



A game by W. Thomas Grové

www.lion-gv.com 1.415.440.0610 lion@lotek.org

Booklet Contents:

1. Breakerz Game Design Document

I. Overview	page	2
II. Game Play	page	4
III. Marketing	page	8
IV. Appendix	page	10

2. My Resume page 13

DVD Demo Reel Contents:

1. Breakerz - Video Game Visual Prototype
2. 3D Character Modeling, Setup, and Animation
3. Storyboards and Animatics
5. Traditional Art - Drawings, Paintings, & Sculptures
6. Documentary & Music Video Productions

Objective:

To obtain a position as an assistant game designer, producer, or cinematic director.



Breakerz: B-Boy Battle™

Concept & Design Document by W. Thomas Grové

Copyright MMIV, Studio Interrupt, LLC; All Rights Reserved

HIGH CONCEPT

Breakerz: the game where you become a break-dancer! Drawing upon the universal appeal of dance and music, Breakerz is a fighting game that is as much fun to watch as it is to play. The intuitive controls, groovy sound track, and colorful graffiti-inspired visuals will appeal to novice and hardcore gamers alike; inviting them to explore a vast set of breakdancing moves and combos in a constant display of one-upmanship. A spiritual successor to Street Fighter and Dance Dance Revolution (DDR), Breakerz keeps the intensity rising as you battle your way to becoming the world breakdancing champion!

TARGET AUDIENCE

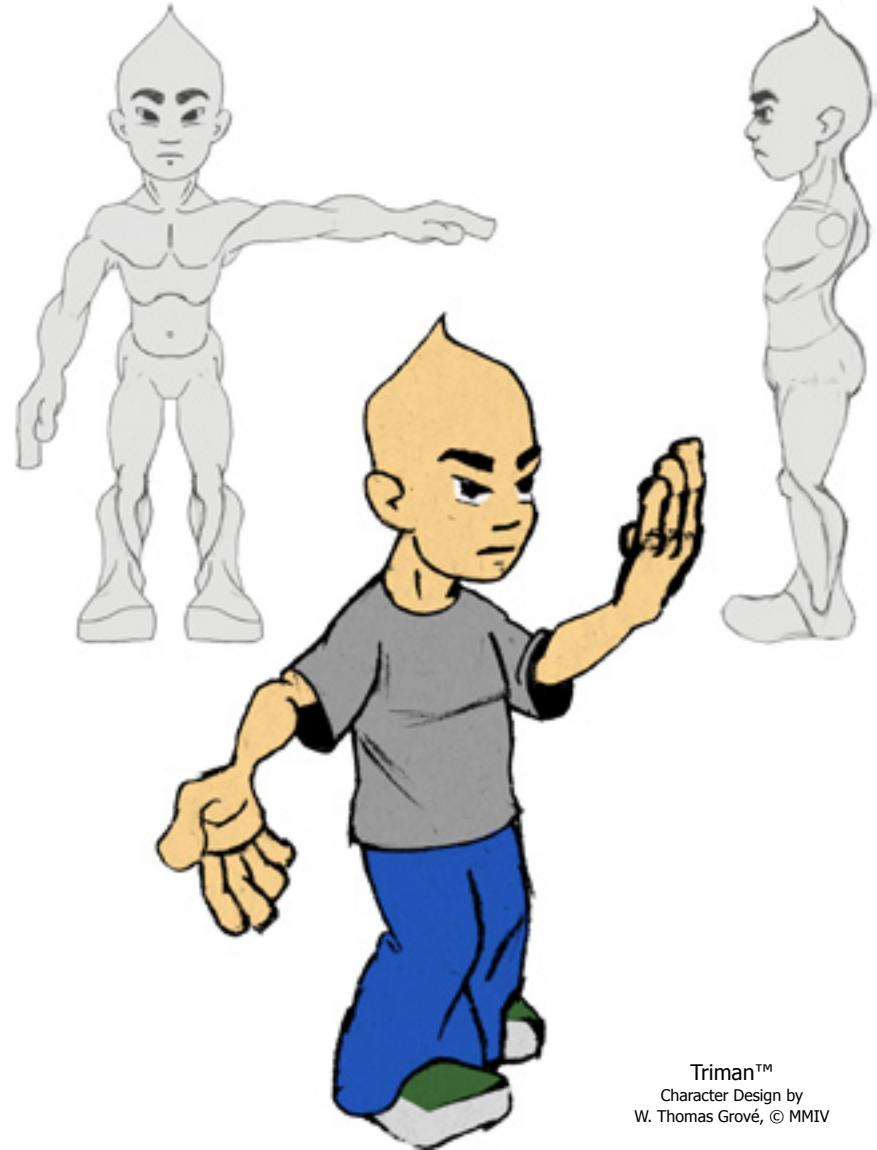
Breakerz aims to capture a particularly wide audience. Girls will enjoy playing Breakerz as a social activity with friends, attracted by the fashionable character designs and the bright colors. Guys will revel in the competitive game play. Late teens and young adults will get into the groove of the hip hop culture, and parents will appreciate the non-violent game play. In short, Breakerz will find a natural appeal to fans of both Fighting and Rhythm based games, while being enough of a spectators' game to raise the eyebrow of the casual passerby.

TARGET PLATFORMS

Sony PSP, current generation consoles, and arcades

GENRE

Breakerz is the first game in the Rhythm Fighter genre of games, combining the strategy and control of a traditional fighter, such as Street Fighter or Tekken, with the emphasis of rhythm and casual fun that can be found in games such as DDR and Parappa the Rapper.



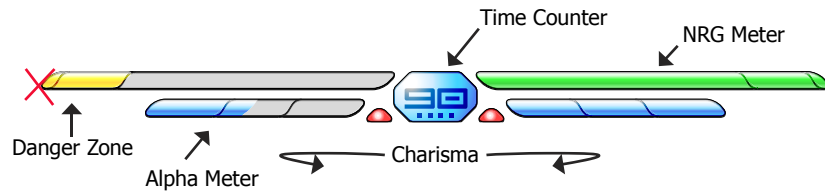
Trimán™
Character Design by
W. Thomas Grové, © MMIV



VARIOUS PLAY MODES

- **Battle (Versus Mode)** - 2 dancers share one stage and compete for the crowd's approval.
- **Copy Cat** - In a 1 player game, you must mimic moves/combos dished out by the AI opponent. In a 2 player game, you must mimic your opponent's last move, but then try to up the ante. The game play interface for this mode is different than the other two as it acts as a training mode. Think of a Parappa-like style cueing interface.
- **Showmanship** - A 1 at a time, 8 player game; opponents wait on the sideline for their turn to impress.

INTERFACE FEATURES



- **Time Counter** - The main factor determining the length of a match is the time limit, although particularly boring or off beat game play could get a player booed off stage early.
- **NRG Meter** - Goes down as you move. Goes down slower if you follow the Rule of Momentum (stringing together efficient combos).
- **Danger Zone** - The closer to the danger zone a move is performed, the more it is worth. If you run completely out of NRG (energy), however, you will fall and not be able to get up until after your NRG is restored past the Danger Zone.
- **Alpha Meter** - Useful for pulling off power moves and super moves.
- **Charisma** - You compete to gain the approval of the crowd. This is how the game is won or lost. The actual value of the meter is calculated from the following: beat accuracy, combo length, and difficulty of moves performed. The weight of these factors must be fine-tuned during play testing. Your Charisma is made clear by crowd reaction, camera movement, and effects.

NRG RULES

- A perfect combo, on beat, should build your alpha to 3 full units (Maximum) just before you run out of NRG.
- You can pull off an Alpha move when $NRG > 0$.
- You will fall down when $NRG == 0$.
- You remain down until NRG recovers from the danger zone.
- Your turn ends when you are shamed off the floor or time limit is reached.
- The Rule of Momentum: please see "Power Moves..." on the next page.

GAME PLAY MECHANICS

- The simplest move perfectly on beat will be rewarded more highly than the most complex move horribly off beat.
- As combo length increases; alpha meter increases
- Tempo sensitive: moves must be executed within a margin of tempo-error. You can control the speed of the animation within that tempo. Falling outside the acceptable tempo range will result in your character remaining in the ready pose or falling if in the middle of continuous motion. This will aid in the programming of the control input listening loop as well as adding to the richness of the game play.
- Spectacular failure: in order to encourage players to challenge themselves, failed attempts at more advanced combos are rewarded with funny character animations.
- Playing conservatively is not rewarded... if you don't "go big" you can be postured off of the floor.
- Foolhardy game play is also not rewarded. You must be mindful of your NRG consumption and rhythm in order to win.

A PERFECT GAME

An example of playing a "perfect game" might look something like the following. You start off nice and easy with some Toprock, transition to Down Rock when your NRG is reduced by about 1/3, and then work your way up to Power Moves by the time that you are in the Danger Zone. Of course you will have been executing all of these moves perfectly in rhythm! Now that you are almost completely out of NRG you pull off an Alpha move and then end your combo in a Freeze. In order to continue with your excellent run, don't forget to hold the Freeze until you are out of the Danger Zone!



RULES FOR MOVE COMMANDS

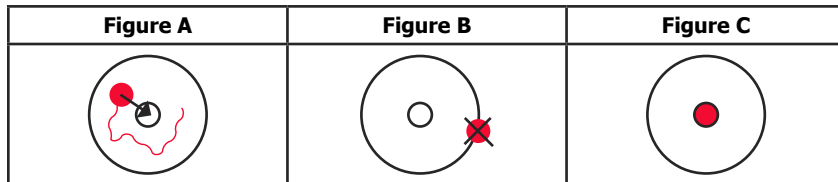
- Move commands should be simple, placing an emphasis on the rhythm of the input rather than the specific sequence.
- Cooler looking moves are, in general, harder to pull off.
- Moves are linkable into combos.
- Context sensitive move commands: your move options at any given time are limited by the move that you are in, or those preceding it.
- Moves are to be organized into a branching tree. More complex moves will only be available as the result of a long combo. The branching tree structure, as well as the 3 stance modes, will provide access to these combos.
- Moves must be made within the margin of tempo error.

POWER MOVES AND THE RULE OF MOMENTUM

- Power moves use more NRG than other moves, Flairs/Halos being among the most draining of all moves.
- The later in a combo, the less NRG a power move will use. I call this the **rule of momentum**.
- Starting with a power move like a Windmill will take a lot of NRG at the beginning. If you keep the Windmill going, it will use less and less NRG.

FREEZES

- To hold a Freeze, you must use the analogue pad to keep a lazy, wandering, dot within the center circle. (Figure A)
- The longer you hold a Freeze, the more difficult it becomes to keep the dot within the center circle.
- If you lose control of the dot before purposefully ending the Freeze, you will fall. (Figure B)
- Freezes don't rack up points, but rejuvenate NRG quickly when done correctly. (Figure C)
- If your NRG Meter is full, a Freeze will build up Alpha.



BREAK DANCE MOVES AND CATEGORIES

The ways that breakdancers (B-Boys and B-Girls) list and categorize their moves, if at all, has not been standardized. People add their own style and variations. These moves can be combined in almost any manner; making for a daunting array of possibilities. I hope that we might someday be able to evolve this project to the point where no arbitrary limitations would be placed on the expressiveness of the player, but alas; this is likely outside the scope of Breakerz at this point in time.

In order to make this project a manageable size, I have decided to come up with my own, simplified, breakdancing categories. These categories, while unique to Breakerz, are not arbitrary; they are designed with the game's context sensitive control scheme and game play in mind.

On the most general and abstract level, I believe that 99% of moves could fall into one of these categories:

1. Toprock Mode



- 1a. Rest State
- 1b. Footwork
- 1c. Freezes
- 1d. Spins
- 1e. Kicks
- 1f. Mode/Move Transitions

2. Downrock Mode



- 2a. Rest State
- 2b. Foot/Hand Work
- 2c. Freezes
- 2d. Spins
- 2e. Kicks
- 3f. Mode/Move Transitions

3. Inverted Mode



- 3a. Rest State
- 3b. Handwork
- 3c. Freezes
- 3d. Spins
- 3e. Kicks
- 3f. Mode/Move Transitions

*Please see the Appendix for an expanded list of moves and categories.



MARKET ANALYSIS

A precedent for success. The following data comes from the 2004 CESA Games White Paper

Game Title	Year	Millions of Units Shipped	
Rhythm Games:			
Dance Dance Revolution	1999	6.50	World-Wide
		4.00	Japan
Parappa The Rapper	1996	1.47	Japan
Beat Mania	1998	2.98	Japan
Fighting Games:			
Street Fighter series		23.00	World-Wide
		11.00	Japan
Street Fighter II (SNES)	1992	2.88	Japan
Tekken series		4.60	Japan
Tekken 3	1998	3.36	Outside Japan
Tekken 2	1996	2.19	Outside Japan
Tekken 1	1995	1.03	Outside Japan
Soul Caliber II (PS2)	2003	1.50	Japan
Soul Caliber II (GC)	2003	1.00	Japan

As the above table illustrates, titles in both the Rhythm and the Fighting genres frequently pass the magic 1 million unit mark in Japan alone; total sales outside Japan tend to be equal to those of Japan. The total world-wide sales for all of the above games are impressive. Another interesting note is that many of the above titles were originally developed for the arcade coin-op market. The additional revenue from this market is not reflected in the above table, but these titles were huge hits, and the revenue that they generated as coin-op titles was – and continues to be – significant.

MARKET APPEAL

The primary audience for Breakerz is the cross section of people interested in Hip Hop culture such as urban art, urban dance, or urban music, and video games – 16 to 36 year olds who enjoy a hip, social lifestyle. An approachable visual style and expressive game play will, however, allow an even wider audience to purchase, play, and enjoy Breakerz.

Breakerz aims to foster a following by harnessing the same power that made DDR and Street Fighter II successful:

- Fun to watch: large crowds gather out of curiosity and admiration.
- Competition makes you want to do better.
- YOU WIN! The satisfaction of being good at breakdancing; without actually having to be able to breakdance!

CROSS MARKETING POTENTIAL

These games have also generated value beyond their unit sales. Fighting games in particular, with well defined and distinct characters, often times develop into valuable Intellectual Property (IP) and are fertile ground for sequels, animated TV series, merchandising, and even film.

Because of the inherent music and dance aspects to Breakerz, it is a natural candidate for several alternative marketing schemes. Release parties in dance clubs, displays in music stores, and installations in coin-op arcades are all viable outlets to expose consumers to Breakerz. The portability and style of the primary target hardware platform, the PSP, also lends to increase exposure as people playing Breakerz will likely garner the curiosity of many a passerby.



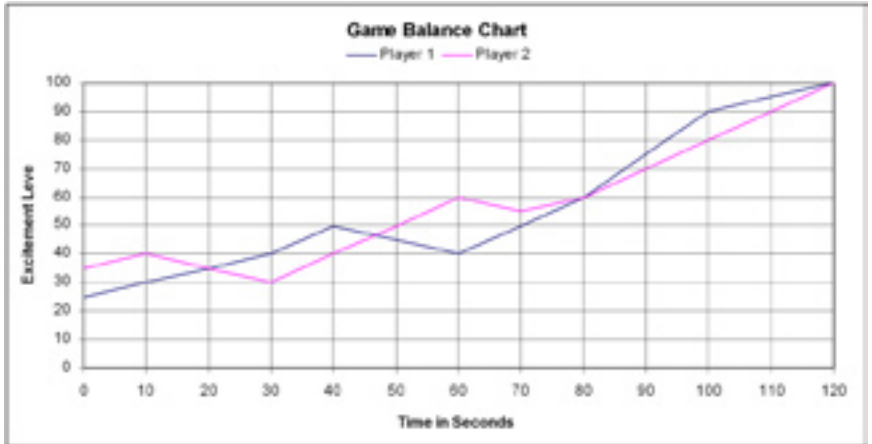
TECHNICAL LIMITATIONS

All art and animation assets have been created within the limitations of the target platform. Because I did not have access to a PSP dev kit, I compiled the following comparison chart between the PSP and its preceding hardware in order to estimate the system's capabilities.

A comparison chart for Sony Computer Entertainment gaming consoles.			
compiled by W. Thomas Grové			
	PS1	PS2	PSP
CPU	32 Bit R3000A RISC chip	128 Bit Emotion Engine	32 bit MIPS R4000
Clock Speed	33.8688 MHZ	299 MHz	333 MHZ
Operating Performance	30 MIPS	6.2 GFLOPS	2.6 GFLOPS
Bus Bandwidth	132 Mb/s	3.2 GB/s	2.6 GB/s
Main RAM	1.5 MB	32 MB	32 MB
colours	16.7 Million	16.7 Million	16.77 Million
resolution	up to 740x480i	740x480i	480 x 272p
Flat-Shaded Polygons /s	1.5 Million	75 Million	
texture mapped Polygons /s	0.5 Million	13 Million	33 Million
curved surfaces	no	no	yes
compressed image decoder	MPEG1	MPEG2	MPEG4
Media / Storage Capacity	CD / 700 MB	DVD / 4.7 GB	UMD / 1.8 GB
USB	no	USB1	USB2
connectivity	no	Firewire	Wi-Fi
note: the architecture of these systems is dramatically different: different numbers and kinds of specialized processors, etc. Therefore, the information here is just a rough guideline to system capabilities.			

EXPANDED LIST OF MOVES AND CATEGORIES

1. Toprock Mode	2. Downrock Mode	3. Inverted Mode
1a. Rest State/Stance	2a. Rest State/Stance	3a. Rest State/Stance
1b. Footwork a. Brooklyn Rock b. Shuffle c. Robot d. Crab/Spider e. Popping f. Locking g. Arm Wave h. Body Wave i. Moon walk	2b. Foot/Hand Work a. 6-step b. 3-step c. 2-step d. 4-step e. 12-step f. Swipes g. Coffee Grinder h. Switch	3b. Handwork a. Handstand b. Headstand c. Head glide d. Hand Walking 3c. Freezes
1c. Freezes	2c. Freezes	3d. Spins
1d. Spins	2d. Spins General Spins: a. Back Spin b. Butt Spin c. Knee Spin d. Coin Drop Hand Spins/Glides/Floats: e. Cricket f. Jackhammer g. Donuts h. Turtle i. UFO j. Wolf Continuous Backspins: k. Windmills l. Bellmills m. Babymills/Munchmills n. Halos/Tracks o. Eggbeaters p. Handcuffs q. Airtracks	a. 1990 b. 1999 c. 2000 d. 2001 e. Head Spin f. Elbow Spin g. Swirls 3e. Kicks a. Broncos b. Applejack c. L-Kick d. V-Kick
1e. Kicks/Flips Forwards: a. Fly & Roll b. Frontflip c. Handspring Sideways: d. 1-h. Cartwheel e. Aerial Cartwheel f. Laydown 540 g. Sideflip h. Wall Aerial Backwards: i. Backflip j. Gainer k. BackflipTwist l. Backw. Cartwheel m. Back Handspring n. Back Handspr. Twist o. Back Layout p. Back Walk-Over q. Valdez / Floor Flip r. Wallflip	2e. Kicks	3f. Mode Transitions
1f. Mode Transitions	2f. Mode Transitions	
a. drops b. kneedrop c. suicides	a. Kip Ups b. Worm c. Rubberband d. Swipes e. Air Swipes f. Head Swipes g. Flare h. Mini Flare	



TOOLS OF THE TRADE

Breakerz was created with the following technologies:

- Modeling, Scene Composition, & Character Setup: 3DS Max
- Texturing: Photoshop
- Animation: MotionBuilder
- Interface: Illustrator, 3DS Max, Photoshop
- Design Document: Word, Excel, Illustrator, Photoshop, Indesign
- Video Compositing: After Effects
- Sound Design: Audition, Live
- Character Design: pencil and paper

