

Music, sound, and Video Games

Genre sound



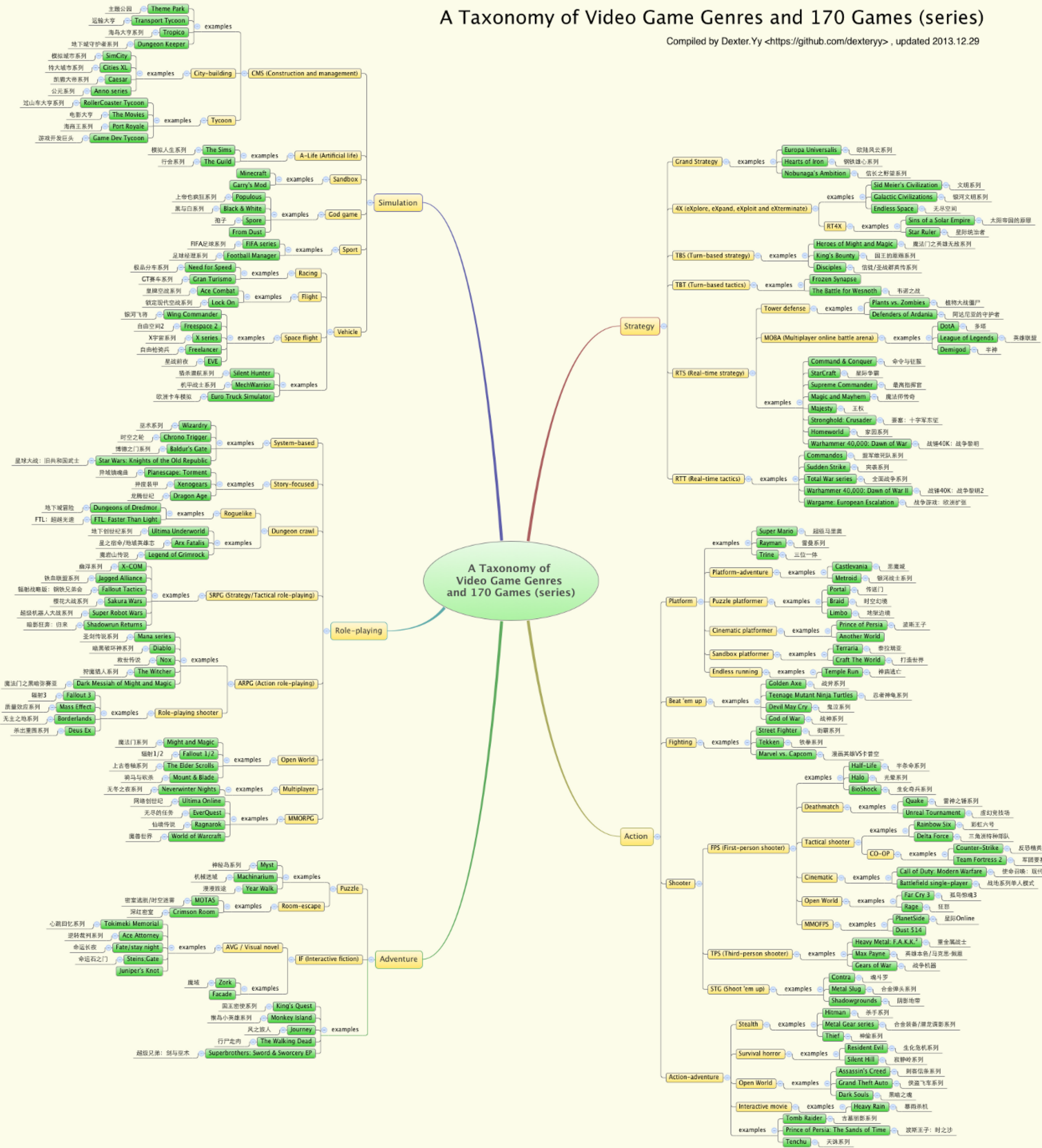
Week 7, Day 1

Genre Problems

- Genre: comes from Latin *genus* invokes the class, category, or type of a work of art
- Dalhaus: thinking of genre as something to do with tradition...the principles we use to group works according to genre as inconsistent...argues that musical genre starts losing meaning and power around 1839 (!)
- what do we look at? function? form?
- thinking about genre as communication rather than classification...thinking about perceptions of audiences as well as composers...research into genre should think about contexts and traditions...Genre exerts a persuasive force. It guides the responses of listeners. The choice of genre by a composer and its identification by a listener establish the framework for communication of meaning." Jeffrey Kallberg

A Taxonomy of Video Game Genres and 170 Games (series)

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Taxonomy Weirdness.....

One example of the complexity of game genre is the popular game Minecraft, which sold 54 million copies across various platforms (Phillips, 2014) and earned parent company Mojang millions of dollars. The mix of components from action, strategy, adventure, and survival genres in this game gets Minecraft tagged with almost every genre label available for games, such as the following list from major gaming review sites:

- Sandbox, Survival (Wikipedia)
- Simulation (Allgame, GameStop)
- Action (Mobygames)
- Action-Adventure (Giantbomb)
- Adventure (1UP, Common sense media)
- Adventure>First-Person>Fantasy (Gamefaqs)
- First-Person Action (IGN)
- Fantasy (Metacritic)
- City Simulation (Neoseeker)
- Strategy (PSN)
- Action & Adventure, Strategy & Simulation (Xbox Live)
- 3D, Adventure, First-person (Gamespot)

Tables

Genre Label	Source	Aspects represented in the label											
		Game Mechanics	Hardware	In-game Activities	Intended Age	Media	Number of Players	Point of View	Purpose	Setting	Theme/ Mood	Time	Visual Design
3D Real-Time Strategy	Allgame							x			x	x	
Action RPG	Gamefaqs			x							x		
Adult Text-based Adventure	Allgame	x			x	x					x		
Anime/Manga	Moby					x							x
Console-style RPG	Gamefaqs		x	x									
Education	IGN								x				
Futuristic Racing	Allgame			x						x			
Ground Vehicle Combat Sim	Allgame			x							x		
Horror	Gamefaqs										x		
MMO Real Time Strategy	Ranker						x				x	x	
MMORPG	Ranker			x		x							
Sandbox games	Ranker	x											
Third-person Action/Adventure/Shooter	Allgame	x		x				x			x		

Table 1. Dimensions of information represented in “genre”

Some issues with classifying games:

	<i>Super Mario Bros.</i>	<i>Mortal Kombat 3</i>	<i>Bejeweled 2</i>
Gameplay	Action	Fighting	Puzzle
Style	Platformer	Versus	Tile-matching
Purpose	Entertainment	Entertainment	Entertainment
Target Audience	-	Mature 17+ (ESRB)	Everyone (Android)
Presentation	2D, Side-scrolling	2D, Isometric	2D, Static background, Grid-based
Temporal Aspect	Real-time	Real-time	Turn-based
Artistic style	Retro	Retro	Abstract
Point-of-view	Third person	Third person	Top down
Theme	Fantasy – Princess	War and Fighting – Combat, Sci-Fi, End of the world– Post-apocalypse	-
Setting	Spatial–Virtual world, Spatial– Nature	Spatial–Virtual world, Temporal –Futuristic	-
Mood/ Affect	Quirky	Aggressive	-
Type of ending	Finite	Finite	Infinite

Table 2. Sample games illustrating the decomposition of the facets of video game genre

Some issues with classifying games:

Internal Combustion Engine - Sound Components

- Engine Sound = Air comes in, gets mixed with gas, Air/Gas goes into a cylinder, gets compressed & blown up, then what's left goes out the exhaust.
- Key Engine sound components of this process:
 - - Induction note (intake)
 - - Valvetrain & other engine bay noises (belts, pumps, etc)
 - - Exhaust

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

A few other notes

Racing Games

- a lot of references to “realism” as the ultimate goal for game developers of racing games—sometimes even asking real race-car drivers to test the games and comment on realism
- is this “realism”? Karen Collins and Ruth Dockaway argue that it’s a kind of space between reality and fantasy—the “cine-real” (a sense of immersion and believability, or verisimilitude, within a fantasy world) that is supported through its music and sound design
- 1990s: viewing racing games as narratives rather than straight simulations has been developing since at least this point (drivatars, survival and growing as an individual, backstory)
- realism even in simulator-based games is questionable, but the audio plays a particularly strong role in both the presentation of “reality” and the narrative arc
- at the heart of the auditory cine-realism is the use of sound and music to fill a gap left by the sensory information presented to the player, and for narrative purposes.

Slides following compiled from:

Collins, K. & Dockway, R.. ‘Drive, Speed and Narrative in the Soundscapes of Racing Games’. In M. Mera, R. Sadoff, B. Winters (Eds.), *The Routledge Companion to Screen Music and Sound*, pp. London: Routledge. 2017.

Dockway, R., & Collins, K. A Symphony of Sound: Surround Sound in Formula One Racing Games. In P. Théberge, K. Devine & T. Everett (Eds.), *Living Stereo: Histories and Cultures of Multichannel Sound*, pp. 247-65. USA: Bloomsbury. 2015.

A few other notes

Racing Games

- Atari *Gran Trak 10* (1974): ad flyer states "You can see it here....but you've gotta HEAR it! Gran Trak 10 is the breakthrough for 1974. Gran Prix racing action, complete with the roar of a supercharged engine, squealing of tires around curves, and heart-stopping crash effects."
- *Space Race*
- note that racing games are often one of the few types of games still released for arcades



A few other notes

Racing Games

- I'm not sure that we were really all that good at making sound at first. Initially, it was recording cars in parking lots on jacks, or on the road, trying to get a combination of the two things. And a lot of the time it was recording cars from the inside so we'd head out onto the road and then you end up with the road noise (Jennifer Lewis, interview 2015).
- Most games require lots of one shot sounds for things like character movement, footsteps, weapons, voice over, world objects and object interactions, etc, with a small number of constant sounds for moving objects, vehicles or background noise. With a racing game, most of the objects in the game are making sounds created from many layers of continuously changing sounds. (Nick Wiswell)
- When I started out doing audio for *Project Gotham Racing*, knew nothing...I was looking at it from my perspective of what I thought was important...It was very much a trial-and-error system, but over the years we've developed....And car guys would say, "This sound is important." And I was like, "Well, I didn't know that. I didn't know that sound was important." (Nick Wiswell, interview 2015)
- One of the things that's really amazing is in our *Need for Speed* system, we have the physical model for engines....We can also start modeling things like mufflers and blowers and doing filter analysis....It's a more physical model. We're trying to get into more actual modeling of elements for "reality." (Gordon Durity, interview 2015)
- may be twenty to forty different layers of audiomaking up the sound of the car.



A few other notes

Racing Games

- Sound has to feel an emotional role that provides the *feeling* of the car, as much as the actual sound of the car (race car driver uses sensory cues to adjust speed and direction, and some of these cues are lost when shift is made from road to screen—in particular sense of movement, g-force, and physical feedback of car)
- “in the real world, a driver can feel his or her body and by extension the car itself shifting in all directions and know from that what’s going on with the tires. In absence of physical communication, sound fills the void in an auditory language the player can learn through practice. That language mimics sounds that real tires make, but in general are exaggerate in games. As the tire approaches the grip limit, the sound starts as a lower-frequency hum or growl. This will get louder and hisser the closer to the limit the tire is. When the tire exceed the grip level, you hear the squeal/.”
- So the sound design in racing game is a combination of layers that constantly change throughout the gameplay in response to the car and track, comprising engine, engine intake, exhaust, transmission, four independent tires, engine RPM, throttle, engine load, turbo RPM, surface type, tire speed, and lateral slip.
- Tire sound, in particular is a very important part of the game, as it’s the main source of feedback for the player while racing....“We’ve done numerous tire recording sessions, on numerous different surface types, to try and cover the full range of grip and traction sounds that you need to really get around circuit quickly.” *Forza* sound designer Mike Cavieziel.



A few other notes

Racing Games

- Metaphor of repetitive beat is quite common—you can hear this in a lot of early dance-music racing soundtracks: *Need for Speed*, *Drift Stage*, early *Forza Motorsport*
- Also tended to be a strong link between motor racing and rock music, from film soundtracks such as *Rush* (2013—, 1970s rock music) to television theme tunes such as BBC and Channel 4's use of Fleetwood Mac's "The Chain" as the opening and closing theme of their Formula One coverage.
- Peter Wicke on rock: "drive" denotes the motoric intensity of music, perceptible as an apparent increase in tempo without any actual acceleration of temporal flow. The apparent acceleration is achieved by increased density of metrical and rhythmic accent patterns."

