-lock

A lock that can be opened with any key of a specific type or a range of types. The locked doors in many Zelda dungeons are or-locks. This means you can use any small key you find to open any of these locked doors.

[~ see article](#)

outcome

The outcome is the final state of the game. The outcome of a game is quantifiable, meaning that it is meant to be clear whether the outcome was one or another; who won the game (Salen & Zimmerman 2004, 96). Games set in persistent worlds do not necessarily have an outcome. It is the valorization of the potential outcomes of a game that gives a game a goal and lets the players win or lose. (Half-Real, chapter 2.)

[~ see A Dictionary of Video Game Theory](#)

overjustification effect

"Occurs when an external incentive such as money or prizes decreases a person's intrinsic motivation to perform a task. According to self-perception theory,

people pay more attention to the incentive, and less attention to the enjoyment and satisfaction that they receive from performing the activity. The overall effect is a shift in motivation to extrinsic factors and the undermining of pre-existing intrinsic motivation." ~wikipedia

[~ see article](#)

P

paradigm shift

Coined first in Thomas Kuhn's book The Structure of Scientific Revolutions (1962), a paradigm shift now broadly refers to a fundamental change in ideology. Final Fantasy 13 has popularized the phrase in the realm of video games to mean a fundamental shift in tactics or strategy. But I think the term needs a little more specificity. After all, every action we make in a video game can be an adaptive response to the conditions in the game and therefore qualify as a change in tactics. Gamers create and switch between new strategies and playstyles all the time.

So, to make the term more exacting, I'll add that a paradigm shift involves changing the tactics, strategies, and/or roles of a multi part system of a single allegiance. In other words, paradigm shifting is all about players/characters fulfilling roles and then changing those roles together to fundamentally change their function. You can't paradigm shift playing one character in a shooter or a fighter. You can only do so as part of a team when you can change the roles of the team in one move.

[~ see article](#)

pattern mixup

A mixup created by stringing together a series of moves to make and break patterns. In a player v player match, executing a pattern involves playing in such a way to influence your opponent to recognize and anticipate your moves. The more moves you string together successively, the more likely the opponent will pick up on the pattern. Once you know your opponent will probably try to counter your moves anticipating the

pattern, you can counter their counter. Often called "pattern based mixup." Rarely called "rhythm (based) mixup."

[~ see article](#)

peripheral vision (reflex)

The ability to spot objects in the area outside central vision. A sub-facet of reflex skill.

[~ see article](#)

perpetual comeback

See "comeback mechanic."

phase of combat

The set of conditions greatly shaping the potential strategies and playstyles all parties are affected by equally. For example, in the Bomberman battle mode, the final 30 seconds or so activate a "hurry up" phase in which the stage begins to shrink forcing all remaining players into a closer proximity.

[~ see article](#)

pigeonhole principle

"In mathematics and computer science, the pigeonhole principle states that if n items are put into m pigeonholes with $n > m$, then at least one pigeonhole must contain more than one item." ~wikipedia.

[~ see article](#)

pin

Any procedure or steps involved in using a key to open a lock.

[~ see article](#)

play

"Play is a term employed in ethology and psychology to describe to a range of voluntary, intrinsically motivated activities normally associated with pleasure and enjoyment. Play is commonly associated with children, but positive psychology has stressed that play is imperative for all higher-functioning animals, even adult humans." ~wikipedia

Salen & Zimmerman define play as "Play is free movement within a more rigid structure". (2004, p. 304) Sutton-Smith lists 7 rhetorics of play: The rhetoric of play as progress, the rhetoric of play as fate, the rhetoric of play as power, the rhetoric of play as identity, the rhetoric of play as the imaginary, the rhetoric of the self, and the rhetoric of play as frivolous. (1997, p.9-12.)

[~ see A Dictionary of Video Game Theory](#)

player

A human interacting with a game. In video games player generally means a human player. A game played against the computer is considered a single player game.

[~ see A Dictionary of Video Game Theory](#)

(p)layered dynamics

The dynamics of gameplay that additional players inherently affect. The term is a pun off of the words player and layered.

[~ see article](#)

(p)layered level design

When the challenge(s) of a level fundamentally and organically change with the addition of players. This means the level doesn't recognize that more players are present and alter any part of the level. The additional players can be cooperative, counter operative, or neutral. The term is a pun off of the words player and layered.

[~ see article](#)

playing to win

A term coined by David Sirlin, but a concept that has existed as long as there have been competitive games. Take the rules of the game and the rules of the tournament, and then do everything you can to win. Don't worry about being cheap or honorable. Don't worry if you're driving your opponent crazy. Don't worry if you're exploiting a strategy that in your opinion greatly unbalances the game. When it comes down to it and you're sitting in the competitive hot seat, you have to do everything you can without reserve if you want to be victorious over others who will surely do the same to you.

[~ see article](#)

podobolic motion

An element (most likely an enemy element) that flies up from below and then falls back down with the same speed and timing (like a Podoboo from the Super Mario Bros. 2D platforming series). The element can move from any angle as long as it reverses its direction and returns to where it spawns.

[~ see article](#)

pointer controls

A device that either directly or indirectly uses light or another mechanisms to relay positional coordinates to a cursor via 2D or 3D movements. The cursor movement is always proportional to real-life movements. There is no springy action or snap back with pointers.

[~ see article](#)

politics

The making and breaking of alliances in a free-for-all (whether made public or done in private).

[~ see article](#)

positive space

In art, the space taken up by the subject(s) of an image.

[~ see article](#)

poto&cabolic controls

Coined after Honeyslug's indie flash game Poto&Cabenga, this terms refers to control design when one non-individual input controls two elements simultaneously .

[~ see article](#)

power (dexterity)

A sub category of dexterity skills. How much force drives a single motion/action. Sometimes referred to as "strength."

[~ see article](#)

power (intrinsic desire)

One of Steven Reiss's 16 basic desires that motivate intrinsic desires. Power is the need for influence of will. This need is very easily stressed in video games because they are interactive.

[~ see article](#)

power (variation)

The obvious, straight forward means to achieve a functional goal. Generally aligns with the primary function(s) of the game.

[~ see article](#)

powerup key

Like core mechanic keys, some locks are opened with optional or upgraded abilities. Examples include using super bombs to access new areas (Super Metroid), hookshotting to new spots (Zelda), and the tiny warp pipes in New Super Mario Brothers. The first time you run into these

locks, you may or may not have the mechanics necessary to progress.

[~ see article](#)

precision

Input device terminology. The degree to which repeated attempts under unchanged conditions produce the same outcome. Also called "reproducibility" and "repeatability".

[~ see article](#)

pressing the advantage

A general concept in any strategy/skill based game where a player puts him/herself into an advantageous situation and attempts to maintain that advantage.

[~ see article](#)

preventative counter

When a player or game element stops an element of contrary motion from ever affecting them according to the aims of their functional intent.

[~ see article](#)

primary function

A short descriptive word or phrase of what you do in a game. That is to say, it's a description of the main type of interactivity in a game.

[~ see article](#)

primary mechanic

Whether a game is defined by an action or a group of actions, a small set of the most essential/mandatory mechanics rests at the core of every game. These mechanics are the primary mechanics.

properties (variation)

The subset of complexities that define a mechanic or any other interactive gameplay element. For example, the properties of a punch in a combat system could be strength, speed, range, damage, etc.

proximity

How quickly a goal can be reached or how clearly one can mark their progress from beginning to end. It's easier to be motivated to do something that has a fairly immediate result. One of three features of goal-setting theory that determines the quality of the goal.

[~ see article](#)

psychoanalytic criticism

For those who aren't careful, a Psychoanalytic critique of a game appears to only be concerned with the fiction of a game and the relationship of the characters. Unless the game is Psychonauts, most games seem to have little to nothing to do with the human psyche. Neglecting how the game fiction and the gameplay (or game rules) come together to create the Psychological work in a game is a common pitfall. Another easy pitfall is to get wrapped up in Psychoanalyzing the developers of the game, or what may be infinitely more embarrassing, accidentally analyzing one's own psychological state while trying to pass it off as an analysis of the game. Though it is true that the fiction of a game is an important part of any Psychoanalytic analysis, the gameplay is where the most profound source of material lies because the interactivity of the game can influence and transform the player in more subtle ways than a passive medium.

~ see essay
~ see essay2

punishment

Common definition: "to subject to pain, loss, confinement, death, etc., as a penalty for some offense, transgression, or fault" ~ dictionary.com.

"is a consequence that causes a behavior to occur with less frequency." ~ wikipedia

~ see article

pure organic (level) design

A type of level design that reflects the interconnected intricacies of our organic world. Basically, designing a pure organic level means taking out as many "artificial" video game limitations as possible. For example, designing levels with no invisible walls, no automatic resetting of rooms, and no unlimitedly respawning resources. It's not about designing more realistic mechanics, but more dynamic, long lasting, and possibly realistic consequences.

~ see article

puzzle challenge

A level or challenge made using a game's puzzle engine that incorporates some element that stresses real time DKART skills (timing, reflex, and even dexterity). The point

is the challenge is no longer entirely focused on stressing knowledge skills. Endless puzzles and randomly generated puzzles are usually puzzle challenges.

~ see article

puzzle mode

The levels in this mode use the game's core puzzle/gameplay system and feature challenges with very limited solutions. The purpose is not to give the player the freedom to play around with countless, emergent, and divergent possibilities while exploring the results of their choices. Rather, the purpose of the challenge in a puzzle mode is to limit the player in such a way to test their knowledge of the puzzle engine and their logical strategies. Puzzle mode levels typically deemphasize real time, action based skills (timing, reflex) in order to completely test the player's knowledge skills (logic, deduction, analyze). This means that many puzzle modes are turn/move based. Like a clever joke or plot twist, the challenge and engagement comes from learning the solution/punch line. Usually, once a puzzle mode level is completed, there's little challenge and therefore incentive for players to replay it. This is known as the "spoiler effect."

~ see article

puzzle stage

A level or level section that focuses on the nuanced use of gameplay mechanics with a very limited set of solutions. Puzzle stages are generally inserted into non puzzle games. Typically optional bonus rooms, puzzle stages are free to create nuanced challenges.

~ see article

Q

quantification

Organizing the range of possibilities of any element or scale into distinct, easier to reference parts for the purpose of analysis.

~ see article

quasi counter

A counter that falls somewhere between a preventative and reactionary counter.

[~ see article](#)

QTE

A quick time event. Created and popularized by Yu Suzuki in his game Shenmue. "a method of context-sensitive gameplay in which the player performs actions on the control device shortly after the appearance of an on-screen prompt." ~ wikipedia.

R

R&D (playstyle)

A player experimenting with moves, options, and mechanics to learn new things about a game or an opponent. Winning is not the primary goal. Also, a player who plays in such a way to help another gamer learn.

[~ see article](#)

reactionary counter

The measures a game element can take to "stop the bleeding" after an element of contrary motion has succeeded (at least initially) in its functional aims. In other words, making the most out of the situation by influencing things back in your favor.

[~ see article](#)

reading (puzzle/strategy)

Reading a puzzle mode puzzle (referred to from this point simply as a puzzle) involves simultaneously reverse engineering the challenge from the winning condition and deductively eliminating extraneous elements, moves, and strategies. Reading involves looking at a game according to function, rules, and gameplay dynamics as opposed to just individual gameplay elements or move possibilities.

[~ see article](#)

real-time (gameplay)

Any case where the game state (gameplay challenge), actions, and cause-effect reactions are furthered via some rate of game time to actual time.

[~ see article](#)

recognition (reflex)

Such tests feature a 'memory' and 'distracter' set of stimuli. There's still only one response the user is responsible for, but now he/she must distinguish if the presented stimulus is the right or wrong one to react to.

[~ see article](#)

redundancy

See "controller redundancy."

refining trend (variation)

An obsolete term previously used to describe a trend in variation where gameplay challenges become harder. It's much more clear to simply state the kind of trends you find instead of concerning yourself with terms such as this.

[~ see article](#)

reflex (skill)

How much one comprehends in a very small moment of time and how quickly/accurately one can respond. One of the 5 types of DKART skills. The facets or subcategories include reflex, stimulus-response curve, peripheral vision, dynamic visual acuity, momentary vision, and eye movement.

[~ see article](#)

reflex range

The small range of reaction window time where reflex skills can be most stressed and applied. Generally between 10 and 60 frames (ie. between 1/6 second and 1 second).

[~ see article](#)

reinforcement

A word that often replaces the common usage of the word "reward. "is a consequence that causes a behavior to occur with greater frequency." ~wikipedia

[~ see article](#)

Reiss's theory of 16 basic desires

A theory to explain the basic sources of intrinsic motivation. In order of relevance to game design they are power, curiosity, vengeance, saving, independence, acceptance, honor, status, social contact, tranquility, physical activity, order, idealism, family, eating, and romance.

[~ see article](#)

resonance (story)

A measure of how well different facets of a story enhance each other usually in some abstract or thematic sense. Also called "harmony." When elements work against each other the elements are said to create "dissonance."

[~ see article](#)

responsiveness

Input device terminology. The time it takes for the system to respond (an expected output) after inputting.

[~ see article](#)

reusable key

These keys aren't consumed when used for the first time. Some keys have limited use. Some can be reused over and over.

[~ see article](#)

reverse flow

When mechanics are used in such a way as to reverse the natural flow of interplay within its interplay loop. Generally the potential to reverse the flow is small compared to the normal flowing actions.

[~ see article](#)

reward

"Something given or received in return or recompense for service, merit, hardship, etc." ~dictionary.com

[~ see article](#)

rhythm mixup

See "pattern mixup."

riddle (puzzle)

Riddles are designed to challenge one to think outside of the box or to make long and uncommon connections between ideas. Solving a riddle often comes with a feeling of invention or a sense that one has discovered the solution. Unfortunately, developers often design riddle puzzles that force players to "figure it out" without offering enough clues or teaching them to effectively read the presented conditions. Essentially, if you don't know how to tackle a difficult problem and you don't have effective help (clues) all of your efforts will be trial-and-error work. If the best strategy you can hope to develop for a challenge is brute trial and error, then the challenge can't support puzzle "reading." Some riddle puzzles video games do it better than others.

[~ see article](#)

roller coaster level design

Any level design where the emphasis is placed on looking and "feeling" cool rather than being functional. In other words, when the presentation, graphics, sound, or story are prioritized over interactivity, variation, counterpoint, function, or challenge.

[~ see article](#)

rolling the dice

When lacking sufficient skill, attempting to overcome a gameplay challenge that is ultimately decided by chance. Generally used to describe a scenario with a low chance of success (0-30%) yet the player repeats attempts until successful. A type of brute force approach.

[~ see article](#)

rules

Gameplay complexities. See "complexity."

All games have rules:

--Salen & Zimmerman describe rules as limiting player action (2004, 138).

--Half-Real, chapter 3 argues that rules specify limitations and affordances.

--Piaget (1941) examines how groups of boys developed the rules of a game of marbles over time.

--Neumann & Morgenstern emphasize the distinction between the rules of a game (which are obligatory) and the strategies the player plays with (which are not) (1953, 49).

[~ see A Dictionary of Video Game Theory](#)

run-and-gun

A type of combat where characters or player controlled elements can attack and move simultaneously.

[~ see article](#)

rush down (playstyle)

See "aggressive (playstyle)."

S

safeguard (balance)

See “self-balancing force.”

sandbox

Game (or game mode) that lets the player experiment with its mechanics, regardless of the game's goal, if any.

~ see [A Dictionary of Video Game Theory](#)

save abuse

A side effect of any level of save freedom. When players use save features to significantly reduce the challenge or consequences of a system. When saving is manipulated as a gameplay mechanic rather than a system feature that exists mostly outside of the gameplay experience.

~ see [article](#)

save freedom

A design feature (or set of features) that give the player the ability to save/load the exact game state whenever and wherever they want.

~ see [article](#)

saving

One of Steven Reiss's 16 basic desires that motivate intrinsic desires. Saving is the need to collect. This need is very easily stressed in video games because we tend to collect achievements, progress, skills, and other virtual objects.

~ see [article](#)

screen-blocking

For split-screen competitive multiplayer experiences, playing in such a way to hide elements or obscure your view when playing a split screen multiplayer game

~ see [article](#)

screen-looking

For split-screen competitive multiplayer experiences, instead of being blind to the other player's view, actions, and location when out of sight, you can simply look at their screen to spy on them. It's easy, effective, and difficult to avoid doing.

~ see [article](#)

secondary mechanic(s)

The set of mechanics that are not mandatory to beat the game (or some other

specified set of challenges). Secondary mechanics are also not tertiary mechanics.

sections (sub-sections)

A way to organize parts that make up the whole. All games can be broken down into sub-sections or sections. e.g. rooms, loading sections, cut scenes, stages, levels, rounds, or turns.

~ see [article](#)

self-balancing force

Inherent limitations built into the design of a game that works to balance out the gameplay in a specific way.

~ see [article](#)

~ see [article2](#)

sensitivity

Input device terminology. The smallest change in the input method that triggers a response in the system.

~ see [article](#)

sequence breaking

Progressing through a game or level in an order other than the main path or the developer intended order.

“The act of performing actions or obtaining items out of the intended linear order, or of skipping “required” actions or items entirely. Sequence breaking is often used to beat a game unusually quickly, to beat it while only completing a few objectives or obtaining a few items, to obtain useful items early in the game, or to help push a game as far as possible in some other way.” ~wikipedia

~ see [article](#)

setpiece

“In Video Games, "setpiece" refers to an object in any given level that is unique or is not part of the level's default object set. These pieces... often... simply serve the function of building atmosphere. It can also refer to scripted (non-random) events of significance in the game, such as an encounter with a major antagonist.” ~wikipedia

~ see [article](#)

shadows

A monocular depth perception technique. Shadows from light sources help us understand the 3Dness of objects in space.

[~ see article](#)

short term memory (STM)

"The capacity for holding a small amount of information in mind in an active, readily available state for a short period of time. The duration of short-term memory (when rehearsal or active maintenance is prevented) is believed to be in the order of seconds." –wikipedia

Also known as primary, active, or working memory.

[~ see article](#)

simple (reflex)

A measure of one's basic reflex ability. The test typically gives a visual (or audio) stimulus in a known location to which the user must respond to quickly using a single input.

[~ see article](#)

simultaneous discovery

One of the 3 rules of Eureka. When multiple independent people come to the same innovative, unique, or inventive discoveries at nearly the same exact time.

[~ see article](#)

size

A factor that affects the effectiveness of shaping behavior via consequences (reinforcements or punishments). This is a "cost-benefit" determinant of whether a consequence will be effective. If the size, or amount, of the consequence is large enough to be worth the effort, the consequence will be more effective upon the behavior.

[~ see article](#)

size constancy

A monocular depth perception technique. Perceiving objects in the distance as having the same size despite looking smaller to the eye.

[~ see article](#)

skill

User or player agency. There are five core categories of skill. Dexterity, knowledge, adaptation, reflex, and timing. These are known as the DKART skills. Team skill is another core type of skill that only applies to team based multiplayer (and perhaps free-for-all) situations.

[~ see article series](#)

skill barrier

A general term for the minimum amount of skill needed to compete or progress in a challenge. Typically used to describe barriers to entry for new players or players unfamiliar with the genre of game. Related terms include "complexity hump" and "interplay barrier."

skill ceiling

The highest level of agency or skill that one can apply to a particular game challenge, level, or game.

[~ see article](#)

skill spectrum

The range of skill needed to successfully play a game at a specific level.

[~ see article](#)

skyrocketing success phenomenon

A phenomenon that occurs due to our learning limitations. When improving at a task, mental resources are used to develop the sharper skills and better strategies. Once our brains are done processing, we're free to excel. So naturally one will experience poorer performances before very successful performances. Also known as "suckcess."

[~ see article](#)

slippery slope

When "falling behind causes you to fall even further behind." ~Sirlin. Falling further behind usually means a loss of key resources/abilities. Rarely referred to as positive feedback.

[~ see article](#)

slow eureka (the)

One of the 3 rules of Eureka. Basically, Eureka happen slowly in our minds. Certainly some "ah-ha" moments come together quickly. But most Eureka moments, though they may feel like all the pieces of the puzzle snap together quickly, are the result of a much longer process. Perhaps a better metaphor is, though the pieces can be snapped together quickly, it takes us much longer to "cut each piece out."

[~ see article](#)

snake (playstyle)

See “meta man/gamer (playstyle).”

soloist (playstyle)

See “lone wolf (playstyle).”

solution

A specific method or strategy for reaching the goal of a gameplay challenge.

[~ see article](#)

solution-rhythm

A single static timeline of actions develop as a solution for a complex timing challenge.

[~ see article](#)

solvable gameplay challenge

A type of challenge that the player can overcome without making a mistake, without having to guess (no “blind encounters”), and without needing beyond human skills (see “reflex range”).

[~ see article](#)

special case counter

A counter that is designed outside of the range of the core player mechanics. The rules or mechanics of these special case counters generally cannot be extrapolated to apply to any other part of the game. Special case counters include quicktime events or QTEs.

[~ see article](#)

specialist (playstyle)

Being a specialist or playing obsessively involves devoting yourself to a particular aspect of the game. The more complex, dynamic, and nuanced the feature you pick, the more of a specialist you can become. The best specialists know more about their chosen feature than the best players in the world and even the game creators.

[~ see article](#)

species

A term for an obsolete method of analyzing emergent gameplay. The 4 varying levels of counterpoint with the last being a combination of the previous three.

[~ see article](#)

specificity (goal-setting theory)

A clearly defined goal. One of three features of goal-setting theory that determines the quality of the goal.

[~ see article](#)

spectator sport moments

Moments where one or more players in a competition are forced (or nearly so) to merely observe the results of an action event play out in real-time. In these moments players don't have to worry about playing, thus they become spectators of their own sport. Such moments can help players understand the action while creating tension

[~ see article](#)

speed (dexterity)

How quickly one can execute a series of motions or repeat a single motion.

[~ see article](#)

spoiler effect

How challenges that heavily or mostly stress knowledge skills can be spoiled once the player learns the solution/trick. Because it's hard to un-know or unseen such information, after being spoiled the player can never experience what it's like to solve the problem again.

stamina (dexterity)

How long a motion or series of motions can be maintained or repeated before a level of performance drops. This level of performance must be declared. A sub-facet of dexterity skill.

[~ see article](#)

stand-and-strike

A type of hand-to-hand combat where characters/bodies must attack or move, but not both at once.

[~ see article](#)

static (timing)

The ability to time actions based on a simple, unchanging time period like clapping or tapping to a beat. A sub-facet of timing skill.

[~ see article](#)

static space

When the conditions of a gameplay challenge do not change (or hardly change) regardless of the player actions needed to overcome the challenge. Typically, repeated player action of a known strategy are required to overcome these challenges.

[~ see article](#)

static trend

A static trend is where there is no change between sections, or when the changes are inconsequential because they fall short of meeting the minimum degree of difference declared for the analysis.

[~ see article](#)

STM

See "short term memory."

strategy

A strategy is a specific plan of action typically for the purpose of obtaining an advantage.

[~ see article](#)

strategy, complete

See "complete strategy."

strength (dexterity)

How much force drives a single motion/action. More commonly referred to as "power." A sub-facet of dexterity skill.

[~ see article](#)

stop-and-pop

A type of gun or projectile based combat where players can move and shoot, but not both at once.

[~ see article](#)

strict encounters

When a game system is designed with mechanics that have very few dynamics and variation. Like in Rock Paper Scissors, the outcomes of each hand to each hand are exact, strict, and unchangeable.

[~ see article](#)

strict lock

See "linear lock."

strict variation

Examines the exact way a game's "levels" are arranged or grouped. Can examine any group of areas, challenges, or levels so long as their relative order is maintained.

[~ see article](#)

structuralism / deconstruction criticism

Structures are probably the most recognizable feature of videogames. Because structures create the foundation for

the game rules and player to learn these rules, analyzing structure develops a clearer insight into how a game works at its core. We're all familiar with the structures of genre. Any gamer can instantly recognize a first person shooter like Halo from a puzzle game like Tetris. Many gaming genre have certain looks to them that is the result of their gameplay structures. Like with any genre, the degree to which the conventions are followed or deviated from varies greatly from game to game. Recognizing a game's structure is an acute way of talking about how a game works in or outside of its genre.

stylization

Also known as "abstracting."

The simplification that a game makes when simulating an activity. For example, the fact that cars do not run out of gas in Grand Theft Auto III. (Half-Real chapter 5.)

[~ see A Dictionary of Video Game Theory](#)

sub-mar

A comical term for any level of design that is less than the level of Super Mario Brothers (NES) for any particular design feature, layer, or element.

suckcess

A humorous term for the "skyrocketing score phenomenon."

suspension

When a game element or game idea is offset from the established pattern of game ideas to create scenarios where the element/idea can carry over and influence other game ideas.

[~ see article](#)

[~ see article 2](#)

symmetric multiplayer games

The types of game where all players start with the same sets of options.

[~ see article](#)

sympathetic resonance

A human phenomenon where the abstraction of feelings moves past impressions based on the source material/original experience(s). i.e., when people make feelings/opinions off of their feelings/opinions. When this cycle repeats

too much anything can feel right/wrong to a person regardless of the actual facts.
~ [see article](#)

Game/Human Dynamics, Giving Orders, Taking Orders, Synchronicity, and Communication.
~ [see article](#)

T

tactic

Tactics are general plans typically meant to gain some kind of advantage.
~ [see article](#)

tactical asymptote

A point along the tactics-strategy spectrum that marks the set of knowledge that is required to successfully overcome a challenge using strategy. This point doesn't represent the maximum amount of strategy (specific plans/details).
~ [see article](#)

tactical threshold

See "tactical asymptote."

teacher (playstyle)

See "R&D (playstyle)."

team dynamic

A type of "human dynamic" that applies to interactions between teammates in and out of the game.
~ [see article](#)

team gameplay dynamic

A system where a teamplayer's actions have a range of influences on gameplay elements, features, or challenges as well as the team's ability to function as a unit.
~ [see article](#)

teamplayer (playstyle)

A player who puts teamwork and team strategies above their own personal styles, choices, and even their own (virtual) well being.
~ [see article](#)

team skill

A new category of skill to go along with the core 5 DKART skills. The 6 subcategories of team skill are Game/Player Limitations,

tells, mixups with

A seemingly look-alike mixup that has a cue or tell to forewarn the player of the upcoming situation.
~ [see article](#)

tempo

A variation of tension timers that uses acceleration to increase the amount of tension over time.
~ [see article](#)

Setting the tempo: playing in such a way to do more with your turn to pressure the opponent into doing less.
~ [see article 2](#)

tension

Stress or pressure on the player that is created by the awareness of some kind of potential loss (generally of time or virtual resources).
~ [see article](#)

tension timer

Creating tension using timers either organic or clock based. Generally applies to timers of at least a few seconds. Otherwise, the timed situation would tend to stress reflex skills, which many players use LTM to deal with rather than being conscious of and reflecting on the tense moment.
~ [see article](#)

tertiary mechanic

Any mechanic that depends on an external element the player cannot independently produce. For example, kicking a Koopa shell in Super Mario Bros. A somewhat obsolete term because it is difficult to determine exactly whether the external elements are a part of the player's abilities or otherwise. Furthermore, this definition can overlap with the categories of primary and secondary mechanics. For example, you can make a tertiary mechanic mandatory for progression and therefore primary by definition.

texture gradient

A monocular depth perception technique. Because there's more detail of objects up close, the further away objects are, the

smaller they appear creating a finer pattern to the eye.

[~ see article](#)

the book

A term for the primary and most effective way to improve at a strategy game. Doesn't necessarily include dominant strategies. By memorizing "the book" of information regarding other players, potential moves, strategies, match records, etc. you can make the most informed decisions against your opponent(s). This is especially effective with strategy games because they, by design, tend not to feature/stress any real-time DKART skills like timing or reflex.

[~ see article](#)

the novelty

The vast and highly unique emergent freedom there is within a gameplay system after the players embrace the systems, endure "the squeeze," and learn "the book" (if possible). Commitment of this level is required for competitive players, but it also helps spectators enjoy the game more.

[~ see article](#)

the squeeze

A term for the perceived and actual reduction of viable playstyles, tactics, and strategies for a competitive multiplayer experience. One may feel like all of the fun is slowly being squeezed out of the game by the other player as they get better at the game and the metagame grows. For many great multiplayer games, the squeeze is only a small requirement before one can experience the novelty.

[~ see article](#)

three rules of eureka, the

See "slow eureka," "simultaneous discovery," and "conceptual platform."

tiered adaptation

The facets or subcategories to adaptation; one of the DKART skills. This tier system provides an easy way to organize examples of adaptation by their complexity.

[~ see article](#)

time period

Length of time. Typically real-time.

timing (skill)

The skill of real-time awareness and synchronicity. One of the 5 types of DKART skill. The facets or subcategories include static, external, internal, acceleration-deceleration, complex timing, and tracks.

[~ see article](#)

tracks (timing)

The ability to comprehend and execute multiple independent timing elements. A sub-facet of timing skill.

[~ see article](#)

translation

The rewording or paraphrasing a game idea into another medium (typically words). An unused term. Relates somewhat to "transmediality."

transmediality

Games are a transmedial phenomenon, meaning that a game can be implemented in different game "media": Chess can be played on a board, on a computer, or blind. Soccer can be played as a physical sport or as a video game. Computer chess is an implementation of chess (everything that can be done in normal chess can be done on the computer and vice versa), but computer soccer is an adaptation (only selected aspects of the sport is included in the video game). (Half-Real, chapter 2.)

[~ see A Dictionary of Video Game Theory](#)

trial and error

A general method of problem solving, fixing things, or for obtaining knowledge. "Learning doesn't happen from failure itself but rather from analyzing the failure, making a change, and then trying again." ~Wikipedia

[~ see article](#)

triangle (interplay loops)

Because the triangle is one of the simplest shapes that uses as few lines as possible, interplay loops that are designed around 3 options are ideal for balance and simplicity. This is why many games use a triangle for their interplay loops. This is also why many games use multiple triangles to add additional interactions to their game systems instead of using a more complex shape.

[~ see article](#)

triangularity

See "triangle (interplay loops)"

Crawford's term for game design where between three units or moves neither is the strongest (A beats B, B beats C, C beats A). Rock-papers-scissors is triangular. (1982)
--Neumann & Morgenstern describes such non-fixed relations as intransitive (1953, 39, 52).

--Smith (2003) proposes a general principle for creating intransitive relations and interesting choices in "orthogonal unit differentiation" whereby units and moves are valued on several different non-overlapping axes.

[~ see A Dictionary of Video Game Theory](#)

tier capacity

The goals and rules of the game create the value scale by which all gameplay choices are measured. The functions or roles needed to compete set the limit of the emergent tiers. When there are more items available than role slots, the inferior options will be pushed to a lower tier. see "pigeonhole principle."

[~ see article](#)

turn

A moment of gameplay where gameplay actions and reactions are paused only to be furthered by player commands. This excludes functions like pause.

[~ see article](#)

turn-based (pure)

A game system where the player can only use their mechanics on their turn. This turn must end in some way and an equal opportunity/turn given to the other player(s) (human or AI).

[~ see article](#)

turtling (playstyle)

See "defensive (playstyle)."

U

uneven design space

When certain properties or design features are given to some but not all elements in a set. The ratio of distribution tends to be around 3:7 for the set.

[~ see article](#)

unidirectional flow

The most common type of flow for interplay loops. Like in Rock Paper Scissors, the counters only flow in one direction thus making a closed loop of interactivity and potential.

[~ see article](#)

unintuitive leap

When one is forced to use trial and error to come up with solutions that lies beyond intuition gaps.

[~ see article](#)

upgrade key

See "powerup key."

V

value scale

The measure by which we evaluate every game action. Our scales can be very personal and subjective (how fun or difficult something is) or they can be quantified and universal (how many points you stand to gain or lose). In terms of game goals, the scale must have at least one quantifiable element because the game must recognize the victorious game state when it occurs.

[~ see article](#)

variable (variation)

Analog gameplay variable/property with 3+ degrees of change. See "analog variables of change."

variation

Differences between game elements.

versatile key

Some keys can actually open multiple locks. For these keys, it makes a big difference whether or not the key is reusable. If not, the player may be faced with a difficult choice; to open door number 1 or door number 2.

[~ see article](#)

viable options

"Lots of meaningful choices presented to the player. For depth's sake, they are presented within a context that allows the player to use strategy to make those choices." ~Sirlin.net

~ [sirlin.net > Articles > Balancing-multiplayer-games-part-1-definitions](#)

video game dynamic

A general term for any interactive system within a game. Not to be confused with video gameplay dynamic.

~ [see article](#)

viewer (story)

[Acting] based on the player's compulsion, independent of any consideration for the avatar's principles.

~ [see article](#)

virtual resources

Resources defined, expressed, and contained completely within a game's virtual space, world, or rules.

~ [see article](#)

vision

See "blindness."

W

well-rounded design

Creating a small, efficient set of mechanics (or other gameplay elements) that don't overlap and clutter each other in function. Can be thought of as touching as many "corners" as possible or being as spread out as possible within a game's design space considering the number of elements in the set. Generally used to describe primary mechanics of a gameplay system.

~ [see article](#)

~ [see article2](#)

wrinkle

In general... "an ingenious trick; a clever innovation." ~dictionary.com

For design spaces, it's more useful to think of wrinkles as design elements that help interesting choices emerge or DKART skills

to be stressed in a more complex or layered way.

~ [see article](#)

X-Y

yomi

"Yomi is the Japanese word reading, as in reading the mind of the opponent." Sirlin.net See "mind game."

~ [see article](#)

~ [see article 2](#)

Z

zero-sum funomaly

A type of funomaly where one thinks one can increase the amount of fun in a game by reducing the amount of "unfun" or "punishing" elements. This way of thinking is mostly erroneous because of how complex and possibly convoluted fun actually is.

~ [see article](#)

zero-sum game

"In game theory and economic theory, a **zero-sum game** is a mathematical representation of a situation in which a participant's gain or loss is exactly balanced by the losses or gains of the other participant(s). If the total gains of the participants are added up, and the total losses are subtracted, they will sum to zero."

~wikipedia

~ [see article](#)

