

# KLASSIKER DER SPIELEGESCHICHTE

## RENNSPIELE

28. MAI 2016



# Merkmale

Audiovision: Grafik  
Technik: Controller  
Narration: Rennen  
Ludition: Steuerung  
Physik: Schadensmodell  
KI: Gummiband  
Ökonomie: Tuning  
Level: Rennstrecken  
Performanz: Spielstil



Arcade

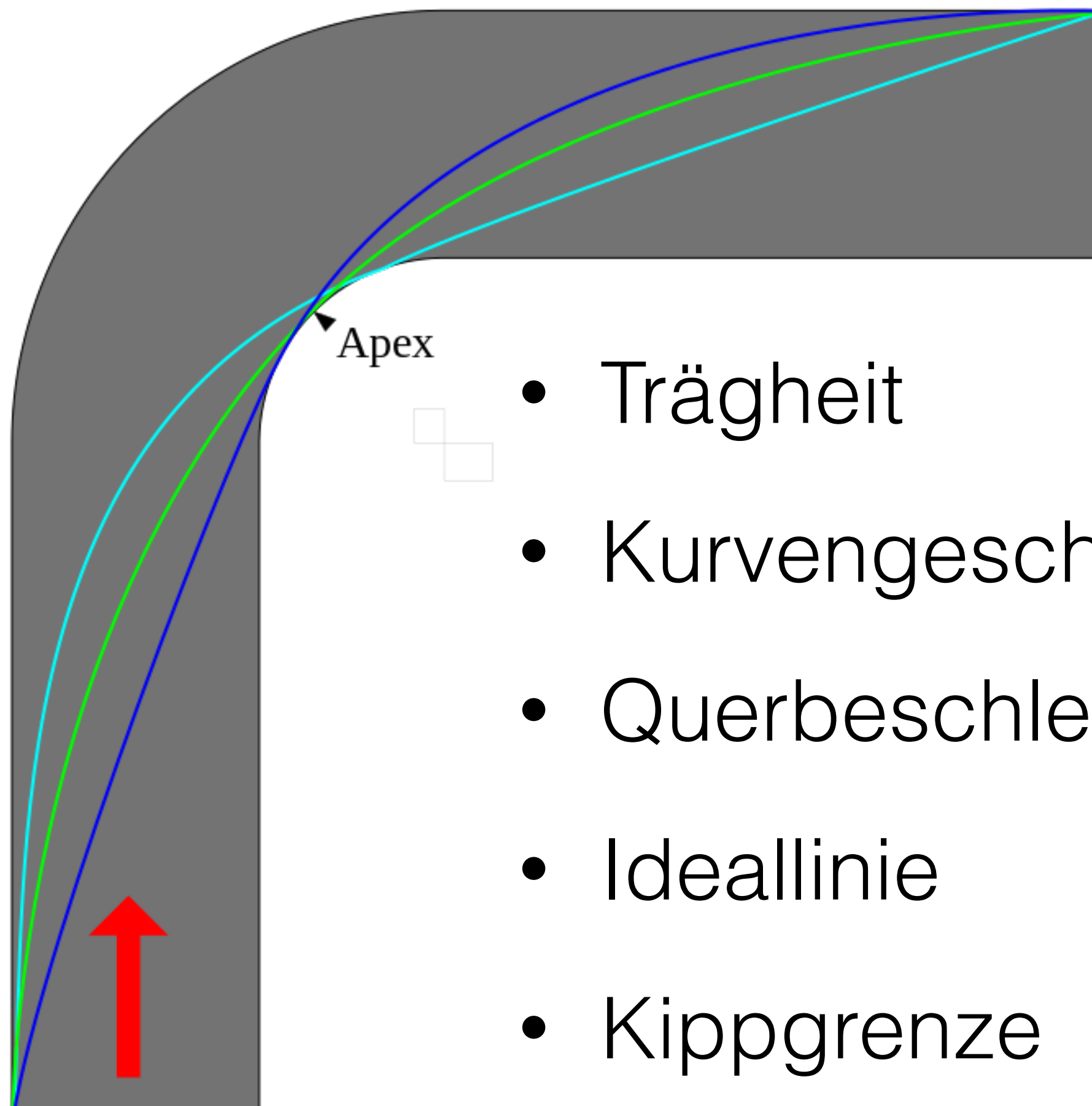


Simulation

# Racing Physics

# Fahrphysik

[http://de.wikipedia.org/wiki/Fahrphysik\\_\(Auto\)](http://de.wikipedia.org/wiki/Fahrphysik_(Auto))



- Trägheit
- Kurvengeschwindigkeit
- Querbeschleunigung
- Ideallinie
- Kippgrenze

Relevante Fahrzeugkomponenten

Reifen

Regelsysteme

Massenverteilung

(Achslastverteilung,  
Schwerpunktshöhe)

Federung, Dämpfung

Radaufhängung

Antriebskonzept

Frontantrieb

Standardantrieb

Heckantrieb

Allradantrieb

Aerodynamik



<http://kotaku.com/whats-the-best-game-engine-for-crashing-cars-1511415461>



MARIO MOTO

MARIOKART

MARIO CIRCUIT

Nintendo

Racing AI

# Racing Line





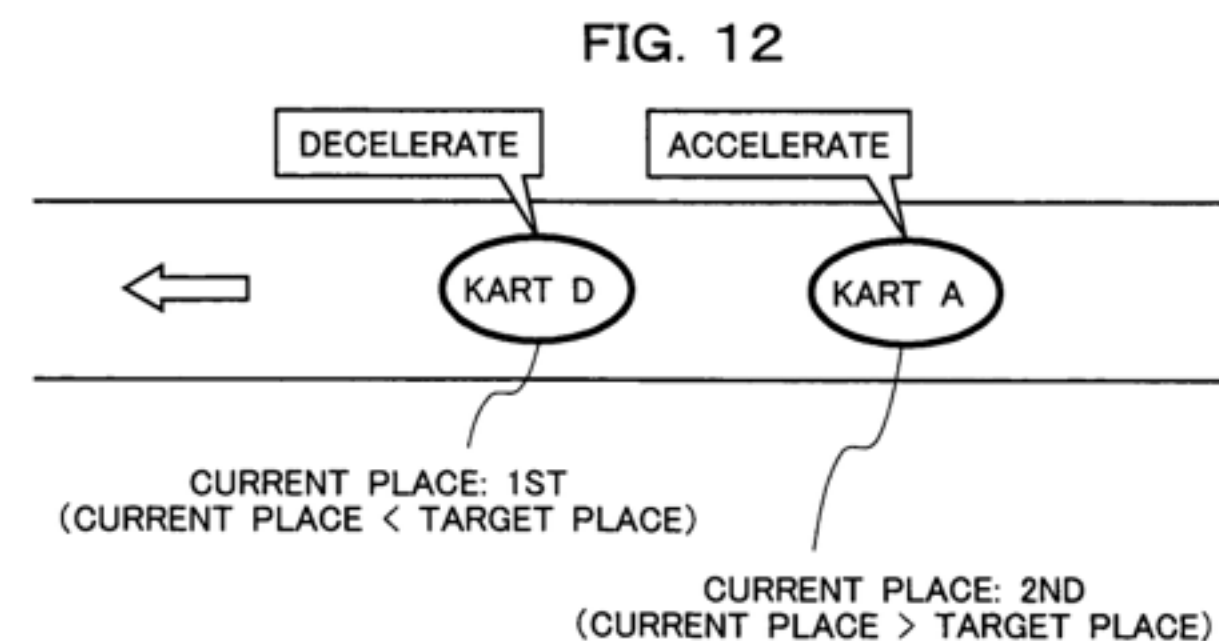
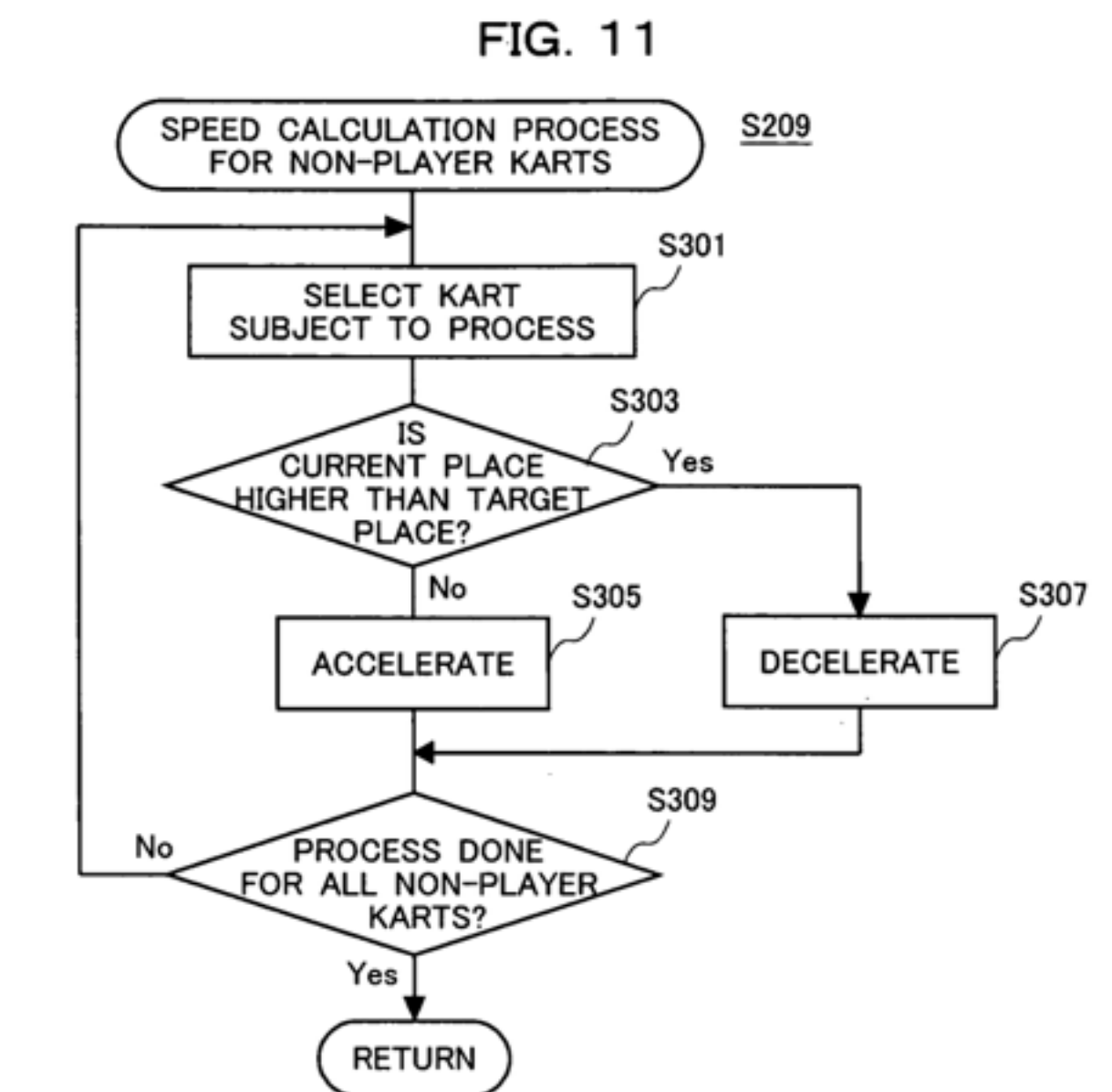
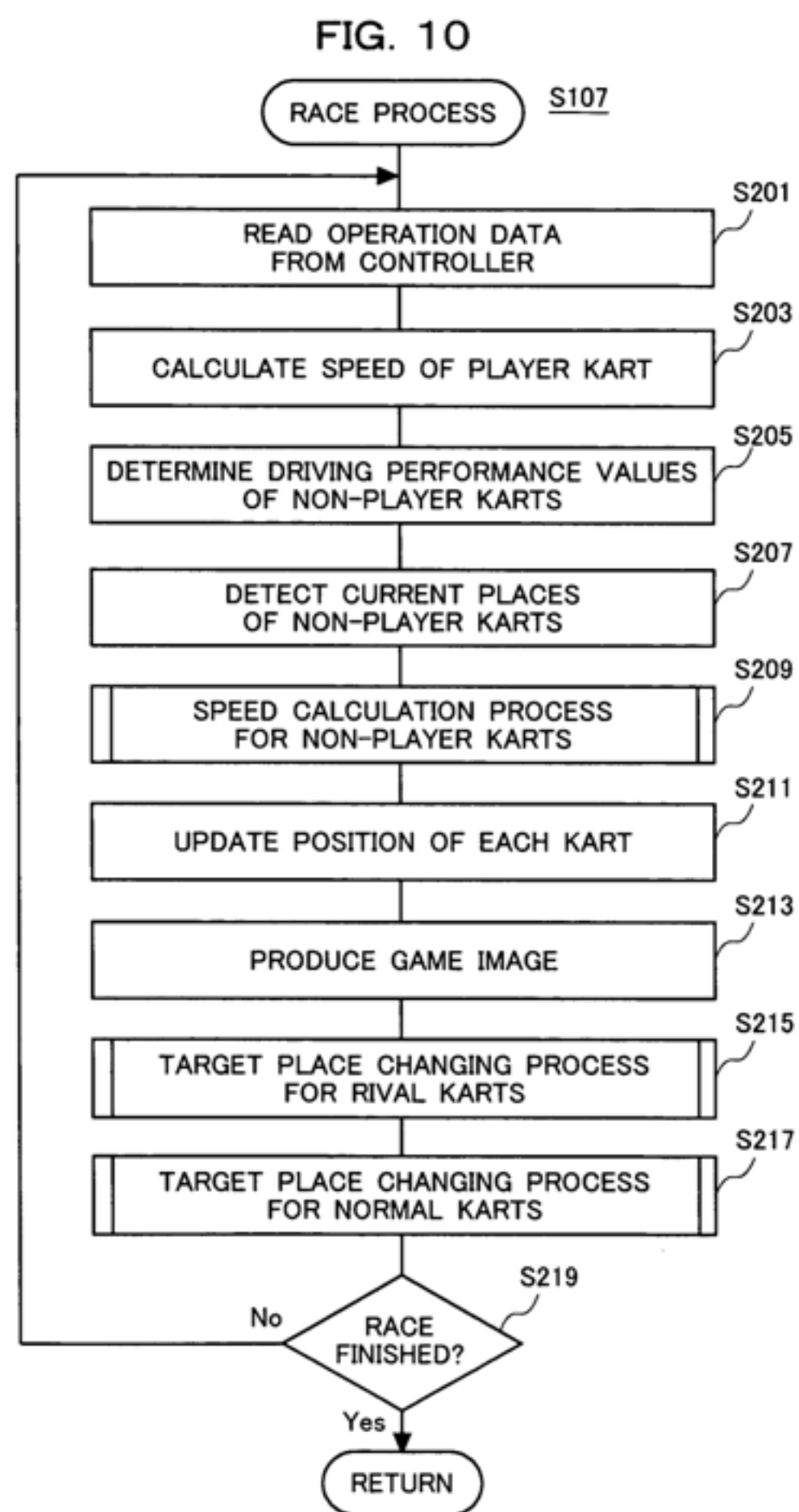
# Rubber Band AI

US Patent 7278913 (2007)

This method is very effective, as it keeps players surrounded for the whole race. It has an important downside: it's not fair, and that unfairness is easy to spot. It can easily break the illusion of fairness in the race. No matter how well a player does during the first 75% of the race, everything is decided by how they perform at the end. A single mistake in the last section can cost the player the whole race.

On the other hand, no matter how many mistakes the player makes at the beginning, there is still a chance of winning the race. The result: players can get frustrated and feel the competition is not fair.

[http://www.gamasutra.com/view/feature/3920/the\\_pure\\_advantage\\_advanced\\_.php?print=1](http://www.gamasutra.com/view/feature/3920/the_pure_advantage_advanced_.php?print=1)



# Racing Economy

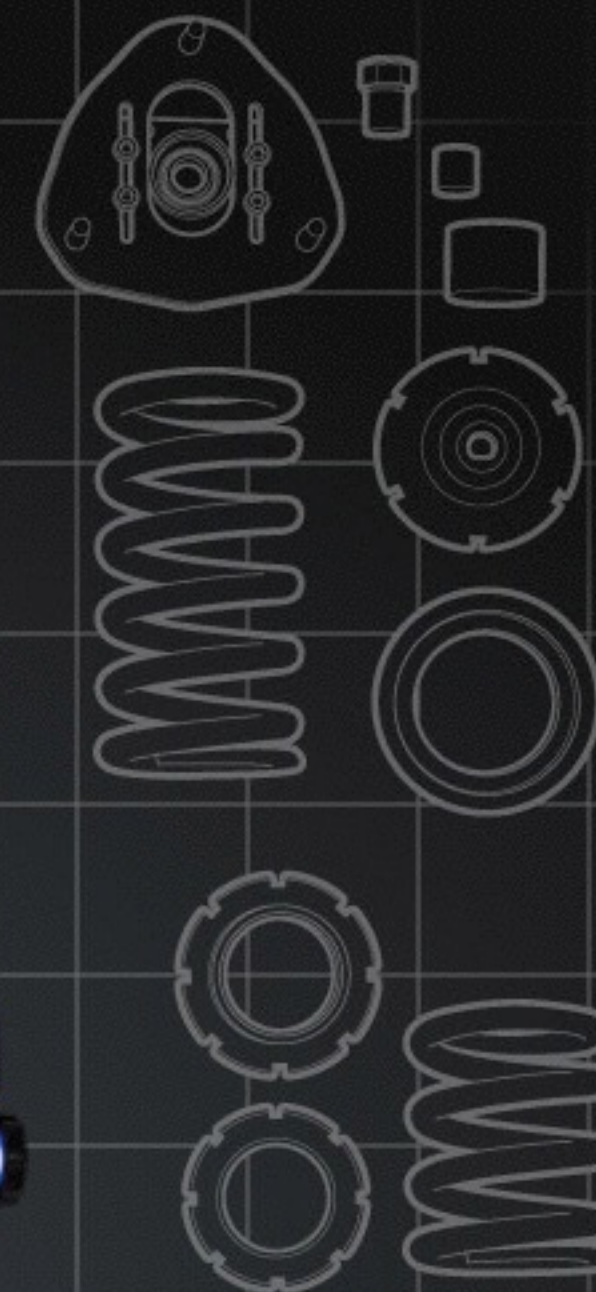
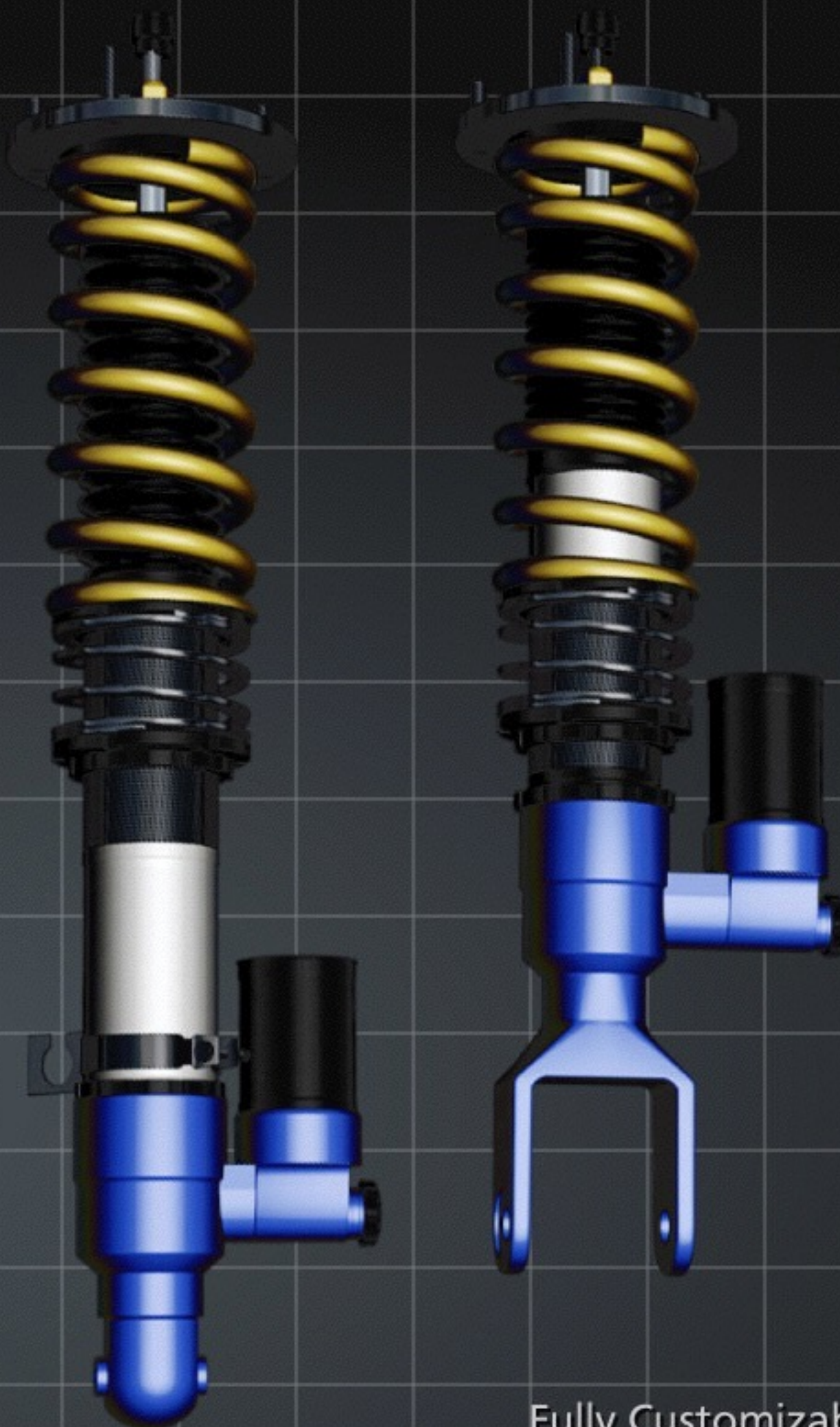
## Suspension Kit

A lineup of suspension kits that control a car's movement.  
A selection ranging from standard kits for beginners to full competition kits.  
Choose a kit that's right for you.

Fixed Sports Suspension Kit  
Cr. 3,000



Height Adjustable Sports Suspension Kit  
Cr. 7,500



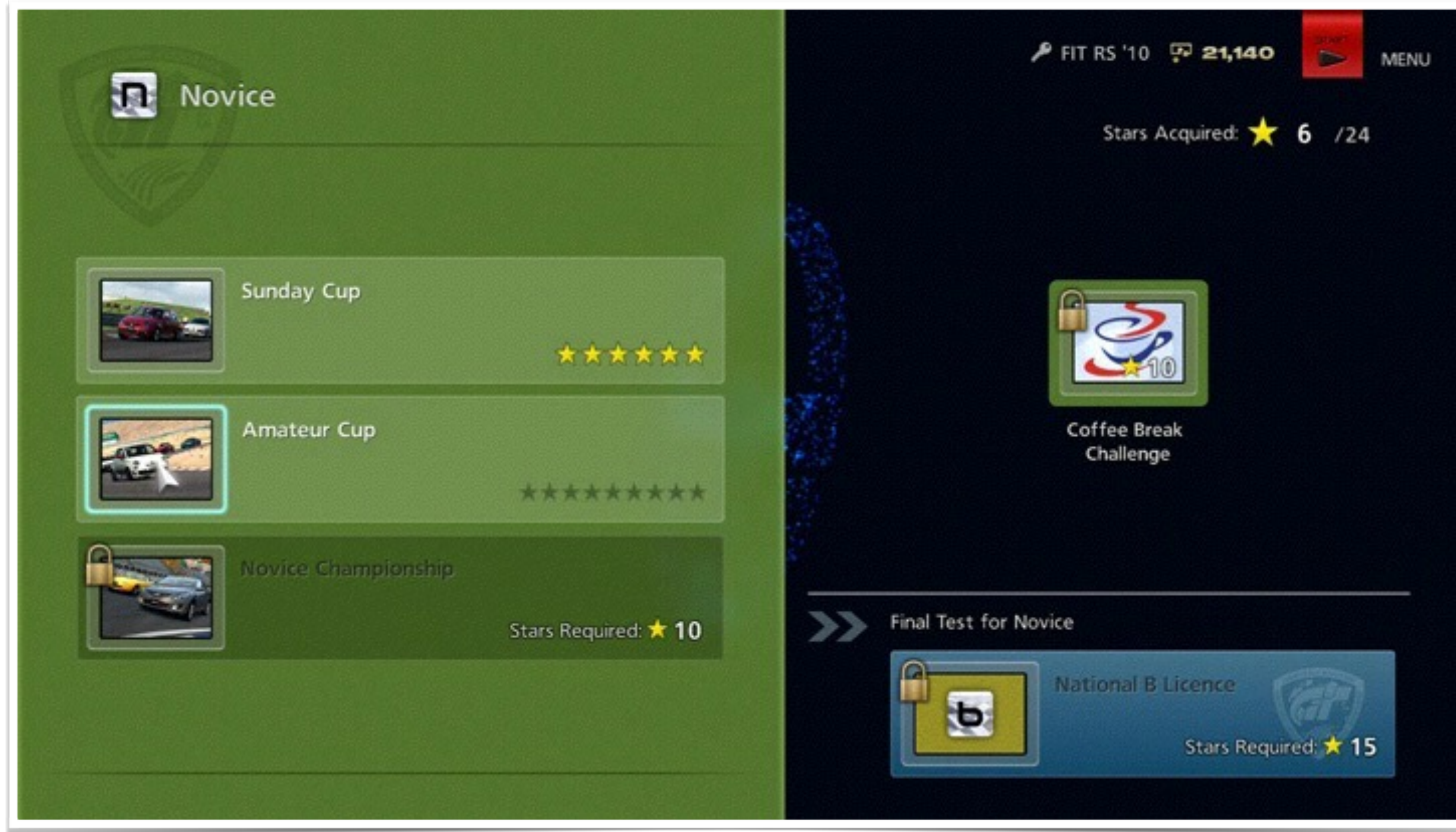
Fully Customizable Suspension Kit  
Cr. 20,000

Owned : 8

Accept

Cancel

# Career Mode



# Car Dealer


Corvette Stingray (C7) '14 2,000,000 MENU


## Showroom

- Select Colour >
- Gallery View >
- Car Information >
- Purchase**

### Lamborghini Reventon '08

LAMBORGHINI



Lamborghini Reventon '08		Catalogue Performance		Italy  <b>PP 551</b>	
Price	<b>Cr. 1,210,000</b>	Displacement	6,496 cc	Length	4,700 mm
Current Credits	<b>Cr. 2,000,000</b>	Max. Power	649 BHP/8000 rpm	Width	2,058 mm
Credits Remaining	<b>Cr. 790,000</b>	Max. Torque	67 kgfm/6000 rpm	Height	1,135 mm
		Drivetrain/Aspiration	4WD/NA	Weight	1,665 kg

The most expensive Lamborghini ever: an ultra-aggressive, 20-car limited edition model.

# Racing Performance

# Dream Racing



<https://www.youtube.com/watch?v=XRQy0x0pIhQ>

# Spielgeschichte



# Vorgeschichte

<http://www.pinrepair.com/arcade/>



1941

REALISTIC! COMPETITIVE! INSTRUCTIVE!

## AUTO-TEST

REAL CAR FEATURES

REAL CAR ACTION

Real steering wheel, real dashboard, real brake and accelerator. And they all work, too. Just like a real car. Simulates actual driving conditions for a fun-packed test of driving skill—in competition with another car.

Driver is rated on ability—to steer, brake and accelerate, safely—for first place. Live electronic scoreboard shows progress of both contestants. Creates tremendous spectator interest. Everyone loves a contest.

To win — driver must keep car ahead, but within safe speed limits. Excess speed 'stops' his car... and 'stops' his scoring, until Safe Speed is resumed.

Continued customer interest. Different road situations with each change of film. Keeps 'em guessing and keeps 'em driving, again and again.

Exciting, attention-getting sound, with humorous driving instructions. Adds to the fun and delivers a sugar-coated traffic safety message. A perfect community relations tie-in.

**AUTO TEST**

A feature at the 47th Annual Congress of the National Safety Council.

AUTO-TEST has earned recognition for outstanding performance in the promotion of Traffic Safety by nationally known business and industrial organizations.

Printed in U.S.A.

1959

CHICAGO COIN'S NEW  
EXCITINGLY DIFFERENT

# drive master

with Revolutionary New  
REALISTIC  
"WINDSHIELD VIEW"  
DRIVING

NO FILM...or Belts!

A Fantastic New Full Color Moving Projection Principle. Simple, Trouble-Free Design.

The Driver Feels He is Actually In the Car, Thru These Revolutionary Visual Effects and Sounds!

GEAR SHIFT . . . Visual Motion Effect of Forward, Reverse, or Neutral.

Hair-raising Accidents, Passing, Lane Hugging.

See Other Side For Full Details

Miles of PROVEN PROFIT MAKERS Since 1931

CHICAGO COIN MACHINE DIV. CHICAGO DYNAMIC INDUSTRIES, INC.

1969

# Nürburgring

neu · hochwertig · zukunftssicher



Patent angemeldet

**Nürburgring** setzt neue Maßstäbe für Videoautomaten. Es ist nicht ein Spiel mit ferngelenkten Miniaturfiguren, sondern hautnahes Rennerlebnis aus der Sicht des Fahrers. Damit gibt es erstmalig einen **Fahrtsimulator mit naturgetreuem perspektivischem Straßenbild** als Münzautomaten.

#### Nürburgring / 1

mit Lenkrad  
und Gaspedal

Höhe: 1,82 m  
Breite: 56 cm  
Tiefe: 76 cm  
Gewicht: 85 kg

#### Nürburgring / 2

mit Motorradlenker  
und Gasdrehgriff

Höhe: 1,82 m  
Breite: 56 cm  
Tiefe: 70 cm  
Gewicht: 85 kg

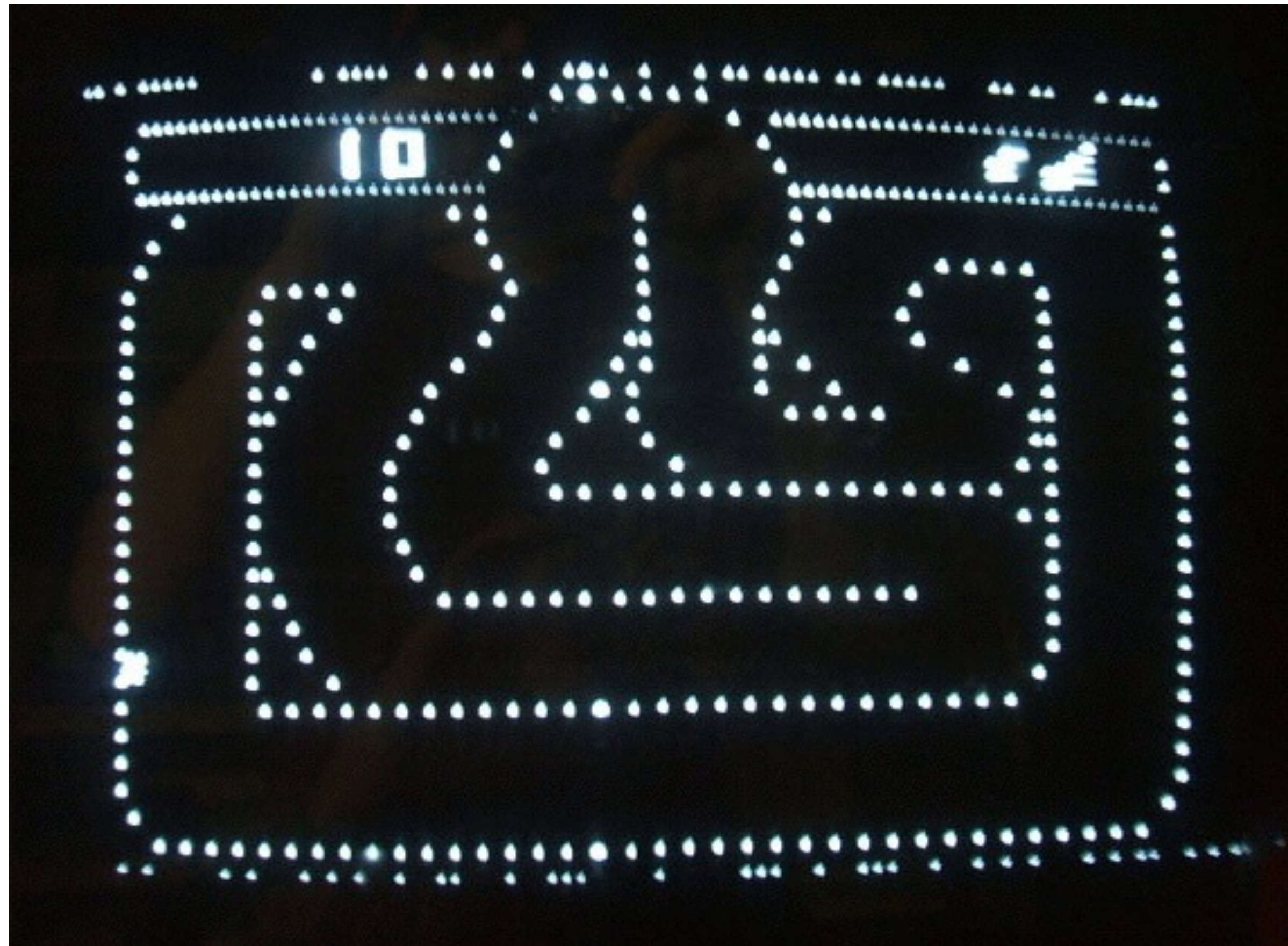
Bonn will die 0,8-Promille-Grenze einführen. D



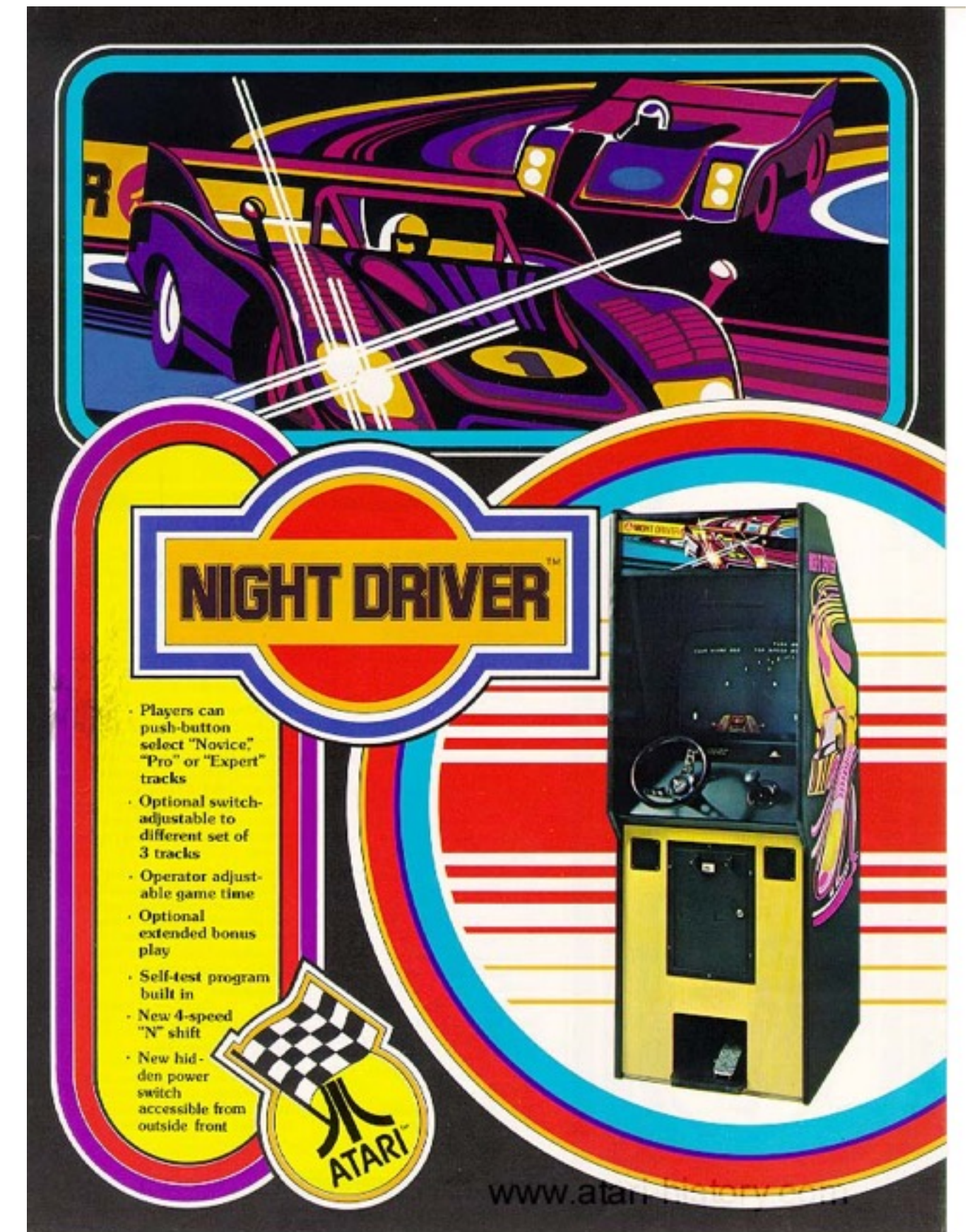
Ge-  
zungsabtei-  
Jrg steht  
rsimulator der Welt.  
nden die Fahr-  
55 Testpersonen ge-  
chtern und unter  
ockpit finden sich alle  
ernte eines Autos. Ein Com-  
ter erzeugt elektronisch ein  
is Bild einer acht Meter breiten Bun-  
sastraße und projiziert es in das  
Blickfeld des Fahrers. Er  
da Strecke realistisch wie bei einer

1973

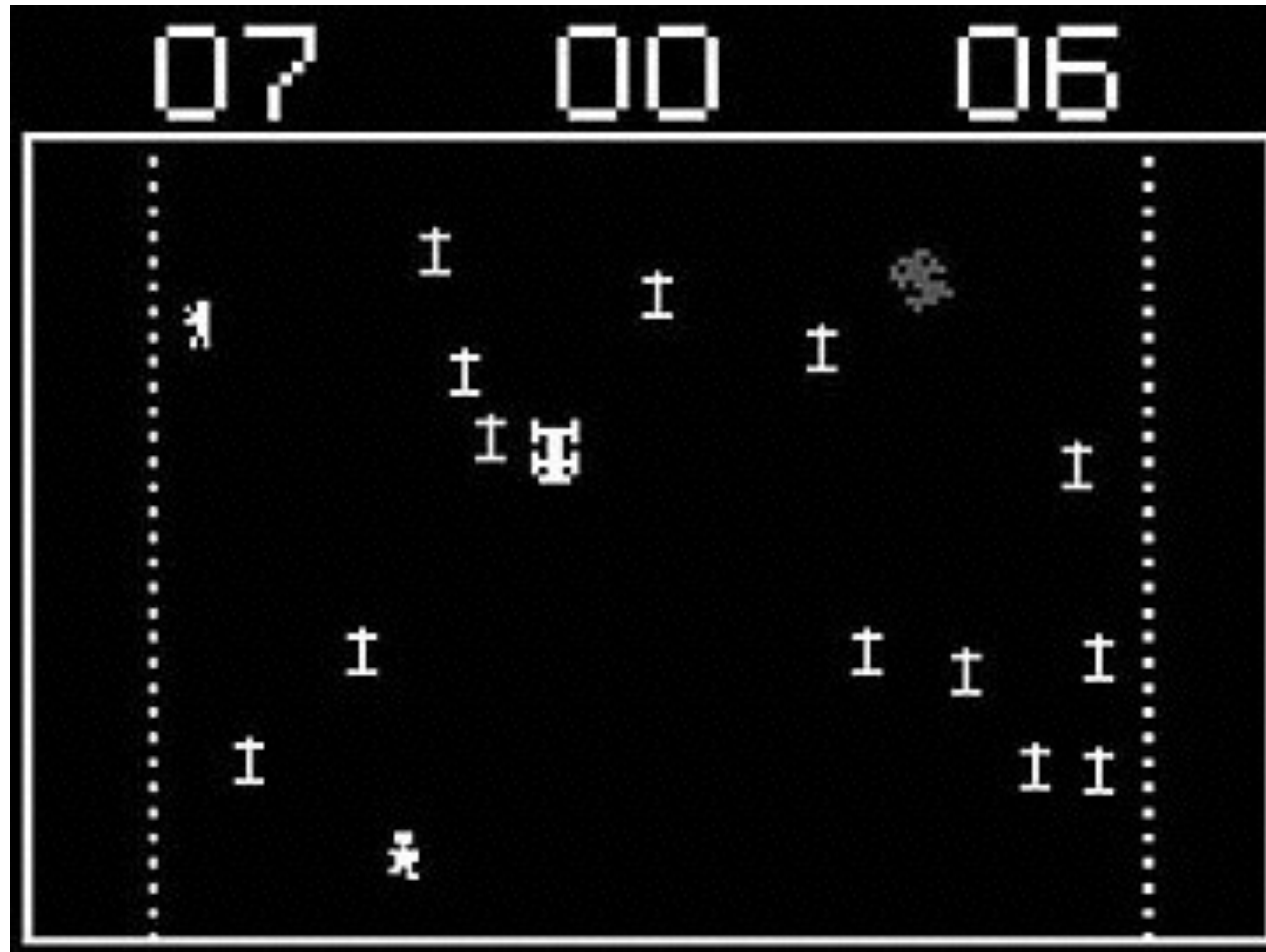
# Arcade: Gran Trak 10 (1974)



# Simulation: Night Driver (1976)



# Vehicular Combat: Death Race (1976)



# Arcade Rennspiele



Turbo (1981)



Pole Position (1982)



Out Run (1986)



# Arcade Rennspiele



Hard Drivin' (1989)



Ridge Racer (1994)



Virtua Racing (1994)



# Arcade Racer



Burnout (2001)



Juiced (2005)



Motorstorm (2006)



# Street Racer



Need for Speed (1994)

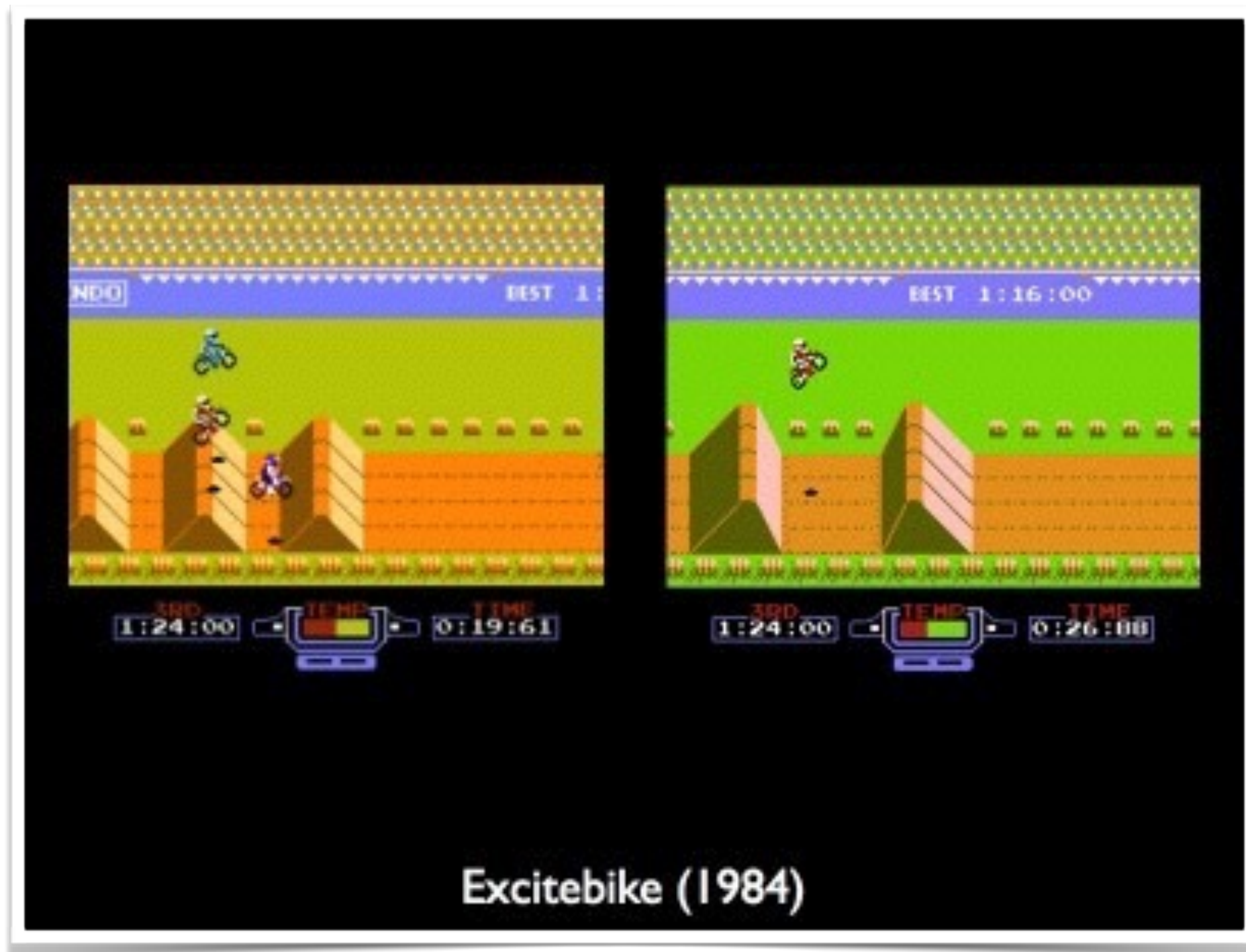


Midnight Club (2000)



Project Gotham Racing (2000)

# Level Editoren



Excitebike (1984)

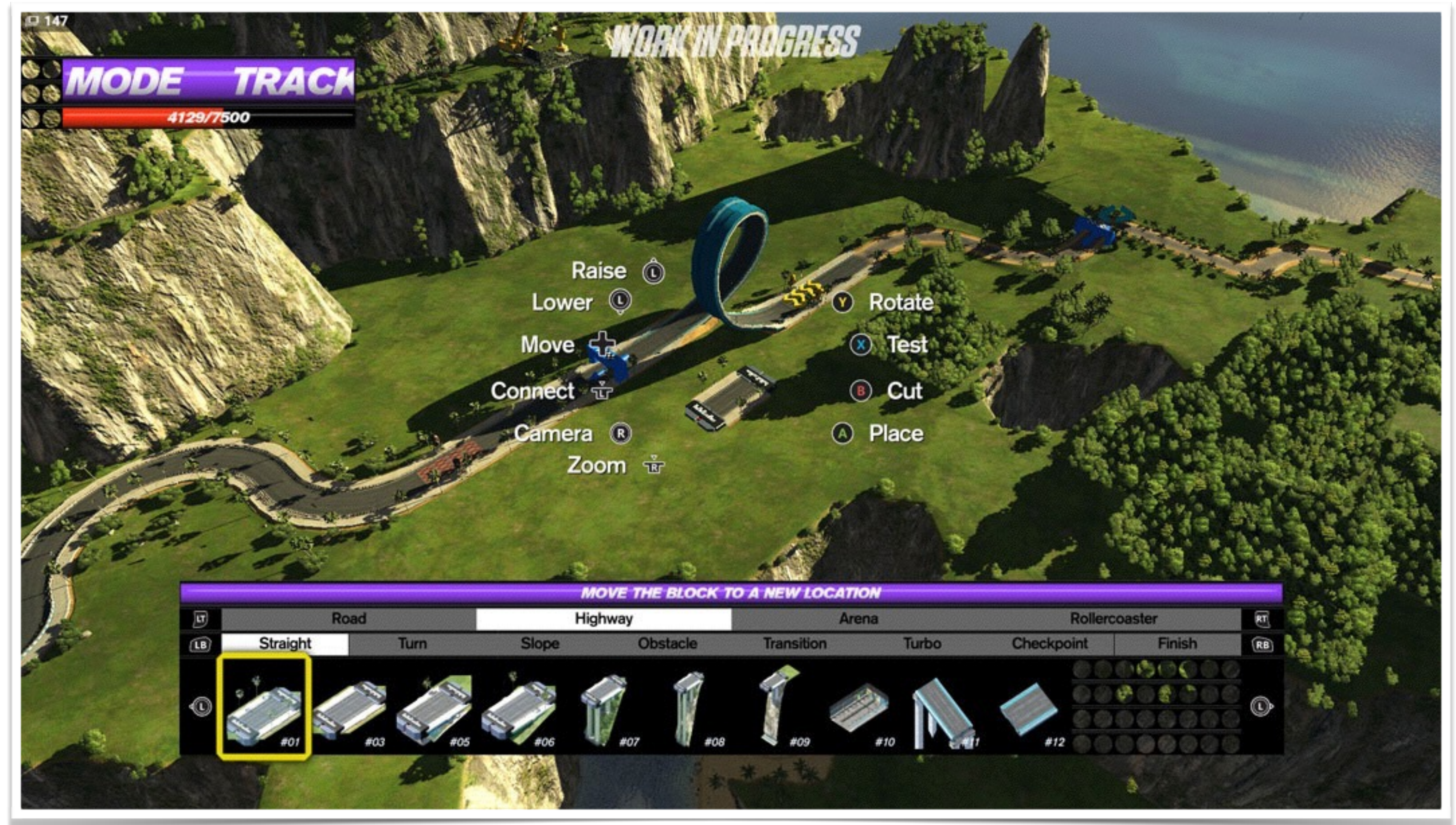


Racing Destruction Set (1985)

# Level Editor



Stunts 1990



Trackmania Turbo 2016

# Kart Rennen



Super Mario Kart (1992)



Sonic Drift (1994)

Angry Birds Go! (2013)

Digimon Racing (2004)

Konami Krazy Racers (2001)

Looney Tunes Racing (2000)

Lego Racers (1999)

LittleBigPlanet Karting (2012)

Muppet RaceMania (2000)

MySims Racing (2009)

Pac-Man World Rally (2006)

SuperTuxKart (2004)

Star Wars Super Bombad Racing (2001)

South Park Rally (1999)

# Simulatoren



Chequered Flags 1983



Revs 1984



WEC Le Mans 1986

# Sim Racing

[http://en.wikipedia.org/wiki/Sim\\_racing](http://en.wikipedia.org/wiki/Sim_racing)



Indianapolis 500:  
The Simulation (1989)



Grand Prix Legends (1998)



iRacing 2008



Project Cars (2015)

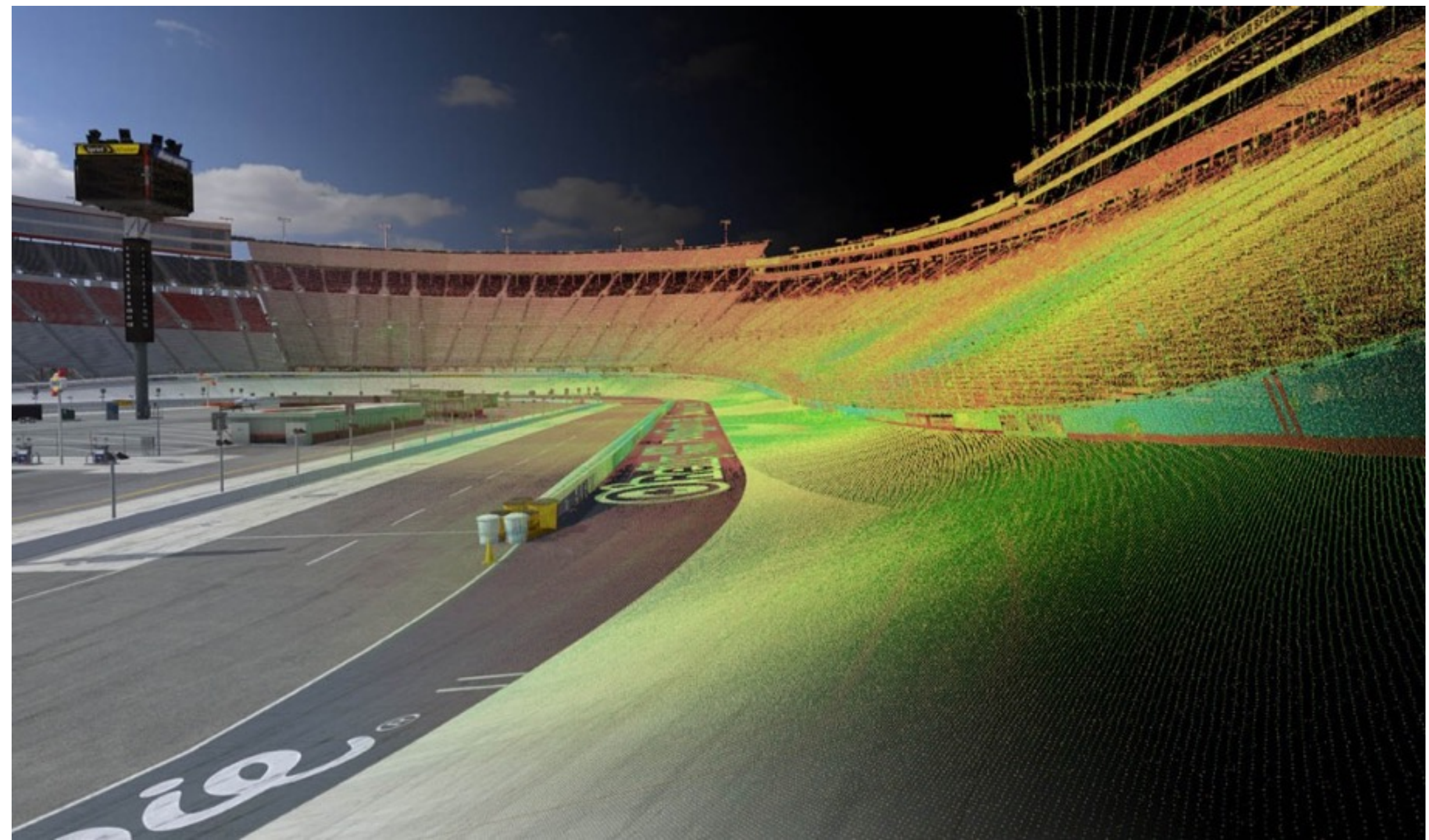
# Genretypische Dispositive





# Laser Scanning

<https://www.youtube.com/watch?v=QHCK-5IZX9U>



# Halb-Simulatoren



Gran Turismo (ab 1997)



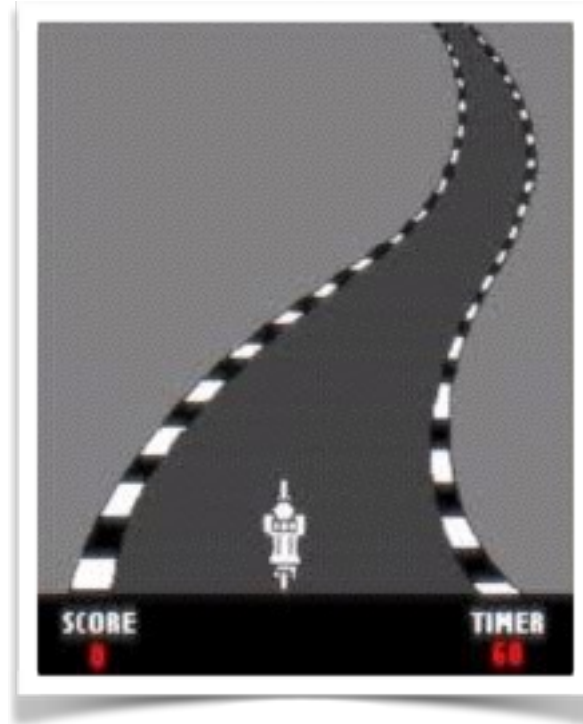
Forza Motorsport (ab 2005)

# Ludo-visuelle Dissonanz



Blur (2010)

# Motorrad-Rennspiele



Fonz (1976)



MotoRace USA 1983



Hang On (1985)



# Vehicular Combat



Rally-X (1980)



Spy Hunter 1983



The Battle Road 1984

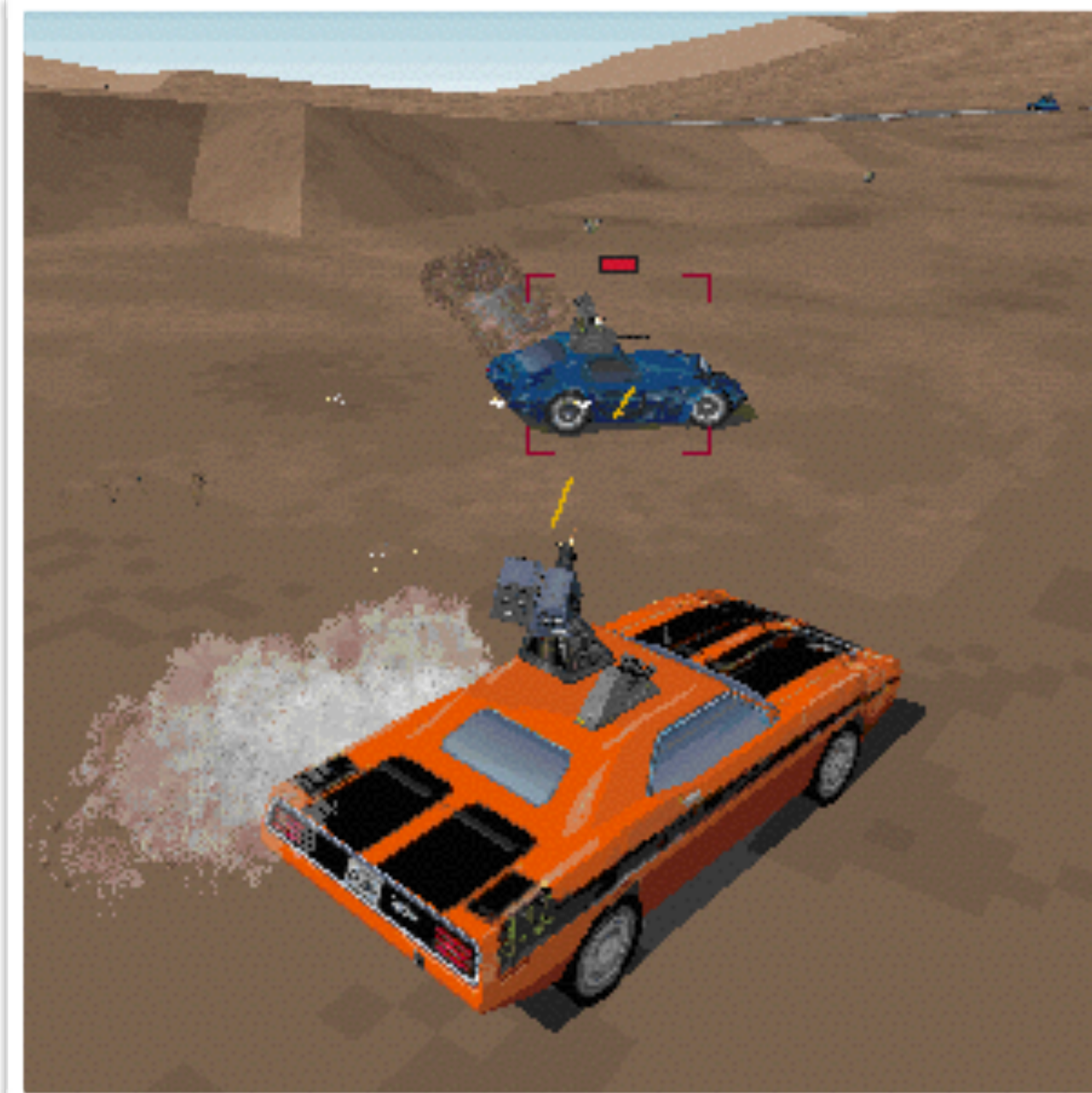


Chase H.Q. 1988

# Vehicular Combat



Twisted Metal 1995



Interstate 1997



Carmageddon 1997