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HARVEY: We have today some distinguished visitors, Tim Ray on piano and Eugene Friesen on his cello. And they along with another person named Greg Hopkins form a trio called Tre Corda, named for one of the pedals on the piano. Tim Ray will explain it. And as you know, they are giving a concert this evening.

So you will all be coming to that concert, and I'll give you as I have before the concert points to write your concert reflections from. I'll send that out later this afternoon. That's at Killian tonight 8 o'clock. So you'll see the full group.

But they're here this afternoon. So please give them a warm welcome.

- FRIESEN: Thank you.
- HARVEY: Thanks.
- **RAY:** Thank you. Thanks. So we're really glad to be here, and as Mark said, we're playing the concert tonight. So of course that's the first requirement for passing the class is that you have to come. We always make that joke. Nobody laughs.

HARVEY: It's not a joke.

**RAY:** It's not a joke. Oh that's why they don't laugh. OK. Now I get it.

**HARVEY:** I'm very serious here.

**RAY:** OK yeah. In just a little bit, we want to get into playing and of course get you guys playing as well, hopefully. Just a little bit about what we do as a trio. As Mark said, our trumpet player Greg Hopkins will join us tonight. And then you'll see Greg next week in the class as well.

We are a trio. We've been together-- gosh, I guess it's getting to be about 12 years now, the three of us. And we do, it's an unusual instrumentation. I mean at least unusual in terms of traditional jazz trios because there's no base. There's no drums. It's also unusual in a classical setting. Usually a piano trio with cello usually has a violin not trumpet. So we're a little bit of a hybrid kind of formation. And it's something I had the idea to put together, like I said, about 12 years ago. And a lot of what we do is we play music that we compose, Eugene and myself and Greg all write for this group. We're all improvisers. So of course improvisation plays a large part in what we do. But we also delve into classical music. We delve into jazz, Brazilian stuff. And that's all our backgrounds as well. I mean, myself, Eugene, Greg-- we're all classically trained. Then we're also jazz players and do a lot of things outside of this group as well.

So besides that, Eugene and I actually have to a duo that we do. We're going to actually play a couple of songs from our duo repertoire because it's a little hard to do the trio stuff without the third person. Although we might mess around a little bit later with that, get you guys involved. But anything you want to say?

FRIESEN: Sure. I mean Mark just told us the first thing about what you guys have been studying so far. And how many of you would categorize yourself as classically trained musicians? OK. Well that was my background as well. I was interested in pop music and rock really when I was in college. But I spent most of my energy in really practicing classical repertoire. And it wasn't until I got out a music school that I started to get a little bit more serious about doing the kind of ear training that you need for improvising.

And for me it's been a lifelong process. I feel like I'm still learning a lot about that and learning to recognize chords and to learn how to contribute to a harmonic environment just by listening and by pitching in.

And but I've also had a chance to do a lot of work with classically trained musicians who have never tried before. Kids of all ages, beginners, middle school, high school kids, and even professionals who are really very afraid to improvise. In fact, last year I had a chance to do a presentation at the American String Teachers Association on improvising. And I started this presentation by asking, what are some of the things that keep us classically trained musicians from improvising? And there were about 100 people are so in that room, and everybody had something to say. I mean I didn't realize this could easily have been the topic of that whole presentation. People really inherit, I think, in our training a tremendous amount of inhibitions. Some of it is the impossibly high standards that we are kind of imbued with as students. Some of which, of course, is really good for motivating our hard work. But a lot of which really makes us kind of cower when we're in a situation where we're encouraged to be creative and play something that we haven't really rehearsed.

And so that's been kind of the impetus of my teaching. And one thing that's really helped me is setting some guidelines that were comfortable for me as a classically trained player. So one of the first ways that I felt I could improvise was no wrong notes, completely open, free improv stuff. And I understand you guys get to do that each week with Tom Hall, right? Am I correct in assuming that at some point you do some improvising where you're not worrying about chords or scales or things like that? It's really most about interaction, right? And how it comes together rhythmically maybe. I mean do you work on the rhythmic side of things more that way, or is it more intuitive kind of communicating? Could someone answer that for me?

**AUDIENCE:** Different things, and different exercises, I guess.

**FRIESEN:** So it's different all the time, different guidelines for your improv that you're doing there. Gotcha.

Well that was-- the free improv part of things and not worrying about notes is a tremendous liberator for me as a classically trained player. And then the next thing was playing diatonically. Learning how to create something that really had heart, that had shape, that had personal expression for me, but that was kind of limited in terms of how it wandered from key to key. And maybe we could play "First Ride" as

an example of that.

# **RAY:** Sure. That's great.

FRIESEN: I don't know where Tim wanted to go with this. We're just kind of winging this. But for me this piece that we're about to play was really one of the first improvs that I did that was a real successful cello and piano improv. It happened to be recorded in a great cathedral in New York, Saint John the Divine. And it had such a kind of formal quality. It's something that I wanted to play in concerts. So we transcribed it. We went by went back and listened to the recording and really transcribed it.

It's like when you have an improv like this, it's kind of like capturing lightning in a bottle in a way. And if you want to duplicate it, you can take some of the themes and stuff as the starting off points, but in this case, it seemed to work so well as kind of a thought through thing, that we play it as close as we can to the recording as possible. Now the piano part is pretty much Tim's invention. What he had from the transcription were a few right hand lines that Paul Halley, the original improviser, improvised. But the cello part is really-- it's written. It's the same cello part that I originally improvised.

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So this is called "First Ride."
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RAY: Ready?

FRIESEN: Yeah.

[MUSIC PLAYING]

## [AUDIENCE APPLAUSE]

- **RAY:** Thanks. and the construction had the third in that chord. I don't know if you caught that, whatever that machine is out there.
- **RAY:** So I'd love to get some of your thoughts and some of your questions. But basically that whole thing that you heard just now, as Eugene said, was all originally freely

improvised, but in a diatonic setting meaning we really never left the key of D major, right? I mean basically. I mean, you see I've got all these pages of transcription, but it's all-- we might try little exercise where we do that with some of you where diatonic-- we're staying in one key, but we're just moving the chords around, moving the roots of these chords around, doing some improvisations, and then doing figures, motives, melodies based on that. Were there any questions, any observations, commentary, criticism? Yes,

- HARVEY: Adrian.
- **RAY:** Adrian. Thank you.
- **ADRIAN:** I was wondering I guess whether like there was some sort of design framework that had been pre-planned, like even some chord progressions that you guys do?
- FRIESEN: Nothing.
- ADRIAN: Everything was just--
- FRIESEN: Yeah.
- **RAY:** Thanks. Cool, yeah.
- **AUDIENCE:** So the original theme actually reminded me a lot of Cannon in D.
- **RAY:** Of Cannon in D?
- **AUDIENCE:** Yeah, where you started. [INAUDIBLE].

[PLAYING CELLO]

**FRIESEN:** Is the melody.

**AUDIENCE:** Yeah, I don't if it's just because of the title or just because it's [INAUDIBLE].

**RAY:** That might of had something to do with it. I mean, I'm sure you probably know when you're improvising, you know you're all you're always drawing from things that you know. Drawing from music that you've heard, drawing of course, from the people

around you who are improvising as well. So there's certainly plenty of times when I'm improvising and I'll play something and I'll be like, Oh, I think that was the theme song to some TV show from the '70s without really intentionally. I mean obviously jazz players will intentionally throw in little quotes for humorous effect. But oftentimes, they don't come out intentionally. They just come out. And that's sometimes the fun part of it.

**FRIESEN:** I've heard it said that you are what you eat. You know that expression? Certainly true for us improvisers. What you know and what you listen to really plays a huge part in what you access when you're really and truly improvising.

Although there's another thing that I might mention about this particular piece is that at least for me, there was something about the acoustics of the cathedral that really activated my imagination in a different way than it had ever been before. The way that the cello just rose up in the room somehow shifted my focus from me and from my technique to the room. I mean it was almost like there was this other kind of presence in there that I was tapping into. And it was an important experience for me. And oftentimes when I'm in an improvisational situation, I place myself back in the cathedral because I really felt like that was where my voice as an improviser was born. It was the first time I had that experience of really being the music and not being a cello player or even being a person.

**RAY:** Any other comments or questions?

- CHRIS: Not really a question, but after hearing that you said that the [INAUDIBLE] design [INAUDIBLE]. That was really inspiring that you managed to come up with something so varied. Because I am really interested in things like that. Because I really like the idea of trying to improvise like that. Just a simple idea. And I guess that's my favorite way of improvising. But I always find a sense of struggle to come up of with a whole variety of interesting things maybe just from that simple beginning. That's really, really cool that that--
- FRIESEN:Can you hear what he's saying well enough? Yeah. I mean maybe one of the things<br/>he's hinting at is the power there is in limitation. That when you really set

6

boundaries about what your language is going to be sometimes that can be really liberating. And in my case, with my limited improv skills at that time-- that was a 1986 when we did that. I was really a pretty new improviser then. The fact that we were in an environment where I could use my open strings, my harmonics, you know, I knew what key we were in, really helped me so much. There's something about that that just calmed me down, and I think that that calmness and the incredible acoustics of the place helped for this kind of magical moment to happen. Because it's a special moment.

A piece like that is something that really captured our attention in a special way. And that's why we want to transcribe it. That doesn't happen every time we sit down to play something compelling. But it is amazing what can happen with kind of a limited palette of harmony, I guess you could say. How that can ignite this kind of passion and feeling of warmth and rapture. And what are some other adjectives you would use for that music?

RAY: Cool.

 FRIESEN:
 No they've got it. Some more adjectives. How would you describe it? Does it sound like church music or?

AUDIENCE: Just calm.

**FRIESEN:** Calm. Maybe that's the diatomic part of it. It's very grounded in that way.

**RAY:** Yeah, definitely. Yeah, I mean I think the other thing that-- I'm sorry, Chris. Thank you. Chris, at least in my mind was when he was talking about sort of how much can come out of a very small amount of starter material, if you want to call it that. I think part of that is also as Eugene said. It's sometimes having the limitations of just, we're going to play in D major, let's see what happens, can trigger these things. I think some of the other thing too is sometimes when you're doing essentially what I would consider freely improvising, you're always trying to-- you're always listening. You're always trying to think in a larger form, a larger format. You know I mean all the music that we love has sections. All the great Mozart sonatas they have different sections that are contrasting. Same with a great jazz piece. They have different sections-- contrasting sections, loud parts, soft parts, a section that features a particular soloist, a section the features the ensemble.

You know, these are all things we're trying to recreate in maybe not necessarily a conscious way, although I mean, you could be more conscious about it. But even when you're just freely improvising, and again, you might be working on these kinds of things already. You're always kind of listening for-- your listening as you're playing. You're kind of thinking like, OK maybe it's time to come down and do a quiet section. Or maybe this is building up to a big section. Maybe this is the climax. Was that the climax? I don't know. Let's see where it goes. But you're always kind of-- I don't want to say that you're always judging and evaluating, but in a certain way the feelings that you develop when you play a great piece of classical music or a great jazz piece, these feelings you're trying to recreate in a freely improvised setting. And often times you can go back and you can look through what you just did.

With my students-- Eugene and I both teach at the Berklee College. A lot of times with my piano students, when we work on improvisation, I'm telling them you have to record yourself. You have to turn on your phone or whatever you've got, something just really easy that you carry around with you. You record your improvisation, record your group improvisations. And then listen back and go, Yeah this is great. I didn't like this so much. You know because that's the way you learn. That's a great learning tool, and I think sometimes it's one of those obvious things that people don't think to do. When, like I said, from my perspective, it's a really great way to develop a sense of what you're doing.

So I'd like to play one more tune. And then we'll maybe open it up a little bit for you guys. I'm wondering if we should do something like the big violins, maybe?

FRIESEN: Like the blues in E minor?

**RAY:** Yeah. Do you want to?

FRIESEN: Yeah. Have you guys worked on blues? Yeah, I'm sure you have. Well again, for me as a classically trained player, the blues were and are really, really challenging. I mean just keeping the form together, I really had to have the paper in front of me for a long, long time just to keep the twelve bar thing together. So but eventually it became internalized. And here is a blues that I came up with. I remember watching the shock and awe invasion of Baghdad. I was just sitting in front of this big screen TV with my cello, and what I found myself playing was this one, Ray.

[PLAYING MUSIC]

#### [APPLAUSE]

**RAY:** Cool. So, I have so much playing that with you, Eugene. That's a gas. So obviously blues form, right? Were you're able to keep track of it? Mostly you could, right? I mean that's one of things, like I said before, as a jazz group we're unusual because there's no bass and no drums. But of course, when again this is something I preach to some of my own students. It's like we're kind of always the bass player. We're always the drummer. Even if you're playing a flute, you're still the drummer, right?

And I think that's one of the things-- this is one of the kinds of playing that we do as a trio where we actually use those skills. We use those like, OK, let's-- we have this internal thing going on, this internal metronome going on. We don't need the ride cymbal necessarily because we're keeping it together. And then of course we because we like to have fun will throw caution to the wind and do some crazy stuff for a while. But still in the back of our mind, of course, we're listening, too. We're keeping track of that time.

Any questions about that? Comments?

AUDIENCE: Yeah. I guess, I was wondering just how-- [INAUDIBLE] on the piano, you were like playing really quick fast notes like that [INAUDIBLE] the cello, you ended, you know every time you did this, you both ended at the same time. And is it just that you've played together long enough that you sort of--

- FRIESEN: Actually I think that the moments you may be referring to are the things about the blues form, where we would come to the end of a phrase. And as Tim was hinting at, or articulating before, when you feel like something needs to change-- you know some of those double bars in the music, in this case the end of the 12 bar form, where we are crescendo-ing, crescendo-ing getting crazier and crazier and crazier. It just feels like, Oh wouldn't that be a nice dramatic moment to just jump off the cliff back into the head into that real, real simple thing.
- AUDIENCE: I think two of the times it happened at the end of the 12 bars, I think one was just at the end of a [INAUDIBLE]--
- **FRIESEN:** And that's just lucking out. And I think that's probably what keeps all of us doing this is just that lucking out part of the thing, just not really knowing what's going to happen. And you know, none of us wants to rehearse so much that you can depend on those things.

I love the very expression, there's no substitute for a genuine lack of preparation. Have you ever heard that one before? Because sometimes when you're really on the front of your chair, you know you're really listening in a way that is enhanced. And I think that is the thing that keeps us musicians doing this is that incredibly intense process of listening and presence, which by the way is transmitted to the audience.

And we get a lot of energy from the audience. You probably know this already, the value of doing this in front of people is enhanced exponentially. And the quality of being in the audience when you're witnessing something that is happening in real time is something tangible. Not only that, but as scientific research has pointed out, our brain research, listeners will have a similar kind of experience brain experience as the performers. So we really get this vicarious kind of thrill, this kind of vicarious high just from being in the presence of something incredible that's going on. Which is why I'm quite sure that live performance will never die.

You know, once we get over this infatuation with the screens, I think people will be back at concerts and live events like that. And certainly the thing that keeps us musicians at it because there again the enhanced listening that we can do in rehearsal is very different than it feels like from playing for you guys. You know there's an extra level of attention that comes to it that is--

And sometimes it's just a tiny little switch in your brain that makes all the difference in the world. It's so amazing. You probably know this from the musical work you've done or the writing you've done. Sometimes you'll sit down and you'll just, your body will just type something really cool. And you didn't even mean to do it, it just kind of happened. You can't force that kind of thing.

- **RAY:** Absolutely.
- **FRIESEN:** Well, where should we go from here, Tim?
- **RAY:** So I wanted to do this actually. I wanted to hand out-- because I know some of you have to leave early. So my thinking for this course-- you know, it is school. You do have to have an assignment. So I'm going to hand out a tune, and I want to get back to the improvising in a diatonic setting that Eugene and I were doing earlier. And that's what I want to do kind of with some of the rest of this class.

But for the assignment, I actually want you guys to work on something similar to what we were just doing. We have a song, I'll pass it out now. We have a song in our trio repertoire called "Cargasian." This is it.

**FRIESEN:** Oh, cool. I love this.

- **RAY:** And basically, what I would like for you to do with this-- check that out. This is actually written by our trumpet player, Greg Hopkins. So of course, this is a concert page. So I guess actually I think our saxophone player is the only guy who's going to have to--
- FRIESEN: Trumpet
- **RAY:** --do some transposition. But at any rate-- oboe, nice. So basically, like I said, we treat-- we'll play this tonight in our concert, so you'll get to here us do it as a trio.

Basically as you can see, there's just a melody line. Did I give you one, Mark? I'm sorry. No, I did.

### **FRIESEN:** I'll take one, too.

**RAY:** So there's a melody line, which you can see. And this is also a 12 bar blues form. So there's like a number one, number two, number three. These are the different sections. Number three you don't have to worry about. The chord changes so much, those are mostly just for my benefit as a pianist. When we play the melody, we all play in unison. In other words, like I said, no chords. It's all just playing this melody in unison. So of course, the first part of your assignment is to be able to play the melody in time. It's similar tempo to what we just did. [HUMMING]

Nice little medium swing kind of groove. You have to watch out. At the end there's some three four measures. You do have to play the three four measures. And then you see at the end on the bottom of the page, solo over G minor blues. Now I know you guys have done some work with the blues. These are very basic-- this is sort of a basic Minor blues form, 12 bars. And basically, what I would like for you to do is to take some of the motives from the melody. And maybe Eugene and I will play it once real quickly just so you can hear it. Take some of the motives from this melody. There's a few key things. I'm sure once you hear them, you'll be able to identify them or you can circle them or whatever. Work with some of these motives. Come up with some blues improvisational ideas. And then what I'd like to do when Greg and I come back on Monday is we'll do essentially what Eugene and I were doing. I'll have you team up in maybe twos or threes and do some improvisation over the blues.

And again a good way to practice that is sit down with a metronome, right? I mean obviously, sitting down with your friends is a better way to practice, but sitting down with a metronome, having the metronome go, just practicing improvisation. Like I say, we'll play through some of these figures and have you kind of identify some of those and maybe try to work those into some of your improvisations.

Can we play this real quick, Eugene?

FRIESEN:	Let's find out.
RAY:	I guess we'll find out.
FRIESEN:	It's been a while.
RAY:	So like I said, we always play this just in unison, the melody. On the way out, you'll hear tonight at the concert, we try to do a sort of a cannon with the melody. But we won't try the cannon now.
FRIESEN:	So for now we're just going to read through three sections?
RAY:	We're just going to read through them.
FRIESEN:	Just to give the sound of it.
RAY:	A one, two three.
	[PLAYING MUSIC]
RAY:	Right, we're ending, yeah. And then the nice diminished chord. That's what we always teach you, right? End on a diminished chord? Good compositional.
FRIESEN:	Isn't that a great melody? I mean, that's like just the coolest, Buddhist design never.
RAY:	It's like a haiku.
FRIESEN:	All that space around you.
AUDIENCE:	Why do you put in bar lines? What's the point?
FRIESEN:	I think the point is that we always are really aligned. We feel the beat together. And you have to, right? To play that.
AUDIENCE:	You have to, but I don't feel the bar lines at all.
FRIESEN:	Don't you? Well, great.

**RAY:** That's good. We like that.

**FRIESEN:** As Tim mentioned, we know we often do this in unison then we'll play it as a round at a bar and two beats, is that how we do it? Or one beat?

**RAY:** We start off the three of us on the way out. We play it unison together. Like I said, coming tonight, you'll hear it. Then we do the improvisation, which is like-- Whoops, I lost my microphone. The improvisation, which is all three of us improvising at the same time. It's not really like a typical, one person's a soloist and another person's an accompanist.

**FRIESEN:** It's really efficient time wise.

- **RAY:** It's true. Makes for a nice short presentation. And then on the way out, yeah as Eugene was saying, we do a round. We start off trumpet and then one measure later is you.
- **FRIESEN:** At the bar, right.
- **RAY:** One bar. And then that piano comes in one bar later. So you get sort of this round effect. And then when we get to section two, we condense it to two beats. And then when we get to section three, we condense it to one beat. So we're only separated by one beat apiece. It's kind of fun. It's sort of a fun game.

AUDIENCE: Why did you decide to, for example in measure seven, write a C flat instead of the [INAUDIBLE]?

**RAY:** That's a very good question. I mean you might have to ask the composer, Greg, who's not here. But my guess would be, although there's no key signature. I mean I think of this as in the key of G minor, which has got flats. So I think that's probably what he would say. Although again, not having a key signature that probably doesn't make a lot of sense. I don't know. What do you think?

**FRIESEN:** I think you're right now.

**RAY:** But I think the idea is that it's in a flat key, and so C flat would be a little bit more

conventional, for lack of a better word. I'm sort of one of those guys where I actually prefer to see B natural if I'm sight reading something.

- **AUDIENCE:** There is a B natural, right?
- **RAY:** That's true that's true. OK. Well, now you've completely stumped me.
- **FRIESEN:** It could be the software, too.
- **RAY:** It could be the notation software, which is oftentimes when musicians make unusual choices, it's not actually a choice, if you know what I mean.
- **HARVEY:** Can I just make another point. I think it would be interesting to ask Greg about when he comes by on Monday. Because actually a lot of these phrases in number one and two seem to be almost three beat phrases if you look at it.

# **RAY:** That's true.

- HARVEY:
   --it really anticipates and it then it goes into three, per se. So it's an interesting

   [INAUDIBLE] with the kind of five integral beats or whatever.
- **RAY:** I would agree. Yeah, you're right. They're not typical phrase lengths. Yeah, you're right. There's a lot of threes, three beat phrases.

Anyway, the other thing I just wanted to point out quickly was just, like I said, you see obviously, if you're looking for motives to grab onto. Well, maybe you can tell me what's one thing you might circle if you were going to try to pick out things that make this melody unique or different or interesting?

### AUDIENCE: [INAUDIBLE]

**RAY:** Right. The little ascending thing at the beginning, right? You see that towards the end. You see it actually all over the place. The second line. And the third line. Little ascending intervals. That's a nice one.

How about the thing in section two, the repeated note? That comes back again and again in section two, right? And then the other thing I would point out would be

maybe this sort of quarter note triplet thing, which comes in once in the first section and then comes in again in the second section. Again these are all things you can try to incorporate into an improvisation.

So like I said, this would be-- I think will be an interesting thing to work on. And we'll get you guys playing on this tune on Monday. Cool.

So let's see. Getting back in kind of the diatonic thing. I wanted to do that. Get you guys playing a little bit.

I guess I'll hand out this thing.

So basically, I mean this is something you probably don't even need to look at, but what we're going to try now, get into a little bit, is just G major. And we're going to spend some time in G major. So I hope you like G major. Conveniently a transposed to A major for those of you who don't read.

**FRIESEN:** Did you do the transposition yourself?

**RAY:** I did the transposition myself. This was not done on a computer. This was done by hand, the old fashioned way, with a needle and thread. Anyway, like I said, I don't even necessarily why I'm handing this out because I'm sure you guys all know what a G major scale is. Well, Mark doesn't. We'll get Mark clued in.

But I thought this might be an interesting thing to spend some time with. And if we have time at the end, maybe Eugene and I will play another piece from our repertoire, our vast repertoire of duo songs.

But basically, like I said, the whole idea of doing improvisation in a diatonic setting-which as you heard from the first piece we played, can really go as far as you want it to go, or it can stay kind of small, is a really, I think, an interesting way to practice. And I think it's a really interesting way to kind of develop a lot of the improvisation skills that you use in other kinds of improvisation, including atonal and jazz. Like I said, any kind of improvisation you do, I think the diatonic version of improv is I think a good way to-- it's a good, as Eugene said, limitation, a good way to restrict the amount of things you have to think about.

So it sounds like someone is knocking on the door.

Let's do this. I haven't really necessarily planned this. But I'm going to do this. Eugene and I will do a little bit of a G major improvisation. The other thing I'll point out on the bottom of this page, again these are all diatonic chords. Chris, you're a piano player, right? Are there any other piano players here today? Cool. So but for anybody who's doing chordal instruments-- I see the banjo and the guitar-obviously, one of the things, and of course Eugene is as well versed in playing chordal accompaniments, probably more so than pretty much any other cello player I've ever met. It's one of his strengths. Again it's something you'll see more evidence of tonight in the concert.

But you see I've just drawn out some basic diatonic chords. If we're in the key of G major, these are all just seventh chords. And it's not necessary. It doesn't mean you have to play seventh chords. But these are examples. G major, A minor, B minor, C major, D seven, E minor, and then the minor seven with a flat five if you go to the seventh degree, F sharp, right. So these are all, in terms of harmony, good source material. It doesn't necessarily mean that you have to move them around a lot or move around at all.

Of course, but it's again, thinking back to that first tune we played, just using a major scale as a source material, there are just so many options in terms of harmony. Sometimes like I said, those of us who come from a jazz world, we're used to things moving more, moving quickly and in a less diatonic fashion. But again, like I said, just in the diatonic areas, you know, you've got 7 chords right here. And then you've got all these chords with different kinds of roots. You know you've got G major with a third in the bottom. You can do a C major with the fifth on the bottom. You can do again, like I said, all of these things.

You've got a lot. Even just in the diatonic realm, you've got a lot of options as chordal instruments. So let's do a short little improv in G. Can we do that? And then we'll get you guys to come in on this. Actually and Alex, you're a vocalist. ALEX: Yeah, I'm doing vocals.

FRIESEN: You're doing vocals. All right. Cool. All right. So we'll get you all involved. So actually let's do this. We'll start. At some point, I'll get you. We'll swap places, Chris. But for now, Eugene and I will start. And then maybe James, we'll get you to come in. At some point I'll give you a nod, and you can come in and join us. And maybe one of us will drop out, or we might just keep going. So we'll just do a little bit of round robin, bring you guys in, brings guys out.

We need your note cards, Mark. You guys have all seen the Aardvark Big Band, right? Do you still use the note cards? I always love that system. Mark's got the system of like, to cue the entire band, he holds up a card that says letter E. It's great.

**HARVEY:** Our festival jazz band direct, he's now swiped that.

**RAY:** Oh, he swiped it from you.

**HARVEY:** Big concert on Saturday, and everyone was using his own card. Imitation is the sincerest form of--

[LAUGHING]

**FRIESEN:** The sincerest form of theft.

**RAY:** All right. So like I said, I haven't really planned this. So we'll see where this goes. Why don't you start?

[PLAYING MUSIC]

RAY: James.

Sorry I've forgotten your name, next to James.

AUSTIN: Austin.

RAY:	Austin.
	How about some trumpet?
	Want to put some oboe in there? Uh oh. Dry reed. That's OK. Adrian, can you come in on some guitar? Oh, I'm sorry. You're Adrian.
	Try some chords. Try C major.
RAY:	Can we get some flute? Yeah. And some banjo? Yeah. Nice. Yeah. Alex, want to try some long tones?. Yeah, yeah.
	Nice. Try some oboe? Yeah. Nice. Yeah. Yeah. Nice.
	Wanna try some flute, Adrian? Yeah. We'll get the whole thing going. Yeah.
	Chris, why don't you jump in? Yeah. Mhm. Yeah. Yeah.
	Nice. All right. Beautiful. That was great that was great. Yeah. It is it's hard to jump out there, right? I know, especially when your reed's not wet.
AUDIENCE:	[LAUGHTER]
HARVEY:	Then it's really hard. But no, seriously though, it's hard to put yourself out there sometimes. And again, I know you guys have been working with Tom on some improvisation. I imagine you've probably been doing some group stuff. There's always a little safety in numbers kind of mindset, which, I know, is totally cool. But,

always a little safety in numbers kind of mindset, which, I know, is totally cool. But, you know, frankly, what's nice is that I could tell you guys were all listening. You're kind of trying to find the group, find the place to go, find the place to be, where you're not where you're not sticking out-- you're contributing without going too far. Which is great, listening is obviously one of the biggest things.

You have anything you want to try with these guys?

FRIESEN: Oh sure.

**PROFESSOR:** We have a whole room full of musicians who are versed in G major.

FRIESEN: Oh, I know. That's so great. I might just say that, in terms of you are what you eat, I've always been intrigued with how to practice to become a better improviser. I mean, at first I thought improvising was just a state of being. It really was not anything you can prepare for. But that could not be further from the truth. You know, preparation plays a huge part in being a good improviser.

So sometimes I think about using-- if you think of your brain in two different parts, you know, the left brain and the right brain. You think of that left brain as being the rigor part of your brain, the part of your brain that is curious about music. Odd meters, scales, seventh chords dominant chords, chord substitutions, diminished chords, diminished scales. All these things are exotic foods that are just very enjoyable for us musicians. We get fascinated with them, and we want to spend time with them.

They're are like my kids when I got them art supplies. They would not only use the art supplies as they were intended, but of course, they wanted to taste it, and put it on the walls, and on their clothes, and on your clothes. It was everywhere. They wanted it to be a full body sensory experience.

It was something kind of elemental as a major scale and the modes of that scale. Each of these modes and each of these keys are things that you may understand with facility at first glance, and yet, there's no way of predicting how your understanding of them will be enhanced by your spending time with each one.

So for example, I have a CD of drones. It's just-- maybe you have these, too-- it's just a root and a fifth and a couple of different octaves in all 12 keys, and each track on the CD is six minutes long. So one day, I might say, OK, today's Phrygian day. And I'll go through, and I'll just let the CD roll. And I'll play six minutes improvised in Phrygian mode through all 12 keys in that day. Just as an example of how you can use drones, as a very simple example.

But I think what I wanted to say, mostly, was that your curiosity and your loving attention to each of these musical elements is something that goes deep inside your being, inside your inner musician. And then these become the tools that you use, the colors that you use, to really portray your expressiveness, when you're in a situation that you can access these things intuitively.

So one of the things that I really love is odd meters, for example. I've been fascinated with the odd meters. And we haven't really spoken about rhythm that much, but really, the success of this improv we just did was really mostly about this little motor that we set up at the beginning of it, and varying it in so many different ways with syncopation, and keeping it moving along. And using the odd numbers in rhythm, I think there's a lot of power and a lot of energy in there.

So we could think about 3, for example. Even 3/4 is such a magical kind of place to be in, because with quarter notes, with in each quarter note, we have 12/16 in each bar. And 12 is a great number. It not only has all this astrological significance, but, of course, is divisible by 2, 3, 4, and 6. So for us musicians, there's just a whole storehouse of energy and rhythmic tension and propulsion available with that number 12.

So let's take 3/4, and, first of all, let's just play some kind of pattern that we are subdividing with the quarter pulses. Can you play along with me? Anything you can come up with. You can just play 16th notes, but really feature those quarter pulses. Can I hear all the 16th notes, but just accent the quarters. Keep going. Nice. That's beautiful.

Great. Let's try another way now. I'll keep this quarter pulse, but now we're going to come up with a pattern, where we accent every three notes. So this is essentially, we're going to be playing four groups of three notes in the same amount of time as we were playing three groups of four notes. Do you follow? So we were doing 1-2-3-4, 1-2-3-4, 1-2-3-4, 1, now we're going to do 1-2-3, 1-2-3, 1-2-3, 1-2-3, 1-2-3, 1-2-3.

So find a three note pattern where you can really feature the first note of each. Go ahead. 1, 2, 3, 1, 2, 3, 1.

I can tell you guys feel it already. That's really, really fun to do.

So let's see if we can a little round, where we'll start with the people doing the quarter pulses, and after, let's say, two bars, the other group will come in with the quarter pulses, while the first group shifts to the three pulses. OK.

And Chris, you can be on this side-- up through, let's see, one, two, three, four, Ja-up through Jacob, and then the rest of you are in the second team, OK. We'll start with two bars of 3/4 doing the quarter pulses, and then we're going to evolve to the three pulses, the dotted eighth note pulses, while they come in the quarter pulse. Clear? One?

- AUDIENCE: [INAUDIBLE] not clear-- so what's going on?
- **FRIESEN:** After two bars, you come in with a quarter pulse figure.
- AUDIENCE: And then they'll switch?
- FRIESEN: They'll switch when you come in--
- AUDIENCE: And we'll just stay--
- **FRIESEN:** And you'll switch after two bars. You're going to go to the dotted eighth note figure, the three figure we just did.

AUDIENCE: [INAUDIBLE]

**FRIESEN:** We just cycle. We'll just come back to what we were doing before, OK? 1, 2, 3. 2, 2 switch. Switch. And switch. Switch. OK, you got it?

Let's try a little duet, just quickly, and see if we do it? Does everyone feel comfortable with this? Let's try a flute and oboe duet. And you don't have to choose which roles you have, and you don't have to switch. But let's say the first person who starts will start with a quarter note kind of feel.

And this is just about rhythm, it's not so much about melody. So see if you can just

make this kind of poly-rhythm evident. We've got the 4 and the 3 going simultaneously. So let's try a flute and oboe duet. It's going to be like a 45 second, or 49 second world premiere.

That's it, yeah guys, good for you. What do you think? Do you like it?

AUDIENCE: It feels like a template. I feel like if we--

FRIESEN: Exactly.

AUDIENCE: --got very used to this, we could do lots of innovative things once this becomes second nature.

**FRIESEN:** Exactly right. It's a template. That's a great way of looking at it. Let's try another one of these. Let's try a James and trumpet duet.

I'm sorry to interrupt already-- this is totally cool-- you don't have to play all the 16th notes. You can play a resulting rhythm that just plays down a funky quarter note feel, for example, you know I mean? And feel free to switch. In fact, let's make that a little rule of this duet. That at some point you're going to switch roles. OK? Don't try to plan it out. You'll just screw it up.

# AUDIENCE: [LAUGHTER].

- **FRIESEN:** Good for you guys. Yeah. That's cool. What I love about it, too, and what we haven't talked all about-- and that is how to make an accompaniment, in a kind of pure and very exposed setting like this. And you guys are really good at that already. I found you gravitating towards that melody and accompaniment role between you, which is a great musical instinct. I love how you did that.
- RAY: And something that a lot a horn players don't think about because you're thinking--
- FRIESEN: So true

**RAY:** --about playing melodies and leads.

**FRIESEN:** I know, I know. I really notice it because the cello has this tradition of accompanying.

The written repertoire is really 90% playing accompaniment roles. So I really appreciate it when I come across a violinist or a trumpet player who is sensitive to that-- or a drummer-- who's really a great accompanist, really appreciate it.

Anyway, just as an example of how a kind of musical element-- in this case, the four against three-- with curiosity, as you experiment with this, you will gradually find yourself wanting to compose stuff. You'll be improvising stuff that you get attracted to and just through being drawn to something, with your natural curiosity with the musician's love for music. You'll find yourself wanting to expand it, and with your loving curiosity, it will grow into something that could either be a composition, or just part of your personal vocabulary, for your personal comfort. I think that's kind of what we do, is collect this quiver full of musical arrows of all kinds of different descriptions. And rhythmically, it's just a huge, huge great world. So I envy you, that you've got this long life ahead of you to check all this stuff out. I do, too. I'm doing the same thing.

RAY: Indeed.

FRIESEN: Where are, we time wise?

**HARVEY:** We have about maybe five minutes more.

**RAY:** Yeah, cool. I just wanted to mention that Eugene, as I mentioned, we both are teaching at the Berklee College, and if you ever get a chance to hear-- and I don't know if you guys wander all the way across the river to Boston, there's another city over there-- they've got some cool things going on. Anyway, no seriously, if you ever see a notification for a group called the Berklee World String Orchestra, it's led by Eugene. It's a string orchestra, as you might expect. It's got all the string players, many of the string players to go to Berklee.

And one of the things that's remarkable about this group, besides the fact that many of them are actually really good improvisers, is that Eugene does amazing work getting them to play rhythmically-- and getting them to play rhythms in all kinds of different styles of music, world music. A lot of original stuff. A lot of remarkable

repertoire that they do. But like I said, a lot of it is based on-- at least my concept of what Eugene does-- is based on working with rhythms with this ensemble. And without a doubt it's worth checking out, if you get a chance to see that.

FRIESEN: One of the ideas of the group was to activate the great world of rhythm, especially from Africa, and South America, and North America, with jazz-- well, all over the world-- without a rhythm section. So all the rhythms are really spread out and written into the parts. There's this great interlocking, [INAUDIBLE] and all the parts are rhythmic, and I think pretty fun to play. And that's the experiment-- making rhythmic use of string instruments.

**RAY:** So we just have a few minutes left. Are there any other questions? Yes.

AUDIENCE: So I was talking to someone the other day about perfect pitch. There's this notion that some people have inborn perfect pitch. And they are, from birth, are annoyed if something is a couple cents sharper than they remember it being. Something like this.

> I don't have anything like that, but as I listen to more and more music, the different pitches start to feel different. And they have these distinct sort of personalities. And we haven't talked about this much, and I haven't heard people in improvisation talk about this at all. But you use that kind of thing? So you feel like the pitches have different feelings, colors to them that you can use? The same thing, maybe transposed up a couple steps would feel different?

**RAY:** Yeah, that's an interesting question, actually. I do. I feel like different notes, different keys, have different feelings to them. I mean, I'm one of those people that has perfect pitch. I don't necessarily-- to get back to what we were saying originally-- I don't necessarily know if the piano is tuned at 442 versus 440-- maybe there are people that tuned in-- I'm not. But I suspect most people aren't. But yeah, it's something, and it's interesting, too, the other thing I thinking about as you were talking was, from an improvisational standpoint, often people sometimes come up to me, and they ask me, do you have perfect pitch? I say, well, yeah, I do. And they go, oh, that must make it so much easier to improvise. Well, no, it's not that easy.

It's not that simple.

And I know, again, only speaking from my own experience, it does help in some small ways, I suppose. If, you know, Eugene and I walk out on a stage, and without talking about it, he just starts bowing a note, having perfect pitch will tell me, oh he's started on A flat. But once he starts playing, and I start playing, you don't think about perfect pitch. I'm not analyzing, oh, his D is a little sharp. And I don't know, that's going to bug me. No, no, no. I'm not going to-- if I were to try to be that analytical in the moment, it would drive me nuts.

- AUDIENCE: I was more talking about aesthetics. I was more talking about what sort of a bearing does the aesthetic of different keys have on your feeling--
- FRIESEN: Well, in my case, my experience of music is related to the cello because I've had this thing in my lap since I was 10 years old. So when I hear a note, I can kind of imagine where it is on the cello. And that's the way that I know what note it is, but it's also the way I can visualize what key a melody is going to sound good in, because of how it will sound on the cello. Yeah.

And then I think an interesting way to play with that is to transpose as much as you possibly can in all 12 keys. You know, start with a simple melody, and just the head of a tune, or an eight bar phrase, or 16 bars, and try playing it all 12 keys. And take your time. If you're like I am, it'll take a long time to get through 12 keys at first. But eventually, you begin to open to how the intervals work, and hear how your instrument sounds in all those 12 keys.

And that's another way to sensitize yourself about how you react emotionally to what key something is in. It's very personal, but it's very real. That was a good question.

**RAY:** It is, yeah. And I think, just one short comment, because we talk about with improvisation, we talk about feelings and being in touch with how things feel, and how things sound. And I think the key that something's in is one of those things. One of those things that gives you information. If I sit down and play a B minor

chord, that's going to give me a certain feeling that would be a little bit different if I played an A minor chord or a B major chord. So that all kind of gets mixed in, for me at least, the key something is. I think it does. It gets mixed into how I how I approach it as an improviser.

And which is why what Eugene says a great idea, you know, you learn to tune, and you say, OK, cool, I'm feeling really good about playing blues in F. And now try blues in D flat. It's going to feel really different. Partly because you probably don't play in D flat as well you do in F, but partly just because it's going to sound different. So I hope that answers your question a little bit. Any other-- Yeah. Adrian?

- AUDIENCE: So you mentioned [INAUDIBLE]. Do you have any other useful exercises sort of like [INAUDIBLE] practice certain improvision skills.
- **RAY:** Excercises for practicing improvisation?
- **AUDIENCE:** Just like for practicing songs [INAUDIBLE].

**RAY:** Right, yeah there's so many.

**FRIESEN:** There's some great technology, too, you guys have probably checked out, right. I mean, everything from a looper pedal, so you can make your own loop, and practice along with it to Band in a Box. And iReal b, the iPhone app, where you can play tune, in any key, in any tempo. Those are all great things.

I think it should be driven-- in my personal opinion-- it should be driven by your curiosity for what you really love. You know, any time it becomes an intellectual exercise, it's something to be aware of. I would counsel to gravitate towards things that you're really, truly drawn to that gives you an emotional response.

We talked about the one side of the brain, the rigor side of the brain, and the other, I sometimes refer to as the surrender part of the brain. In other words, when I improvise, I often place myself in this kind of more open mode. It's where the music just is there, and I'm contributing to the music without having to analyze it, or try to remember anything I practiced. It's really just a way of being with your imagination and with your more open, emotional state inside the music.

That's something that's hard to practice in school. So that's why it's so important to find a place to practice that you're comfortable in, that hopefully sounds good for your instrument, and spend some time there, just making the connection between how you're feeling and how it sounds. How comfortable you are and what you love.

**RAY:** Yeah, I think that's great. I think that's great advice. I mean, just again piggybacking a little bit on what Eugene was saying, oftentimes, you'll find things. You'll find things that excite you when you're listening. You'll hear something at a concert or on a recording, and you'll go, wow that's great. And I think this is how most of us do it, and have done it, for our lives.

For me, I would be in college, sitting in a class and Mark Harvey, or whoever my teacher was, would put on a recording of, you know, Bill Evans. And I'm like, wow, I've never heard this before. I've never heard someone play the piano like that before. And then it's like, OK, now I got to go check out Bill Evans. And now, after having done that, my playing has little bit of that in it, right? Because he's one of my favorite pianists.

I think that's sort of what Eugene is saying. Stuff that you're drawn to, explore it, jump into it. It can be anything and everything, but then once you start exploring it, then you'll find resources. You'll find transcriptions of Bill Evans solos, and, of course, recordings, which are very easy to get, mostly, nowadays. And like I said, there's a lot of good resources out there for working on improvisation. But just find things that you're drawn to, even if it's just six measures of a John Coltrane solo. It's like, I love those six measures. I got to learn those six measures. I got to get them--- I got to have them. And you learn them, and you start playing on them, or it could be anything.

**FRIESEN:** The stranger your interests, the more interesting of a player you'll end up being.

**RAY:** It's true. So, cool.

**FRIESEN:** You are what you eat. Watch your diet.

28

**RAY:** Watch your diet. So.

**HARVEY:** Wise words on which to end. Let's give him hand.

**FRIESEN:** Nice to hang out with you guys.