Hello, my name is Emmanuel Lagumbay.

Welcome to the latest installment of our panel series “Trumpets and Transients: A Composers Guide to Sound Design”.
For GDC we are putting a different twist on our format, presenting in a Microtalk format, followed by time for QA!
Also please remember to fill out your GDC session survey after our talk, so we can find out how we did!
Without further ado, let’s begin with our first speaker, Penka!

GDC
Knowledge is Power
Penka Kouneva
Freelance Composer
GAME DEVELOPERS CONFERENCE
MARCH 18–22, 2019 | #GDC19

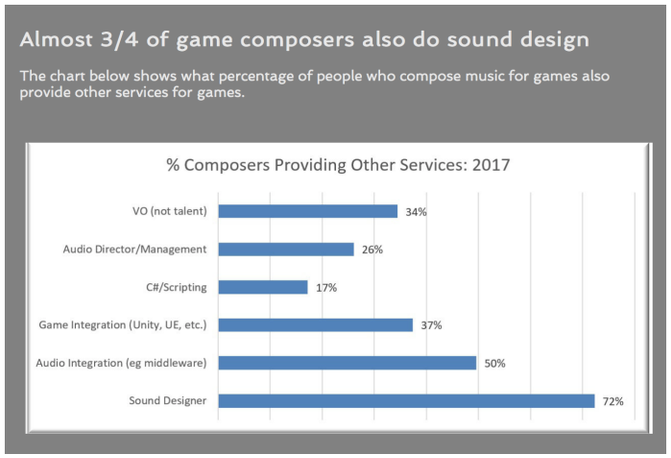
Who I Am

Penka Kouneva - Freelance Composer for Mobile & VR Games

Additional Composer for:

The Stats - Annual Game Audio Survey 2017

- 464 usable responses
- 72% of composers create SFX
- 50% of composers also integrate audio (middleware like FMOD, Wwise, Elias, etc.)



Key Takeaways

1)Learn Sound Design to expand your job possibilities

1)Learn Sound Design to improve your own craft & skills as a composer

Expand Job Possibilities

- More valuable collaborator

- Many Sound Designers are full-time in-house

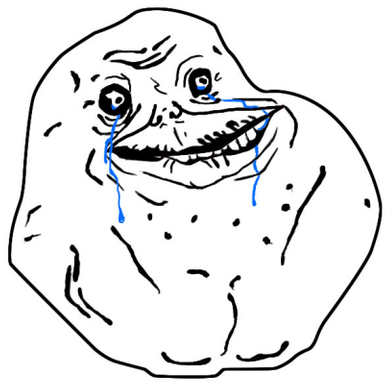
- Most Composers are freelancers.

Team Dynamic

Multiple Sound Designers in a sound team

- Weapons, vehicles, combat, foley
- Ambiances
- Dialogue Editing
- Implementation

Composers in Indie Games



“Become a Dentist”

Number of Opportunities

- Most opportunities are in mobile and casual games.

- Having all audio skills (music, sound design, VO editing, audio-middleware implementation) means higher value.

Benefits as a composer

- Learn to compose around the frequencies of diegetic sound and tonal ambiances.

- When will music take over? (Hint: Without dialogue)

- Clearer communication with audio colleagues in the studio

Hierarchy of Audio

- Hierarchy of Audio:
  - Primary: VO
  - Secondary: Diegetic SFX/Emotional sound design (and non-diegetic like drones, ambiances, etc)
  - Tertiary: Music (Non-diegetic music)

Summary

- Sound designing opportunities are more frequent.

- Deeper understanding of sound in games (and the world) makes you a greater game composer

The Mummy VR

Challenges

- 8 minutes long with heavy SFX and dialogue

- VR is sound goes directly from headphones into ears.

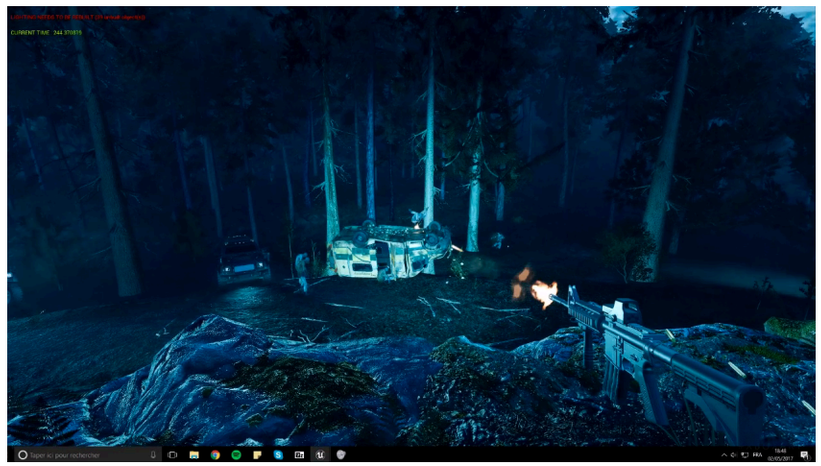
Sound designer: Here's a bunch of heavy SFX

Voice Director: Here's a bunch of important dialogue

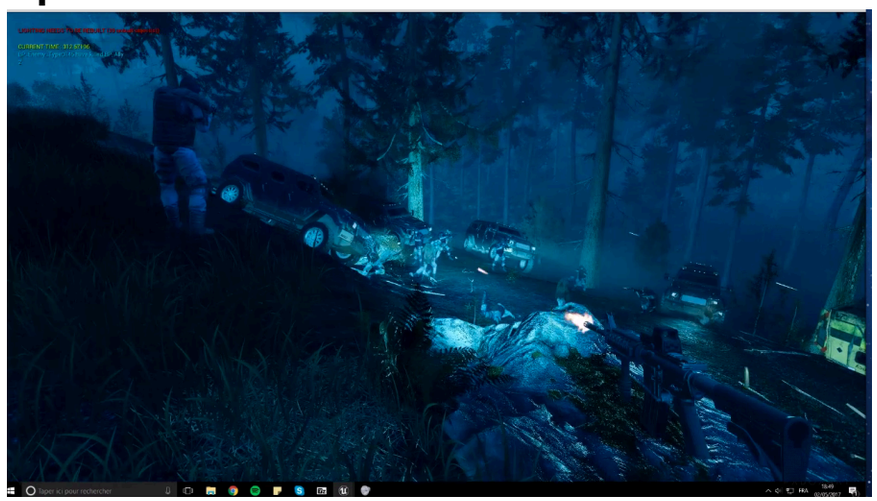
Composer:

Example 1 - Special Forces

Example 2 - Tension Horror Music



Example 2 - Tension Horror Music



Thank you!

Web:
www.penkakouneva.com

Twitter:
@PenkaKouneva

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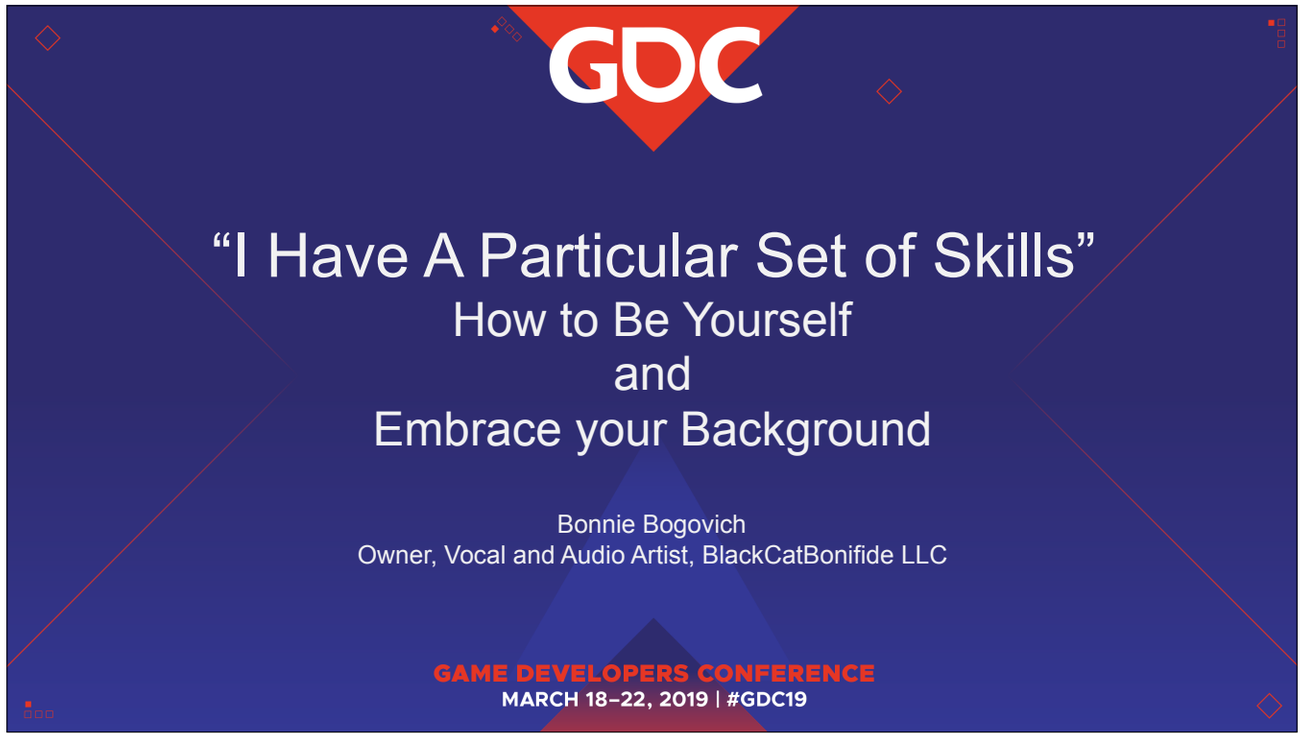
GDC
“I Have A Particular Set of Skills”
How to Be Yourself
and
Embrace your Background
Bonnie Bogovich
Owner, Vocal and Audio Artist, BlackCatBonifide LLC
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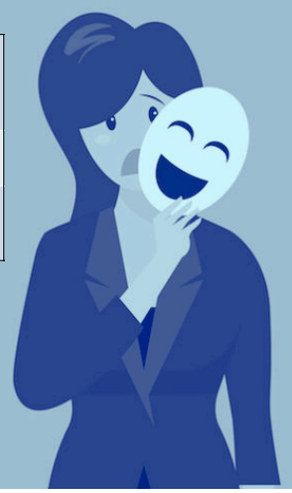
Session Name:	Everyone at this Conference is a Fraud
	GDC 2016
Speakers:	Stephan Schutze, Laura Karpman, Bonnie Bogovich, Varun Nair, Austin Wintory, DB Cooper



Speaker: Bonnie Bogovich
Twitter: @BlackCatBonFeed

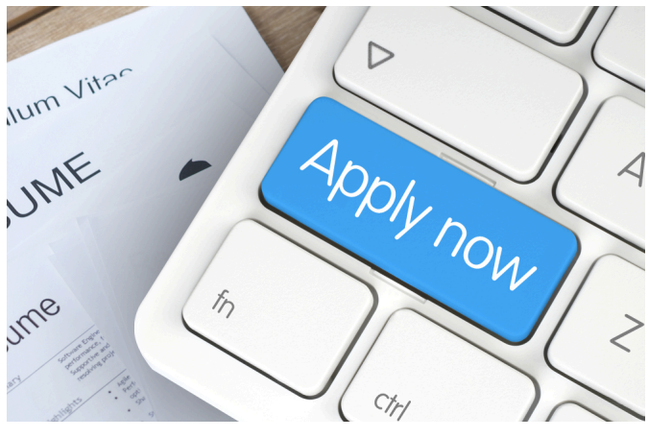
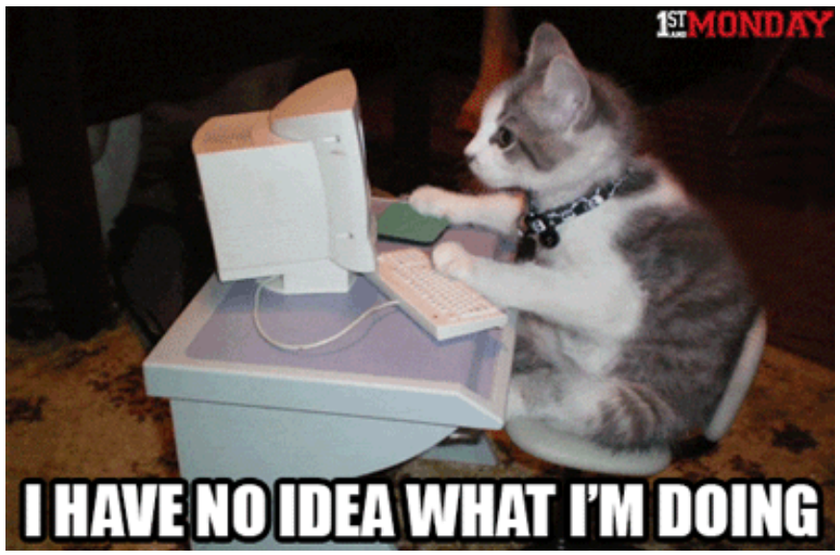
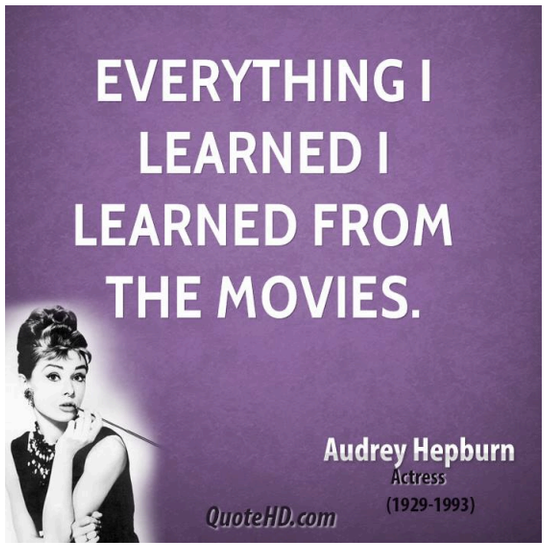


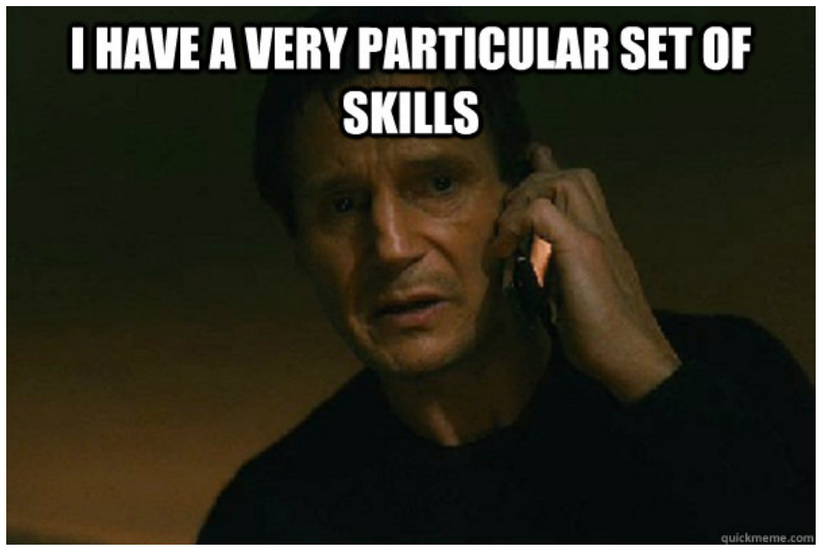
image from http://www.thestaffingstream.com



from Google image search

KEEP
CALM
AND
BREATHE


EVERYTHING I
LEARNED I
LEARNED FROM
THE MOVIES.
Audrey Hepburn
Actress
(1929-1993)
QuoteHD.com



quote from film "Taken"

WHERE DOES HE GET
THOSE WONDERFUL TOYS?
quickmeme.com

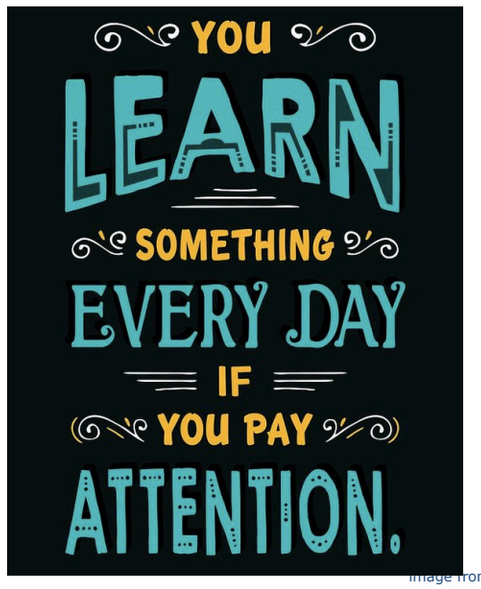


Image from https://www.theadvocates.org/2016/09/learn-by-doing/

Learn by **DOING**.

image from https://www.theadvocates.org/2016/09/learn-by-doing/

Show Me

FollowSpot Operator

Transcriber

Film Boom Operator

Chorus Ensemble

Set Painter

Stage Manager

Film Editor

Teaching Assistant

Sing-A-Long Musician

Multimedia Artist

Puppet crafter

Production Stage Manager

quote from film "Taken"

FollowSpot Operator

Transcriber

Film Boom Operator

nsemble

Se

m Editor

Teac

ician

I use SKILLS learned/acquired from these jobs in my Game Audio career EVERY day

Puppet crafter

Production Stage Manager

quote from film "Taken"

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quote from film "Taken"

HARD skills learned while working as a a **Stage Manager**

quote from film "Taken"

Speaker: Bonnie Bogovich
Twitter: @BlackCatBonFeed

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SOFT skills learned while working as a a **Stage Manager**

quote from film "Taken"

Speaker: Bonnie Bogovich
Twitter: @BlackCatBonFeed

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DO ALL THE THINGS!
image from Keep Calm-o-Matic
Speaker: Bonnie Bogovich
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image from Keep Calm-o-Matic

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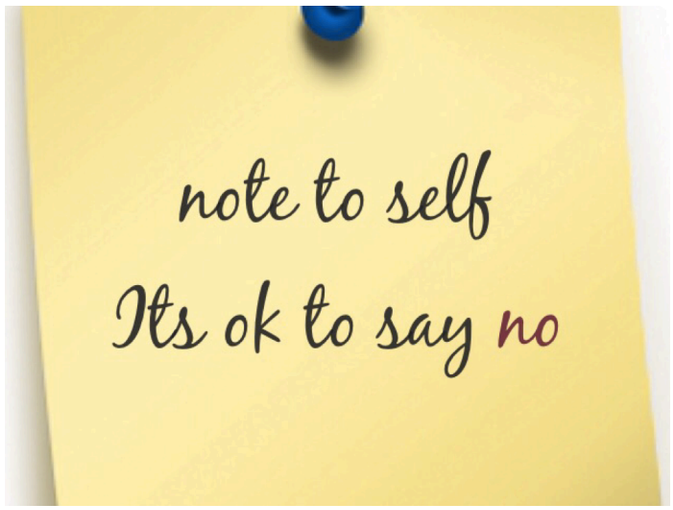

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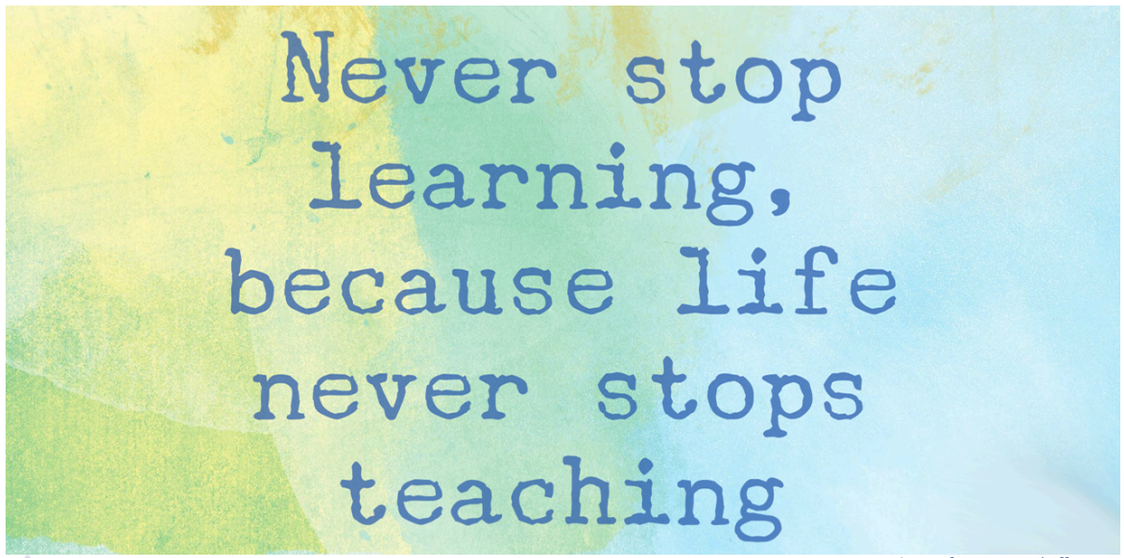

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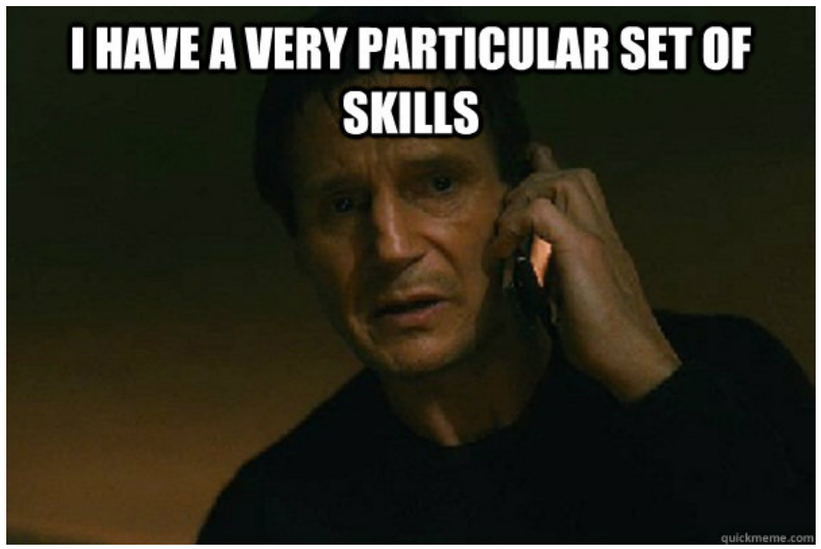
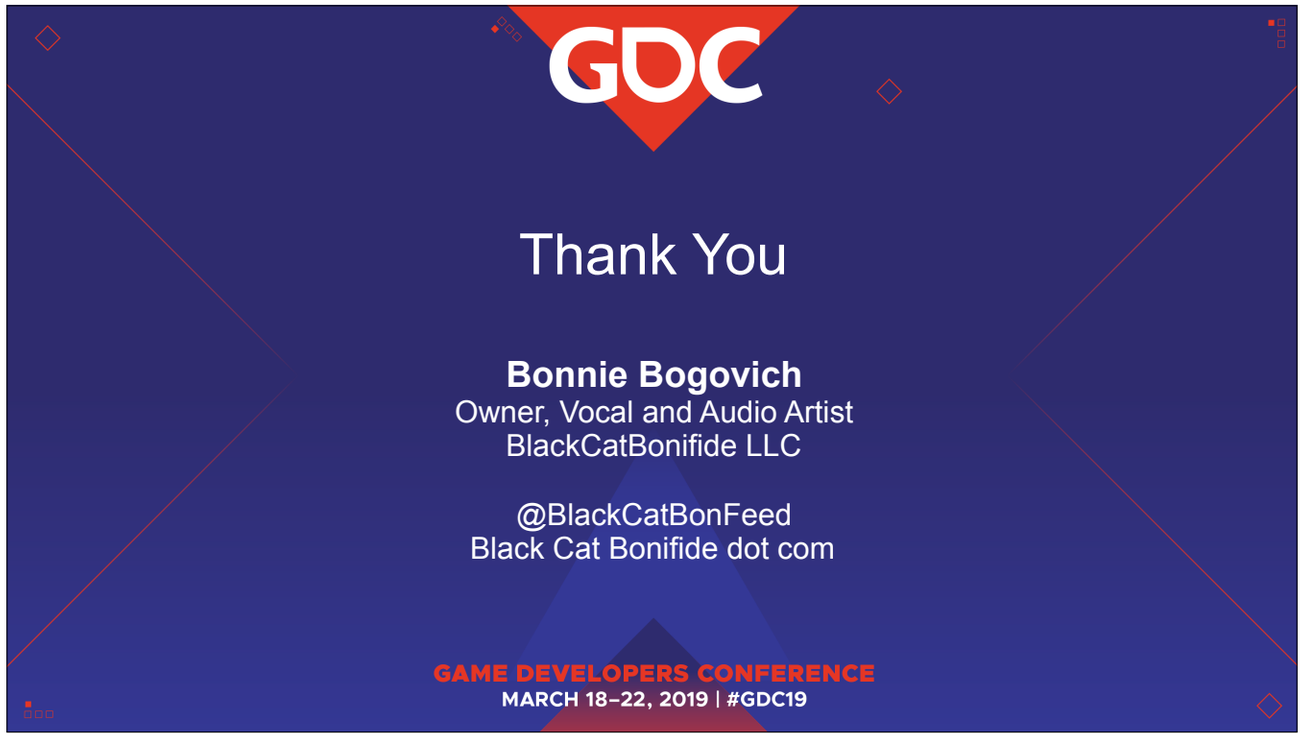


quote from film "Taken"

image from SnorgTees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Thank You
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Music and Sound
A Match Made in Slack*
John Robert Matz
Composer - Independent
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Music and Sound
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*(Not endorsed by Slack)
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Thesis Statement:

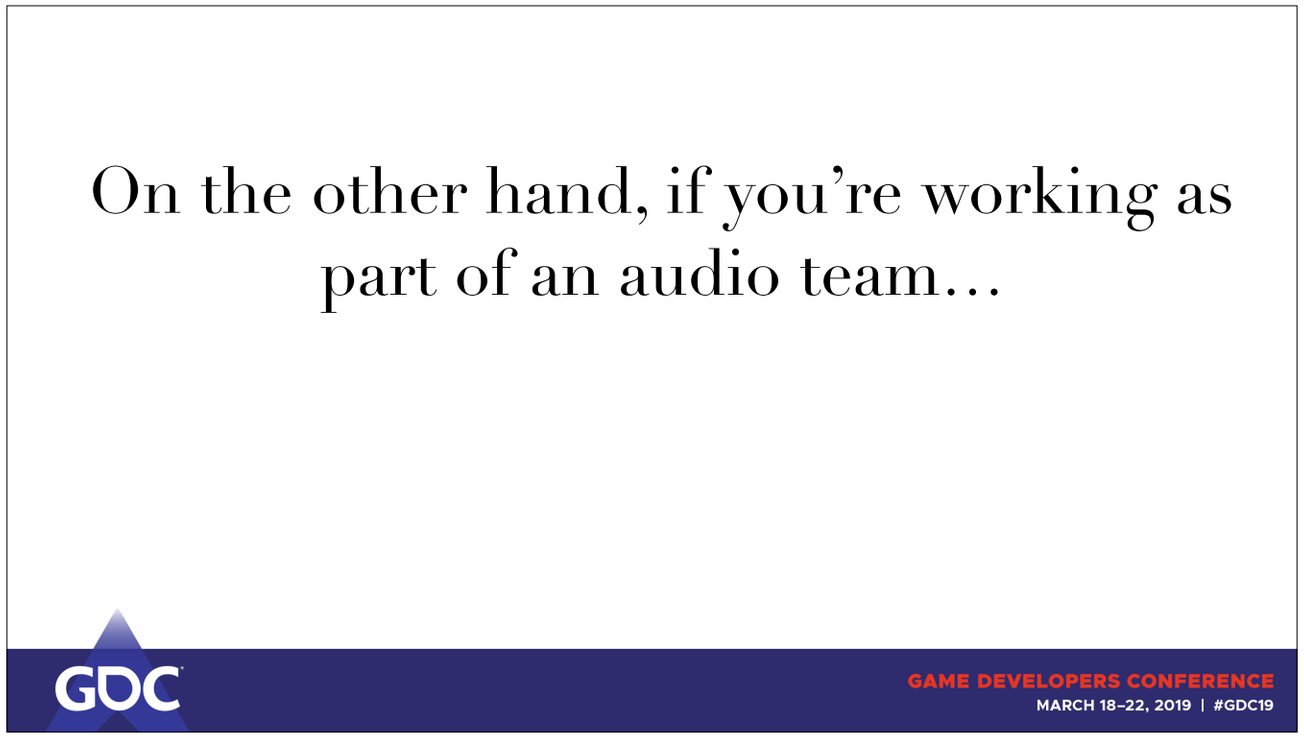
Sound Design and Music are two parts of a whole, and, as such, need to be approached holistically.

For some projects, the audio team size is ONE.

If that’s you, then congratulations. You control EVERYTHING. (CLICK)\

(Good luck with that.) ;)

(Good luck with that.) ;)



- On the other hand, if you’re working as part of an audio team,
- as a composer, sound designer, or part of a team of people doing those jobs, then:
- You can SPECIALIZE!
- You don’t have to worry about what anyone else is doing!
- Just make what you’re working on the BEST it can possibly be and everything will be perfectly fine-

Oh. Wait. No. No, that’s, um… not how it works.

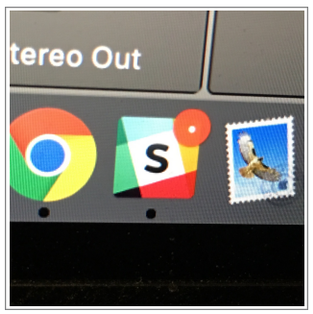
Everything you do has an effect on someone else's work.

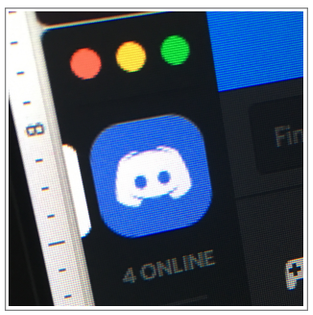
(Even if you're the only audio person.)

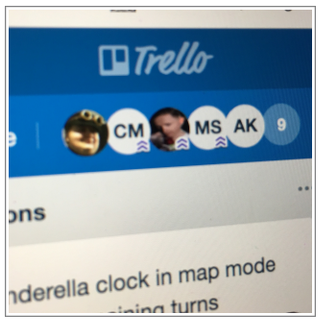
Communication, then, becomes KEY.

…So, how do we communicate?

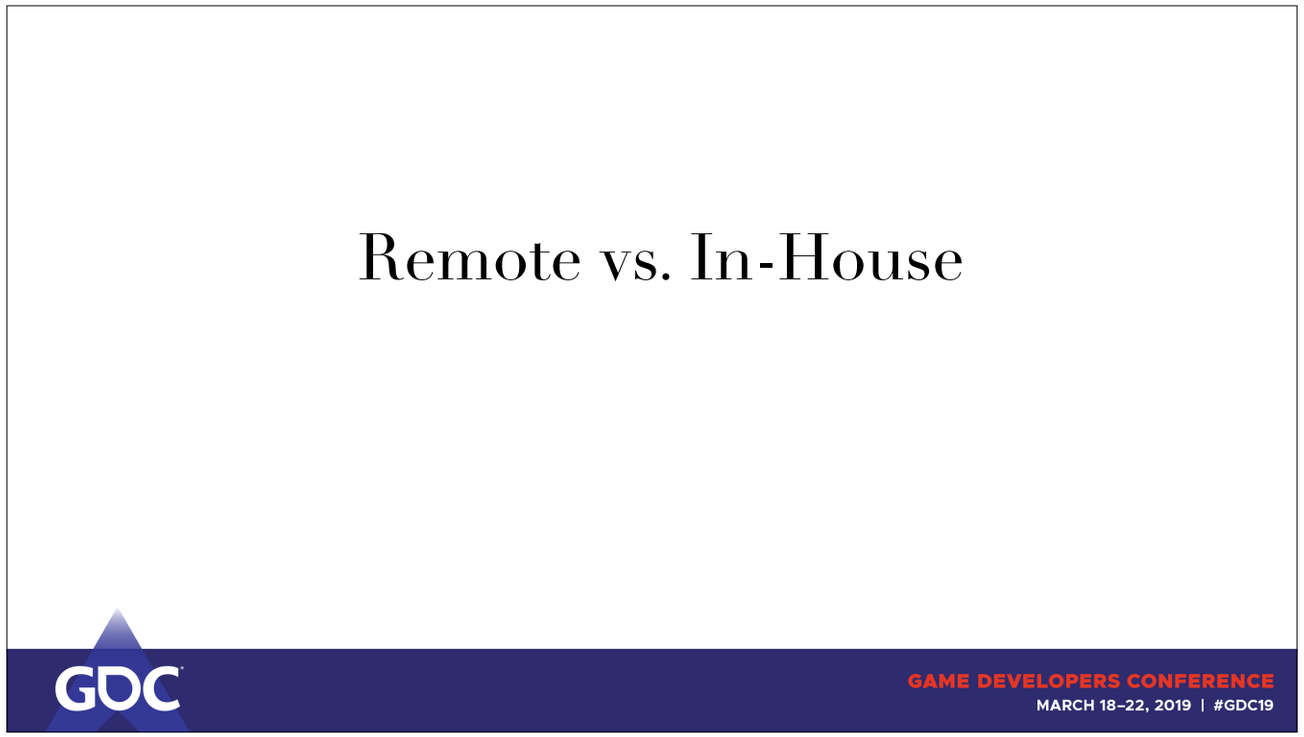
Fostering Team Communication
Tools and Environment







(So, how do we communicate?)



First, before we get into this, there’s a bit of difference between the structure and approaches for in-house and remote teams.

~~Now, I’ve only worked with remote teams, but I’ve worked and talked to a lot~~

If you are in-house, then do everything in your power to be, as Burr put it,

“In the room where it happens.”

(examples)

If you are in-house, then you’re very lucky; you get to be physically near the rest of the team, which is great - unless you lock yourself away.

You need to do everything in your power to be, as Burr put it,

“In the room where it happens.”

(READ AFTER REVEAL)

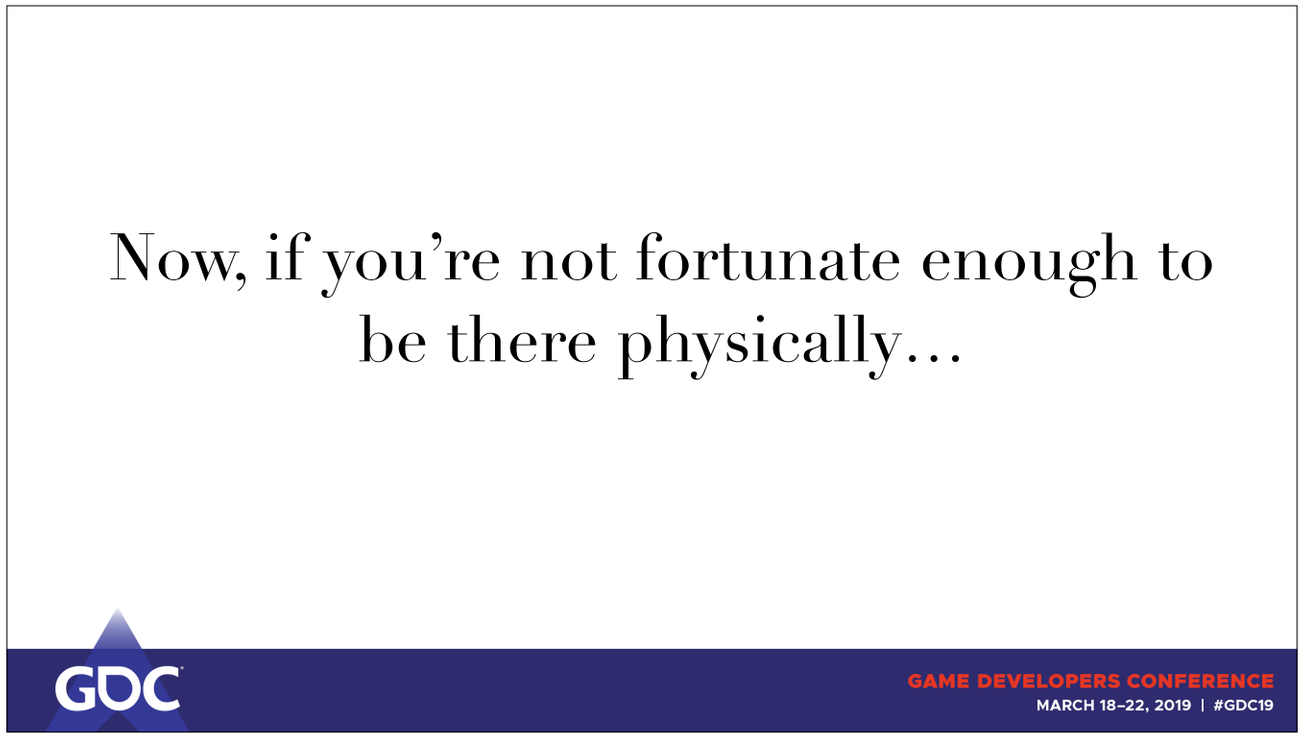
Proximity and visibility are key.

Put your workstation in the midst of the development team. Invest in good monitor headphones, but be sure to find opportunities to share your aural works-in-progress “out loud” when you reach milestones.

You want to make audio feel like a part of the larger picture, rather than a silo’d off and isolated element in some back room.

Attend the meetings, contribute to things, even if they’re outside your normal area of expertise.

Be part of the team.



Now, if you’re not fortunate enough to be there physically, then your job is a bit harder.
You need to find a good communications solution that works to: (NEXT)

A.) Clearly show where you are on a project, what everyone is working on, and allows you to easily share works-in-progress, questions and thoughts.

B.) Allow for quick and clear feedback on said works-in-progress

C.) Fosters a sense of community within the team.

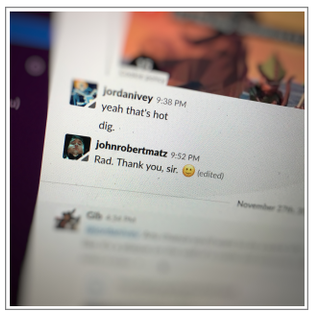
I, personally, have used everything from Slack to Discord, to Skype and Facebook Messenger to communicate with my teams. I find that being able to pose a question, share a bit of work, or leave a status update and expect that people will see it and respond immediately without the formality of a lengthy email chain is invaluable for quick feedback, notification and iteration, and really helps you to feel like you’re in the same room with people.

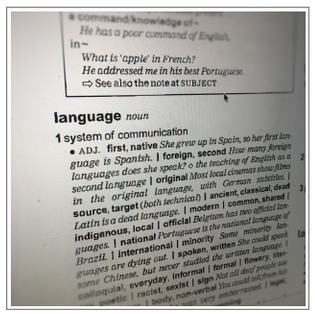
No matter what technical solution your team uses for communication, it needs to accomplish these goals.

No matter what technical solution your team uses for communication, it needs to be able to accomplish these goals.

Fostering Team Communication

Interdisciplinary Language and Communication Techniques





Now, communications techniques aside, What do you actually say?

Fostering Team Communication

Interdisciplinary Language and Communication Techniques

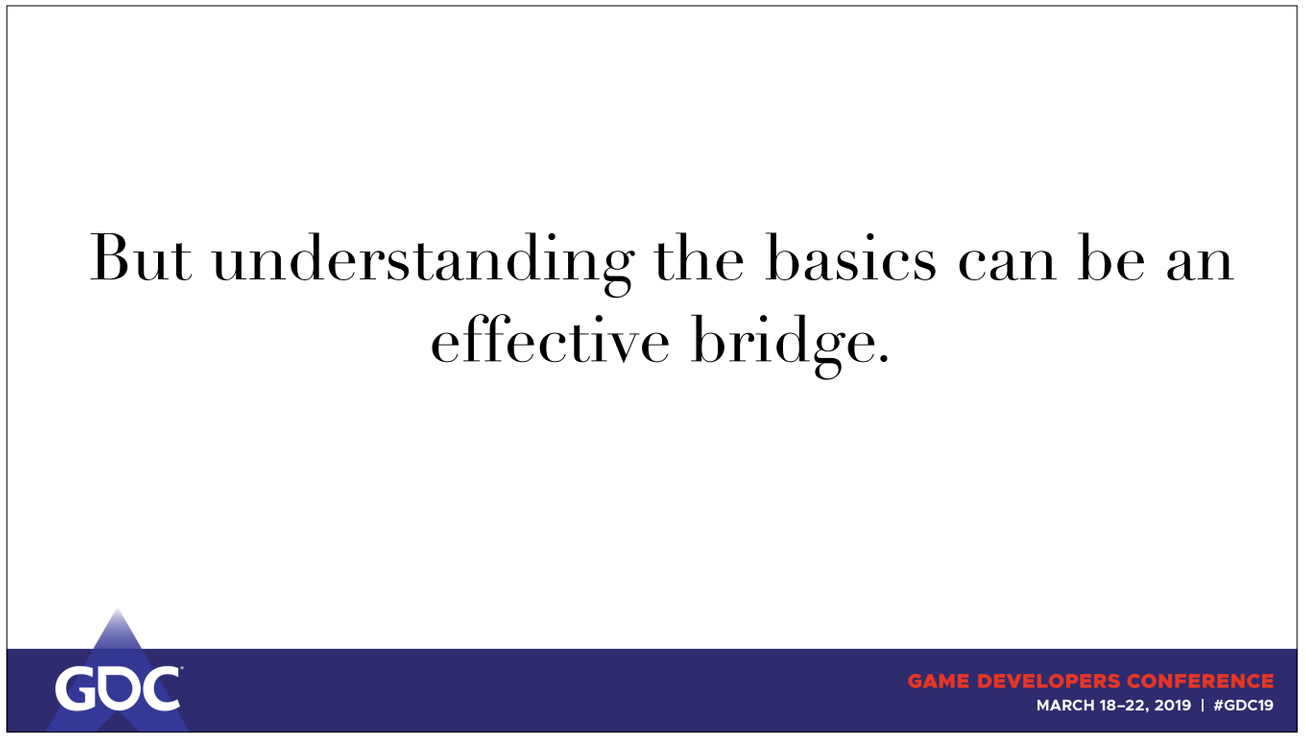
i.e.

How the heck do you talk to other members of your team?

Every discipline in game development has a unique language.

You don’t need to learn EVERYTHING
about a language.

You don’t need to learn EVERYTHING about a language,
There are potentially hundreds of unique terms and techniques for any discipline… (But)
(NEXT)



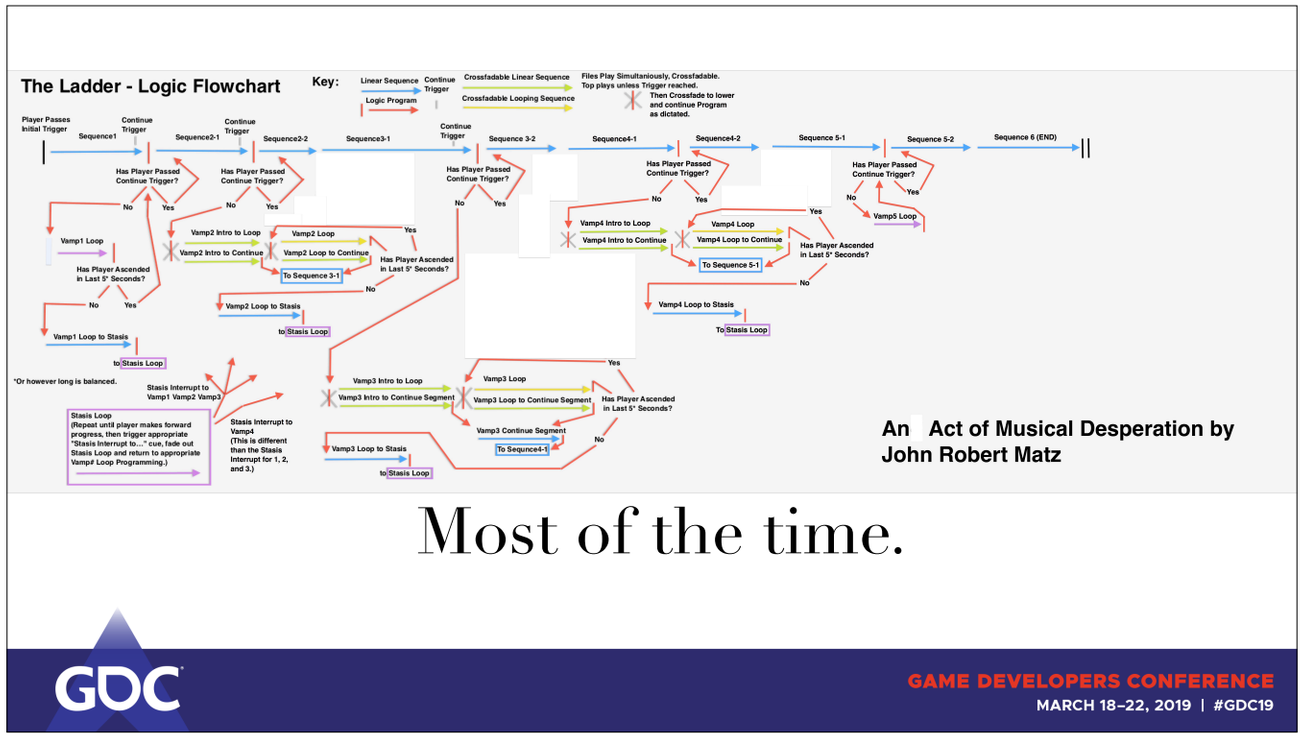
But understanding the basics can be an effective bridge.
Knowing some of the basic terminology, and, more importantly, structural logic behind a discipline will make you more valuable to the team, and help make your own ideas come across much more clearly.

A few examples:

Programmers understand logical arguments, AND/OR, randomization, sequences, “if this, then that”, etc.

If it’s a complicated idea, but you can express it with a flowchart, they’ll love you.

These are some gross generalizations, but, in general:



An Act of Musical Desperation by John Robert Matz

Most of the time.

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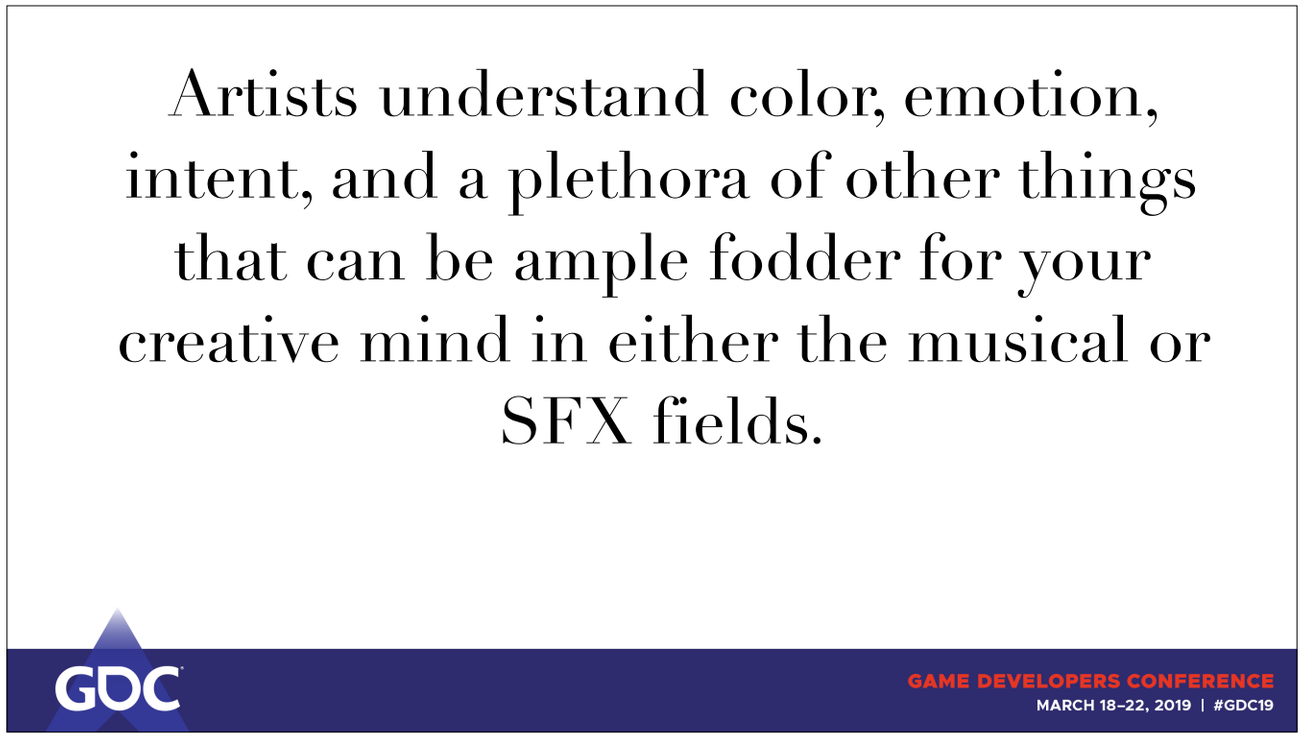
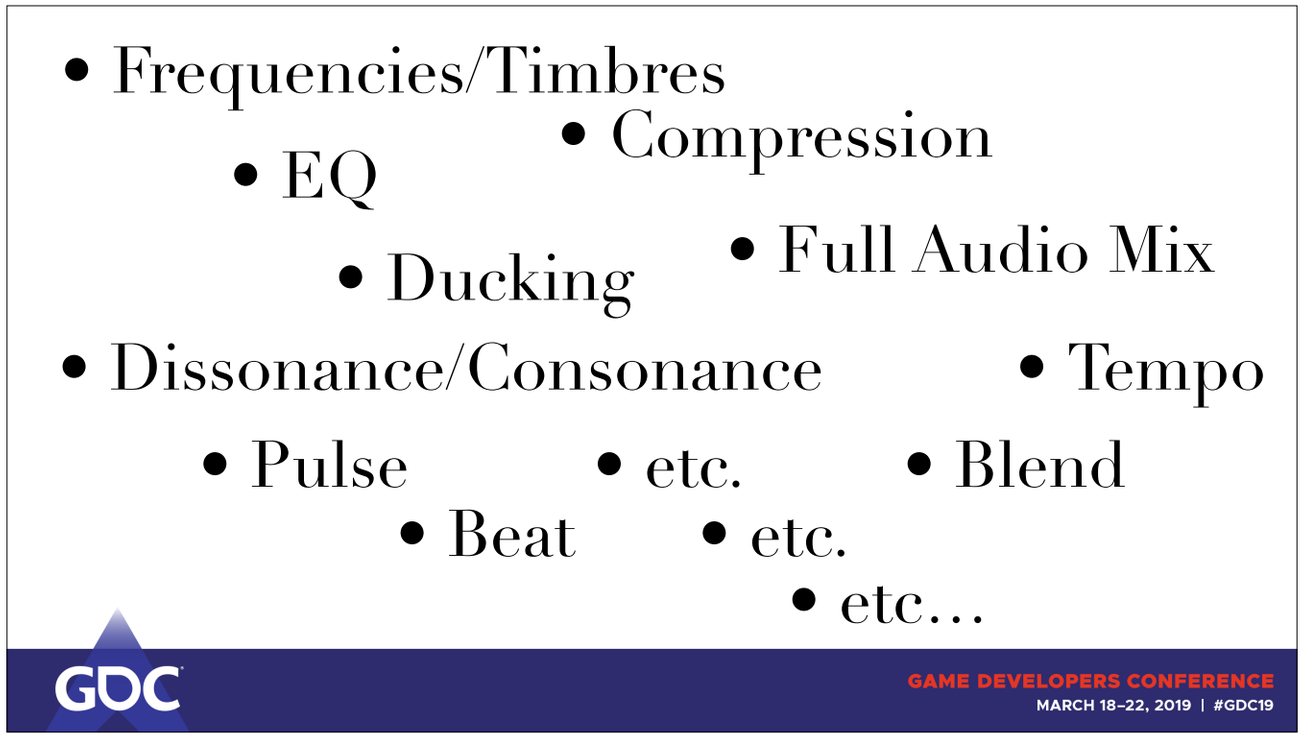
(Well, most of the time)
(In my defense, this is before we switched to FMod.)



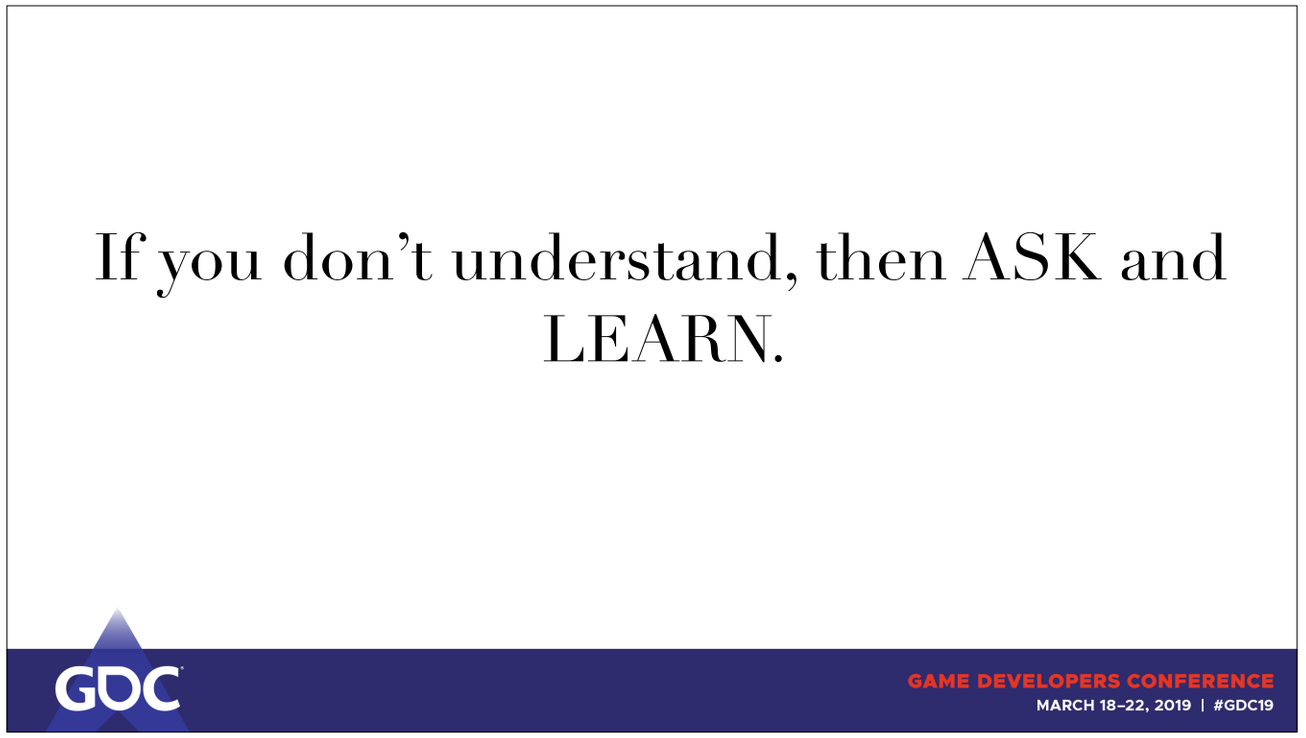
Artists, on the other hand, understand color, emotion, intent, and a plethora of other things that can be ample fodder for your creative mind in either the musical or SFX fields.

(Also, they’re the only person you can actually ask to make something “More Purple”, and get a valid response.) ;)

Sound and Music, on the other hand, share a common language, you just sometimes need to decipher the accent.



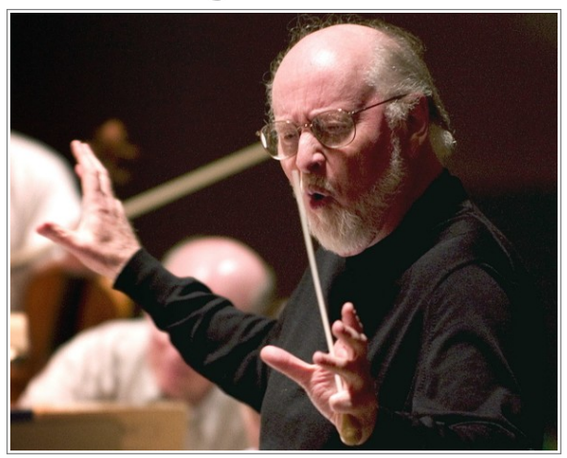
Any composer or sound designer should understand these terms and concepts, and be able to use them to describe ideas and find solutions to issues.



If you don’t understand a term or concept, then ASK and LEARN.

Remember that everyone on the team wants to produce the best possible work of art, so it’s always better to clarify and add to your knowledge rather than assume, or smile and nod your way through a conversation. I know that may seem obvious, but you’d be surprised

Sound & Music - Working in Concert



(Apologies for the Gratuitous Ben Burtt and John Williams.)

Music and sound both come out of the same speakers and go into the same receiver:
The ears.

So, you need to make sure you communicate your intents clearly, and leave room for each other's work as appropriate.

Why, you ask?

An example.
Picture this:

You’re writing a vital cue for a key moment of the game.
As the hero looks up at her goal, so very far away, we hear a plaintive horn theme enters, quoting the theme of her quest, the theme you painstakingly wove into the prophecy cutscene from the start of the game. She’s come so far and through so many trials to reach this point, and she’s never been more alone, or more determined.

Your sound designer colleague, looking at the same scene, decides to fill the shot with high, whistling wind sounds for dramatic effect, to underscore the loneliness of the moment.

Remember:

"Everything you do has an effect on someone else's work."

Both approaches were valid.

But some communication could have saved us from this.

There’s only so much space in the audio spectrum at any given point.

So, Music and SFX need to be especially considerate of each other's requirements.

Penka touched on this earlier:

In her “Mummy VR” score she had to deal with constant gunfire and VO, and in Wil Roget's score for Call of Duty: WWII, he also accommodated for sound design in the same way, by minimizing a lot of percussion to leave space for the booms and bangs of the gameplay.

~~Conversely, In RODINA, a sci-fi game I worked on, because gun sounds were much more laser “pew pew” than “bang bang”, a percussion-forward drive for combat music became more appropriate and sonically acceptable.~~

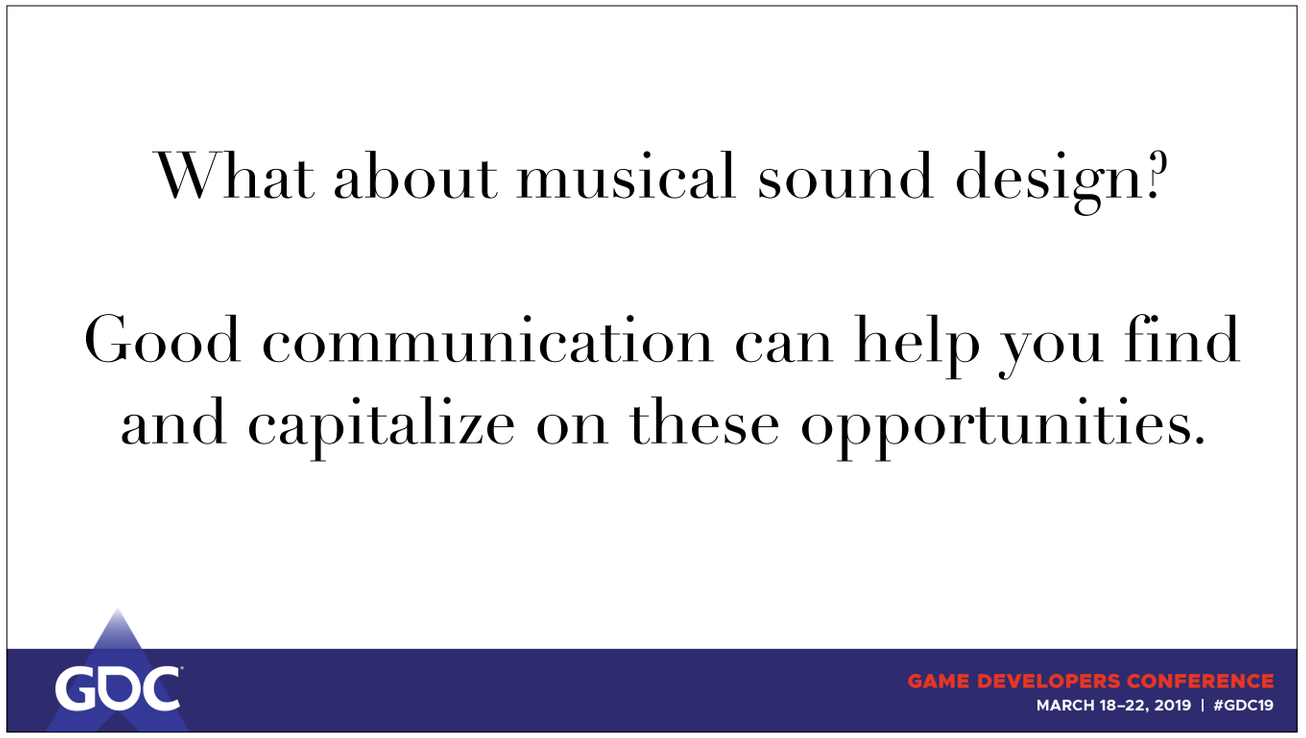
FOR THOSE OF YOU ON THE SOUND DESIGN SIDE:
Ensure your sound design doesn’t clash with the music it’ll be heard alongside.

If your sound design has a pitched element to it, make sure it’s in a compatible key, and don’t take up massive swaths of the spectrum with it, unless it doesn’t interfere with the score.

In “For The King”, we removed the bass end of UI sounds and added a higher “swish” element when selecting hexes on the overworld because it was competing with and getting lost in the exploration score.

Make sure that music and SFX aren’t doing the same thing,
e.g. a big percussive hit when the player dies, but also a big SFX hit; compliment, don’t compete.

Along a similar line to what Penka talked about with “stings” in horror scoring, in “Fossil Echo”, when the player falls and hits the ground onscreen, they don’t die, and we hear a reasonably-bassy body impact sound. When they actually die by falling off the screen, getting shot, etc. we have a big musical percussive hit, and (on a randomizer) a flute “tail” plays to extra punctuate your demise. (CLICK)



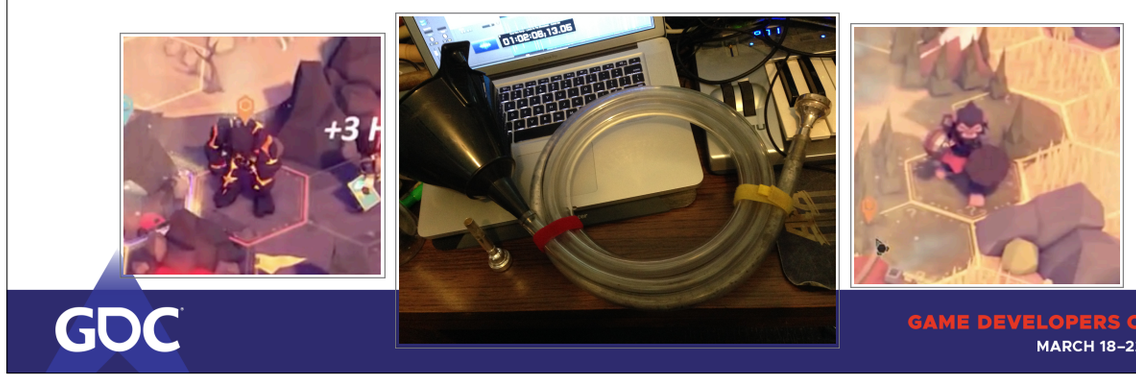
READ THIS:

Even as a composer working with a sound designer, sometimes musical sound design elements can be a vital aspect of a game’s overall sound design, and help tie score and sound together in a holistic way.

Good communication can help you find and capitalize on these opportunities.

Here are a few examples:

A few examples from my work on “For The King”, which I worked on alongside Jordan Ivey, who handled the Sound Design side of things.



Sound design alone wasn’t quite the ticket, and we wanted to make the events feel more like part of the musical landscape, so I used Didgeridoo, some brass, and Hoseaphone, to provide those primitive “warhorn” sounds, (CLICK) plus sampled and live percussion add a bit of extra musical oomph to it.

“Dice Rolls” in *For The King*

When rolling for movement or challenge results.

One of the major goals with the score for For The King was to make it feel like you were being accompanied at all times by a band of bards. Drumrolls/tambourine strikes used as dice rolls further cemented that idea.

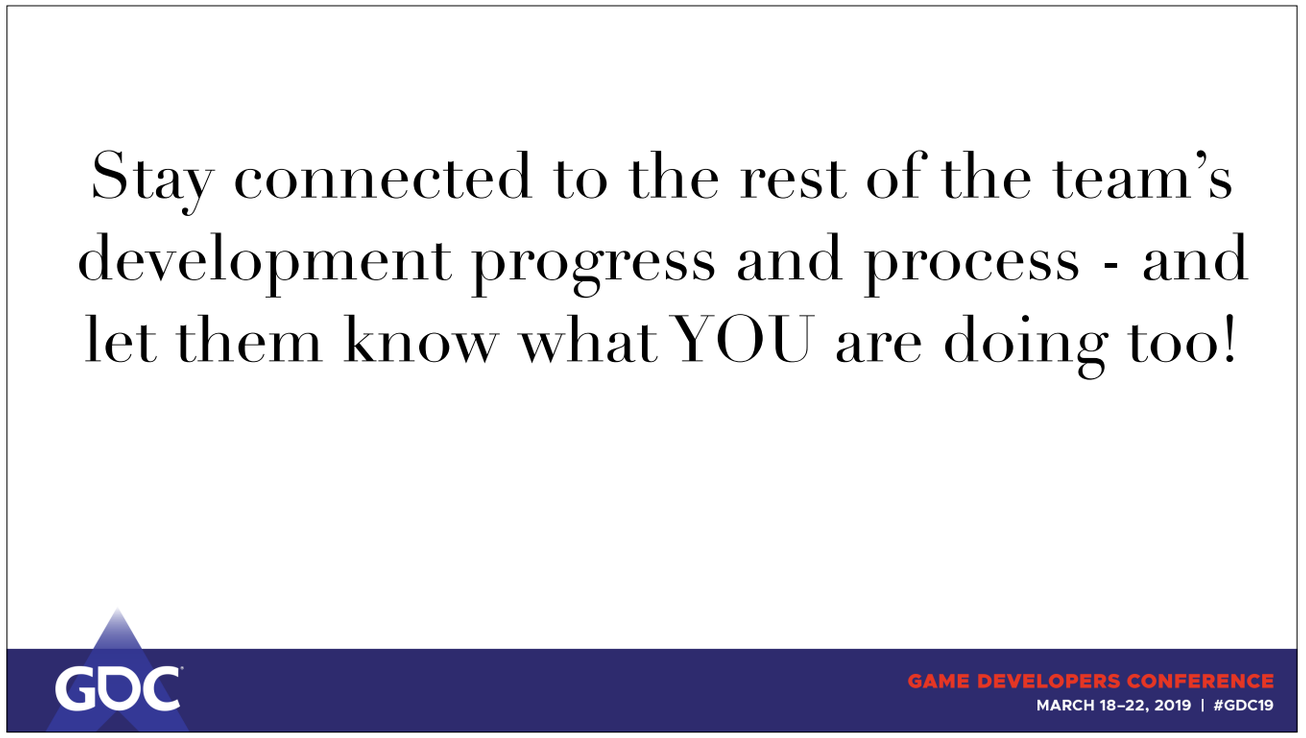
One of the early known gameplay elements for For The King was a “Minstrel” or “Busker” character class.

We knew they’d have instruments that they would play in battle, so Jordan and I decided to bring in the fantastic Stephen Froeber, who watched character combat animations and improvised a whole bunch of neat licks that fit them on a variety of lute and “lutelike” instruments. (CLICK)

We chose keys and modes for him to work with that fit well with the combat music in the game, and the results were incredibly effective.

Conclusion!

Ask questions! -
Stay “in the room where it happens”,
either physically or digitally.



Get through all slides before this!
Hopefully I've impressed upon you the importance of good communication within your audio team, and within the larger development ecosystem. Asking questions, knowing what everyone's creating, and being able to give and get feedback are vital to a unified project.

I hope you all have productive, communicative teams going forward!

Thank you!

John Robert Matz

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@JohnRobertMatz - Twitter

JRNMatz@GMail.com

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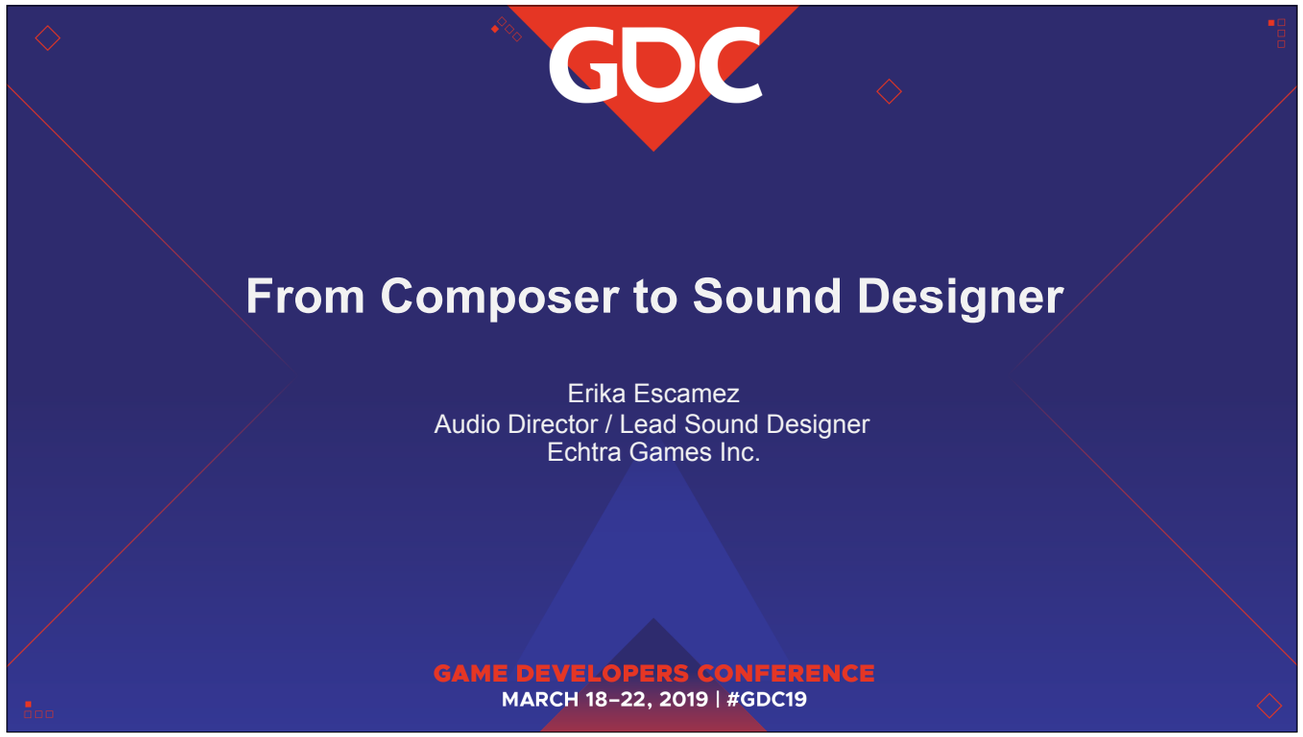
GDC
From Composer to Sound Designer
Erika Escamez
Audio Director / Lead Sound Designer
Echtra Games Inc.
GAME DEVELOPERS CONFERENCE
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Strategy

- Think outside of the box. (2min piece into 6 min piece)
- Come up with the questions (what is happening in the game)
- Use your music as a sound design skill

Questions, not answers

- What's the environment like? (base bed)
- How many enemies are on screen?
- How difficult are the enemies on screen?
- How far are they from my player?
- Is there a specific stronger enemy within the other enemies?
- How many other players are around?

Is there a monster skill happening?
Am I using a special skill?
Is UI sound being used?
Are there hazzards around?
What monster is doing a skill?
Is it a player?
Is it an actor?
Am I hit by a status effect?
What actors are present?
Is it a monster?
Is there a champion?
What actor is closest to the player?
Are there status effects active?
How far are the Champions from player vs other monsters?
How far are the hazzards?
How far are the Champions from player vs other monsters?
How far are the skills monsters are doing?
What is the most powerful entity?

Questions, not answers

- How does the music change based on all these factors in a non linear environment?

Using music as a sound design skill

- Thought process - Use all the previous questions to compose dynamic music that conveys information to the player.
    - Work with composer.
        - Variations
        - Mix Shifting
    - Work with Audio programmer.
        - Questions become rules by assigning drama values

RESULT

- Flexible Music
  - The music mix changes as the drama value increases
  - The drums rise in volume from “X”db to Xdb if there is a particularly difficult enemy that got assigned a higher drama value.
  - If you’re just cruising the music should fill your space.
  - Skills and monster sounds take priority on music because music becomes an additive in high intensity.

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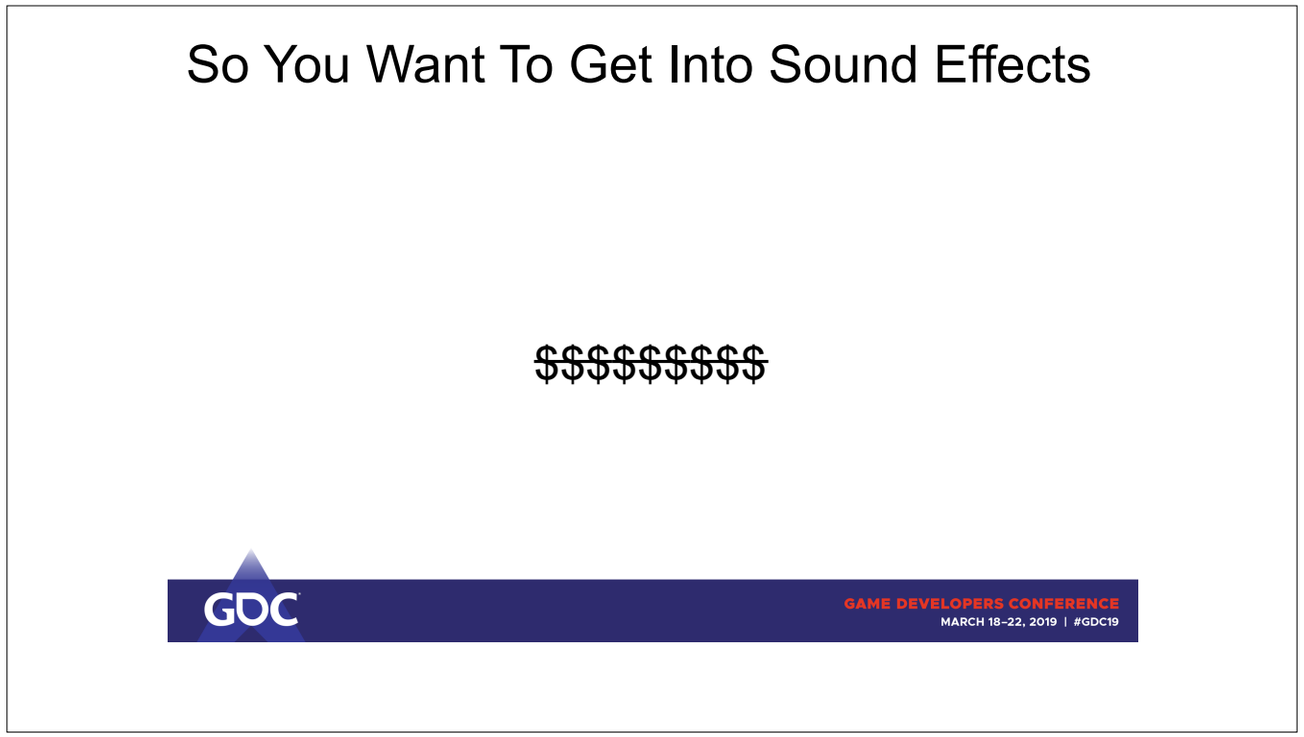
GDC
Making The Most Of What You've Got
Matthew Marteinsson
Klei Entertainment
GAME DEVELOPERS CONFERENCE
MARCH 18–22, 2019 | #GDC19

Who this

- Matthew Marteinsson - sound design at Klei Entertainment
- 16 years of game audio
- Beards, Cats, And Indie Game Audio podcast

I’m a sound designer and not a composer

Bare with me I’m usually overly verbose on these so this 7 minutes is a challenge.

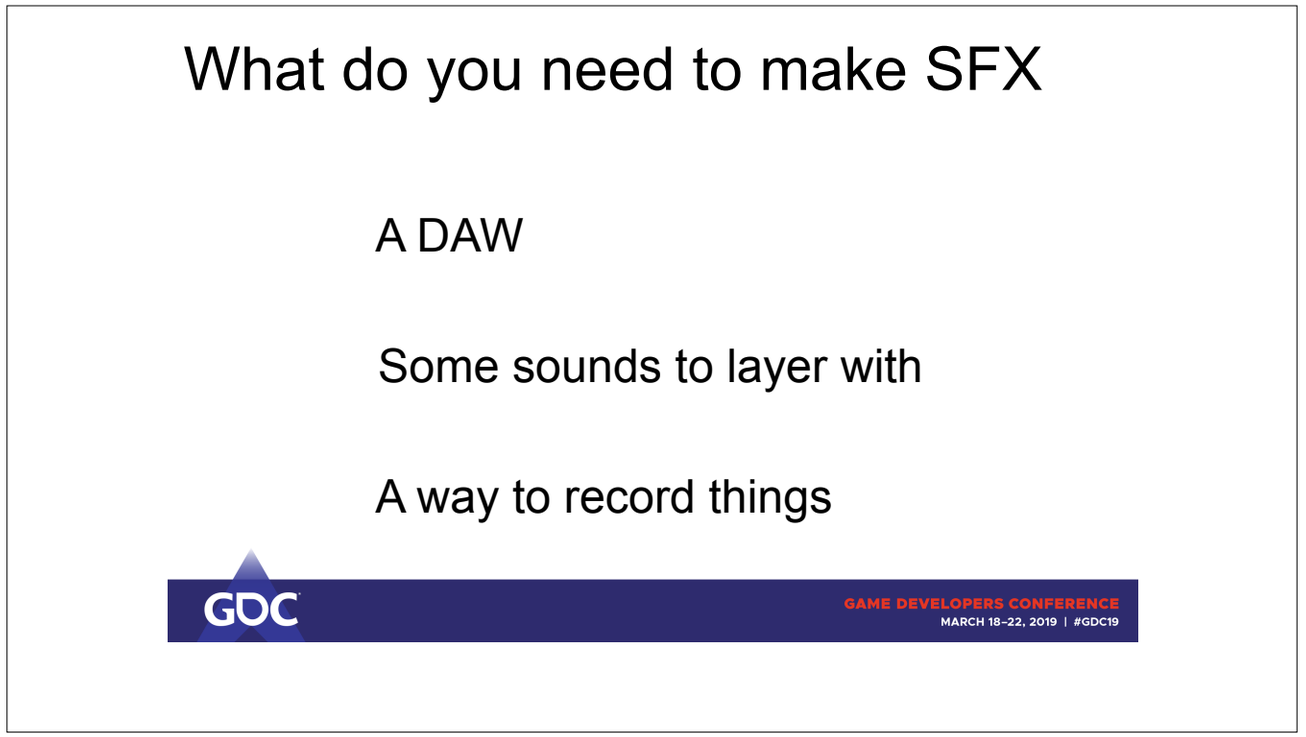


Lots of advice you'll get about getting into sound design will be about spending lots of money. And I always have a problem with that. And in the long run doing sound design, yes, will cost you as much as doing serious composing will. You'll basically double what you need to spend on gear and tools.

But you don't need to do that right off the bat.

So, I will be making some assumptions here. That as a composer you have a computer, a DAW and the usual plugins that come with that. And with that you don't need much more to start out.

A thing to note is most of the fancy tools that are specific to sound design that you see people talk about are really just about speeding up workflows. When you're starting out you don't know how you'll want or need to work. Don't worry about the special stuff till you have a bit of an idea of what you're doing and what your workflows are going to be like.



Don’t feel you need to change DAW to do sfx work. Some maybe “better” but you’ll be better off sticking with something you know starting out. Protools, Reaper, Cubase, Logic, even Live or Fruit Loops will do you fine to start out.

Sounds can come from libraries and your own recordings. Lots of sfx providers have small free packages you can get for the cost of an email address. They aren’t deep but they’ll get you started. There’s freesound.org as well but be careful. Lots of sounds there need proper credit that you’ll need to keep track of, you’ll have to sift through a lot of garbage and there’s also the rumours of copyright infringing sounds being uploaded there by people. The bigger thing you can do is record your own stuff!

A portable record is great and useful. Even the cheap ones from any of the reputable manufactures will work fine. But if you don’t have one you can start out recording with your phone. And for recording at home all you might need is a mic. There’s a $20 chinese mic will work out fine to start. And there’s lots of slightly higher cost ones from reputable manufactures that will work great too. And great thing about cheap mics is you can put them in dangerous places and won’t feel to bad if something happens to it. I totally haven’t melted any microphones while recording.

Remember nothing is as it seems. Building sound effects is all about reinterpreting things. This is great for starting out because you don’t need the actual things you’re trying to make sounds of. Everything within arms reach can become the basis of your new sounds.

Think of the classic “celery for bones breaking”. Start taking things from your house and putting them in front of a mic. Shake it. Hit it. Rub it. Hit it with something else. Do these things softly. Do it hard. Listen to how the sound changes. Listen for the elements of the sound that could be used for something else.

Recording sfx will be like recording any other instrument. So use that mindset when approaching it. It’s a performance. Also, you just need to do a lot of it to find out what works.

Ok but how do you actually make sounds

Layers, layers, layers

It’s like mixing/orchestrating a song

The same way you approach orchestrating a song is how you can approach making a sound effect. You layer a whole bunch of different bits together to make a cohesive whole.

You build up the lows, the mids, the highs. Balancing all the elements. It’s just the things are the body, the punch, and the mechanics of a gunshot instead of the bass, guitar and drums or the different sections of the orchestra. The same concepts apply of all the parts adding up to a cohesive whole.

With a little rethinking your composing skills will translate.

Middleware… Yes. But later

Yes you'll need it at some point

But worry about that second

Doing sound effect work in games implementing your work is definitely going to come into play. So you will need to skill up on middleware and game engines. But worry about doing that second. Lots of really great interesting sfx work can be done on this level. But worry about one step at a time. You'll be much more effective as an implementer if you've got a grasp on the sound design part first. If you don't split things up it can all be a bit overwhelming.

Once you do want to tackle it, pretty much all the major middleware packages can be downloaded with no cost for you to experiment with.

Thanks

- @mattesque
- matthew@kleientertainment.com
- Beards, Cats, And Indie Game Audio podcast

Remember

You already know what you’re doing, your skills are transferable.

You want to record as much as you can.

Don’t worry about learning everything at once.

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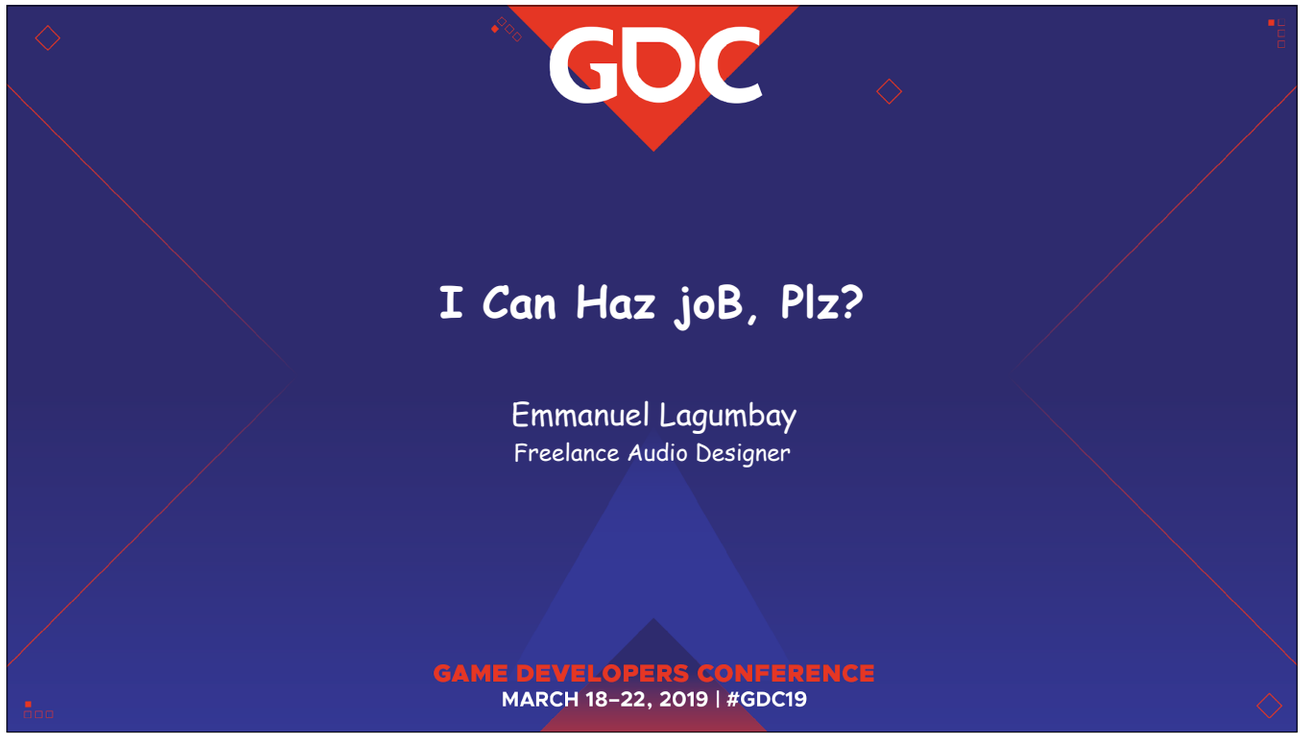
GDC
I Can Haz joB, Plz?
Emmanuel Lagumbay
Freelance Audio Designer
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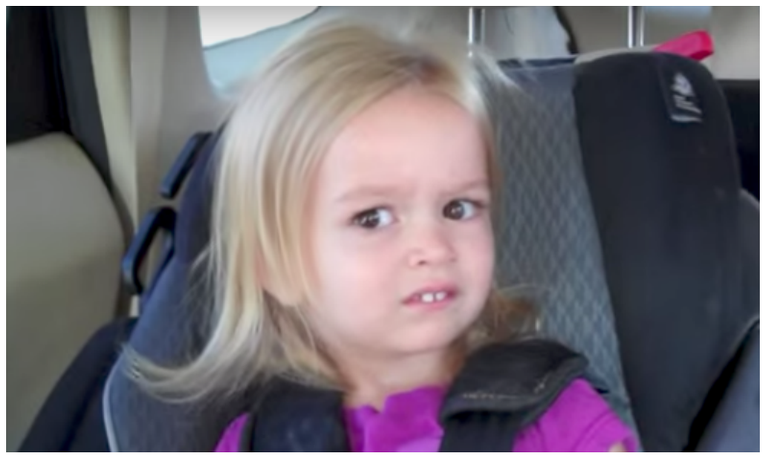
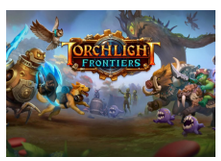
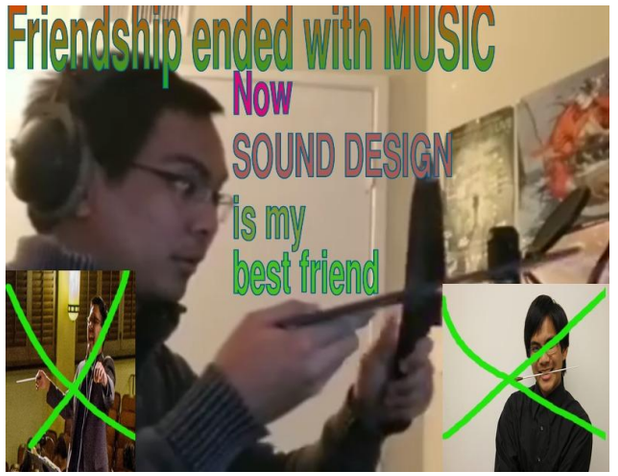
IS THIS YOU?



Who am I?

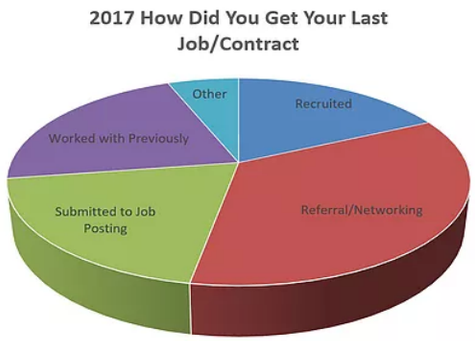
- Composer gone rogue – SFX are my best friend now
- Audio Designer (SFX, VO Design, Music, etc.)
- Work includes – VentureVerse: Legend of Ulora (SFX, music, VO), Torchlight Frontiers (SFX, VO/VO Design), Wonderfall: A Tale of Two Realms (SFX, VO/VO Design)





I cAn Haz JoB, Plz?

- 50.8% were recruited or referred!
- Games I was referred to:
  - VentureVerse: Legend of Ulora, Wonderfall: Tale of Two Realms, Miracle Mia.
  - Out of the country? NP.
  - 6 Great Relationships > $60,000 of sound libraries
- Interacting with devs?
- You'll have so much time to talk about you down the road. "DYNAC?"
- Remember most people are really hiring a PERSON not a ROLE.



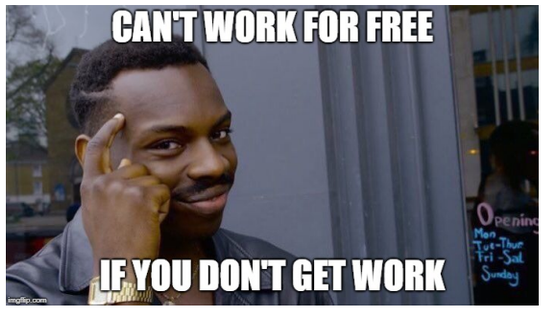
Numbers game

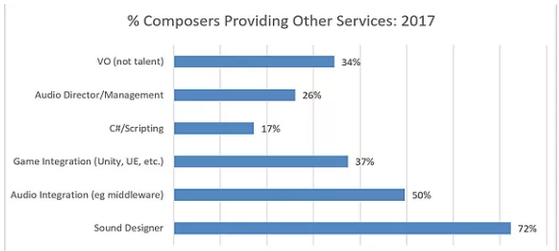
- 72% of composers also do sound design (Game audio industry survey 2017 – 464 responses)

This means...

- Everyone in this room is competition.
- Everyone in this room is a friend.
  - There are tiers to jobs.

    IE: Student > Indie > Mid Tier > AAA
  - Overflow happens.



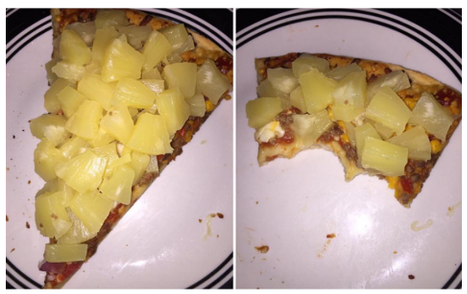


Time to d-d-d-d...d-d-d-d-DEMO (reel)!

- Putting together a reel is like trying to decide what to wear to GDC.
  - Be comfortable in your own skin.
  - Find the work you want to resonate with most

"But I've never sound designed for a project."

No Credits? No Problem.



- Footage that can show off your skill and generates opportunity.
  - If someone looks at the original, will they be wowed by your work?
  - If not, are you just doing the sound again or making it better?

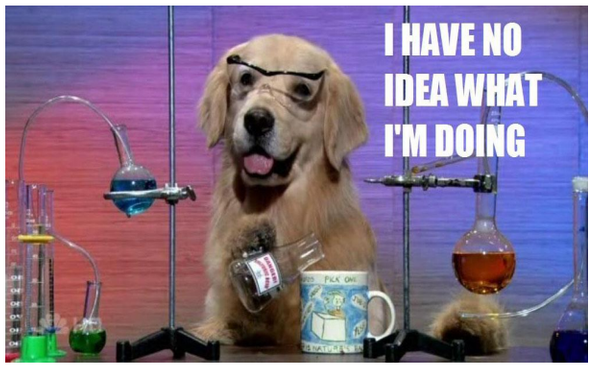
- KNOW YOUR AUDIENCE
- Cards Against Humanity

I have no idea what I'm doing

- It's okay to ask for help
- "I don't know any sound designers."
  - Composers can offer constructive feedback as well.
  - Look around the room.
  - Reel Talk by PowerUpAudio

    https://www.twitch.tv/powerupaudio

    Thursdays at 4PM PST



Demo Derby 2017 – Before – and AFTER AFTER

Don't surrender at 20

- It takes time and effort to get better.
- It takes time and effort to build relationships.
- It takes time and effort to be a good person.
  - Don't surrender just because you didn't get the gig.
  - Try again and see what happens.

Comic Sans - Someone out there likes you.

Go forth and make noise! Happy recording!

Throwing away a music cue for a game

Resampling the cue with plugins to make a vehicle engine.

Twitter – Instagram – Facebook:

@EmmanDaBomb

GDC
Thank you!
Penka Kouneva
(Independent)
@PenkaKouneva
Bonnie Bogovich
BlackCatBonifide LLC
@BlackCatBonFeed
John Robert Matz
Independent
@JohnRobertMatz
Erika Escamez
Echtra Games, Inc.
@eriescamez (Instagram)
Matthew Marteinsson
Klei Entertainment
@mattesque
Emmanuel Lagumbay
Lagumbay Music
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