

1 [0:00:00.0] [Applause]  
2 hello I'm gonna try not use the mic just  
3 cuz Marty self-conscious enough without  
4 amplifying and it's not weird at all  
5 that I was sitting in the corner that  
6 whole time while you came in that's not  
7 good  
8 so when I first spoke to Dan about  
9 coming I thought well originally we were  
10 talking about doing workshops doing  
11 mixing so easy stuff sit in front of a  
12 computer say here's a compress or  
13 whatever and then we decided well it'll  
14 be more of a talk I [0:00:30.0] thought well great  
15 I'll just talk about compressors that's  
16 easy and then I thought well no I'm  
17 going to Oxford I need to challenge  
18 myself and so what I've decided to do  
19 tonight is to talk about the things I  
20 think about which is not necessarily the  
21 things I do and this isn't a you know do  
22 as I say not as I do moment this is just  
23 the the things that go inside my head  
24 when I'm thinking about is it mixed good  
25 enough is [0:01:00.0] it done what's the point all  
26 of that so I haven't given this  
27 particular talk in public so I'm gonna  
28 have to look at my notes a little bit  
29 and I might stumble a little but I  
30 hopefully will go off into the weeds and  
31 then we're gonna have QA where you can  
32 ask about compressors and that'll be  
33 easy  
34 compared to everything else so first of

35 all I just like looking at this and  
36 listening to that playlist I am a lucky  
37 lucky man that is [0:01:30.0] that is crazy so  
38 that's me and I'm here and that's today  
39 and what I wanted to talk about was not  
40 the mechanics of mixing or making a  
41 record or composing this I think there  
42 are there quite a few composers you know  
43 names as opposed to people who just mix  
44 and so I think these concepts are as  
45 relevant and one of the sort of  
46 interesting things about what's been  
47 happening in the music industry  
48 lately is because it's been decimated by  
49 downloading and now streaming and  
50 there' [0:02:00.0] s no money for anybody whatsoever  
51 there is still this sliver of it that's  
52 chasing money and you know there is the  
53 pop market and it's huge you know  
54 especially in Asian other parts of the  
55 world that pop market is massive and it  
56 makes lots and lots of money but for  
57 everybody else it's gone back to being a  
58 little bit more about the art unless  
59 about  
60 commerce because the commerce is so  
61 uncertain and I think in a lot of ways  
62 that's really great because for [0:02:30.0] the last  
63 probably 50 years the recording business  
64 was just printing money so it all became  
65 about printing money and how can you do  
66 that and you always had artists within  
67 it and some of them would be successful  
68 in some wouldn't but now you're at a

69 point where every artist can put their  
70 product out into the world right it's  
71 not just the ones who happen to get some  
72 money from a record label and go into a  
73 studio every laptop is a studio every  
74 room is a live [0:03:00.0] room and you can make a  
75 record anywhere in the world and put it  
76 out the next day whether it's on YouTube  
77 where you go through a distributor and  
78 it's on all of the digital things that  
79 people can listen to it on so I think  
80 it's a really great time to sort of  
81 remember about the thousands of years of  
82 music that was before recording existed  
83 so composition could be a job and some  
84 of them are very high-paying jobs lots  
85 of court composers are plenty of  
86 buildings [0:03:30.0] around here that probably had  
87 a composer tied to them or came up  
88 through there but the idea of music as  
89 art and for the definition of art I mean  
90 I've heard some people define it as  
91 something that you don't need to do to  
92 survive and if you do that then that's  
93 art and I that makes some sense but  
94 there plenty of things I don't need to  
95 do to survive that I would not call art  
96 and we don't have to talk about him [0:04:00.0] in  
97 this room but I think that my definition  
98 of art as someone who tries to help  
99 other people create art and get out into  
100 the world is that it is something that  
101 you make that you present to someone  
102 else to try and elicit an emotional

103 response  
104 that's art it can be a positive response  
105 a negative response it can be a protest  
106 sign it can be a song it can be a  
107 sculpture it can be a concept and I'm  
108 gonna be very pretentious later in the  
109 talk and [0:04:30.0] we'll talk about the concept a  
110 little bit more but I love the idea of  
111 music as art because even if you're  
112 going for commerce you have to go for  
113 art because there were lots of records  
114 I've been working on where someone will  
115 make a decision based on what they think  
116 would be popular or that would be more  
117 like this other record  
118 but then if that record isn't popular  
119 what you're left with is a compromised  
120 piece of art because you've made  
121 decisions based on [0:05:00.0] the commerce side of  
122 it which may or may not work out I mean  
123 how many people were on MTV Cribs before  
124 they cancelled the series not that many  
125 so the idea of making the music for its  
126 own sake and a record is a piece of art  
127 that happens to contain music which is  
128 also art so it's meta art or something  
129 ridiculous like that but the idea of  
130 record making as art as well and so when  
131 you look at making records that way I'm  
132 gonna use [0:05:30.0] my remote now so the only  
133 thing that matters when you're making a  
134 record I'll talk specifically about  
135 making records because that's what I do  
136 so the only thing that matters is what

137 comes out of the speakers that's it  
138 there's no argument you can make which  
139 would make me add something to that list  
140 it's what you get when you listen to the  
141 record that is the art and that's the  
142 art coming towards the listener the  
143 listener then reacts however they're  
144 going to [0:06:00.0] react and every listener reacts  
145 differently because otherwise there'd  
146 only be one popular band everybody has  
147 different tastes but that's the idea of  
148 what comes out of the speakers now why  
149 is that important well I'll take you on  
150 a slight tour through my life but first  
151 let's talk about just recording in  
152 general so to be fair these graphics are  
153 all from yesterday so I've stolen  
154 graphics from all over the internet and  
155 most of them are not terribly good and  
156 completely inappropriate but let's [0:06:30.0] talk  
157 about the difference between sound and  
158 recording so see if we can actually it's  
159 dead Oh stay okay so that's sound we're  
160 good with that it's it's actually water  
161 pouring out of somebody's skull but  
162 let's say this is something making sound  
163 in a room and that's not too far off  
164 from how chaotic and crazy a sound wave  
165 is in a room it's interacting with  
166 everything that's going on with the  
167 convection in this room because of the  
168 heat it's [0:07:00.0] hitting walls and floors and  
169 bouncing back and you're getting my  
170 voice off of about 25 surfaces if you're

171 sitting in the back of the room so this  
172 is the idea of sound in a room and this  
173 is when  
174 recording what somebody's doing now it  
175 can be a person singing it can be a  
176 piano it can be a guitar amp it can be  
177 anything but you make a sound wave right  
178 and then to make a record of that sound  
179 wave are we still working  
180 oh so [0:07:30.0] you record it and traditionally  
181 there are two different ways to record  
182 it analog or digital so that's supposed  
183 to be analog up top digital on the  
184 bottom think that's pretty clear so the  
185 idea is you make a representation that  
186 you can store and then you can play it  
187 back later that's the idea of recording  
188 recording is just a delay that's all it  
189 is and you do it by taking a microphone  
190 or something like that which has this  
191 incredibly flimsy sheet and you make [0:08:00.0] it  
192 like an ear drum and stick it up in the  
193 air and put it in the way of that total  
194 chaos that is the sound wave so that it  
195 moves the same way two sound waves  
196 moving and it creates either a voltage  
197 well it creates a voltage that's what  
198 microphones do and then you either  
199 record it on some bizarre analog format  
200 by converting it into magnetic fields or  
201 something like that or you digitize it  
202 by putting it through an A to D  
203 converter which we're not going [0:08:30.0] to talk  
204 about tonight that's lecture eight of

205 this series is when we talk about A to D  
206 converters so the idea being that you  
207 take this total chaos that's in the room  
208 that you can't grab you can't see you  
209 can't do anything except hear it and  
210 capture it and store it and once it's  
211 stored you can mess with it right you  
212 can EQ it you can compress it you can  
213 play it backwards you can pitch it up  
214 you can pitch it [0:09:00.0] down you can do a  
215 million different things to transform  
216 that sound while it's in one of the  
217 forms on the right okay then eventually  
218 you take your transform bit play it out  
219 of a really jagged looking speaker and  
220 it's back out in the room so now pretend  
221 all that water is going into that  
222 person's head but only through their  
223 eardrums I didn't find a better graphic  
224 for that but the real point of this is  
225 though that that is total chaos once it  
226 comes back out [0:09:30.0] of the speaker you do not  
227 have any control over it anymore it's  
228 gonna make its way through the air  
229 whether it's from an earbud to the ear  
230 drum so it's only traveling two and a  
231 half centimeters or whether it's from my  
232 mouth well we're talking about recording  
233 so recording of this out of a  
234 PA system which will never happen to the  
235 back of a stadium whatever it is it  
236 comes back out it turns back into chaos  
237 and then someone's ears get [0:10:00.0] in the way  
238 and then they listen to it and then they

239 have a reaction to it so that is  
240 recording in a nutshell the idea though  
241 that's very important we'll come back to  
242 this later is you do not have control  
243 over it once it's out of that speaker  
244 you have ultimate control over it before  
245 it comes out of the speaker so while  
246 you're working on it and manipulating it  
247 it's up to you to make it the thing that  
248 you want to come out [0:10:30.0] of the speaker to  
249 elicit the response now the whole point  
250 of this is that's audio come on you can  
251 do it  
252 no I'm gonna use the spacebar because  
253 it's easier okay so let's let's look at  
254 a little list of things that don't come  
255 out of the speakers and what I want to  
256 do is group this sort of along my career  
257 and how this when I was a ardent  
258 enthusiast of things that did stuff when  
259 I was a kid you push a [0:11:00.0] button and  
260 something else happens and that was  
261 amazing and that manifested itself in  
262 doing lights and sound for band in high  
263 school and then I saw recording studio  
264 for the first time and okay that's what  
265 I need to do and at the time there were  
266 two universities in the states that had  
267 four-year degree programs and my parents  
268 that you were getting a degree period so  
269 I had a choice between Berkeley and  
270 Boston and Miami University Miami so I  
271 decided to go to university Miami now  
272 while you're at [0:11:30.0] the University as any of



273 you who are at university or teaching  
274 University know you're surrounded by  
275 people who do exactly what you do they  
276 do it in different ways but they know  
277 the jargon they know the tools and it's  
278 all you talk about 24 hours a day seven  
279 days a week and sometimes you go home  
280 and you bore your parents with it but  
281 that's it you're in this tiny tiny  
282 little world and while you're a student  
283 at least for me you're [0:12:00.0] creating art for  
284 lack of a more general word for what I  
285 made while I was in school arts kind of  
286 a stretch but you're making lots and  
287 lots of things that are really for just  
288 the consumption of your peers right it's  
289 not going out into the world unless  
290 you're really lucky or you're recording  
291 the choir here it makes two albums a  
292 year something like that you're make  
293 little pieces that you play at recitals  
294 for other people who do what you do and  
295 if you' [0:12:30.0] re lucky you write a piece that  
296 gets performed things like that so there  
297 are all of these things that you think  
298 about and you talk about and you talk  
299 about with each other and then yeah but  
300 these are the things I used to talk  
301 about cept the trouser things we call it  
302 pants but that's different here so I  
303 didn't want to you're always wearing  
304 pants when you mix right well I guess if  
305 you're in a kilt  
306 you might anyway so but the idea [0:13:00.0] is I

307 remember hundreds of conversations where  
308 I had done a piece in the electronic  
309 music lab or I'd recorded a band and I  
310 wanted to play it for somebody either  
311 someone else at school or my parents or  
312 my brother who's a very harsh critic and  
313 I would start by at least five of these  
314 things like by the way I compressed  
315 these drums it's so awesome and I used a  
316 phaser on the bass and the chorus and  
317 it's a little bit it's not as [0:13:30.0] more  
318 because I didn't have the best  
319 microphones to use and they were set up  
320 in a weird way and the drummer wasn't  
321 that good and then you hit play and  
322 first of all you set people up for  
323 disappointment so it's a terrible way to  
324 go you just want to say this is gonna be  
325 great but also as soon as you hit play  
326 that's all erased and it doesn't matter  
327 it doesn't help to know that the drummer  
328 was terrible they're gonna [0:14:00.0] hear that the  
329 drummer is terrible that's coming up as  
330 soon as you hit play so it is pointless  
331 to talk about these things but you do  
332 you do then you get out of university  
333 and you get into the world where now  
334 your work is going out to the public you  
335 hope the general public and I was  
336 incredibly fortunate to be doing small  
337 jobs on huge projects so I'm doing  
338 things for Michael Jackson and Metallica  
339 this is going out to lots and lots and  
340 lots of people [0:14:30.0] and the the phrase I

341 always use about this when you start  
342 making excuses and there's a whole  
343 nother set of excuses is does it start  
344 right away for that you can't go to  
345 everybody's house who buys the record  
346 and explain why it sucks it's not an  
347 option so you have to look at these  
348 things and then fix them and surpass  
349 them and get past the point where they  
350 even matter and I had a very very hard  
351 time with this when I started mixing  
352 more  
353 I used [0:15:00.0] to always send an email with  
354 every mix and it would have some of  
355 these things in here like hey man really  
356 sorry about the way the chorus hits but  
357 it just wasn't happening and I don't  
358 know why and maybe it's you or maybe  
359 it's me but I can't really tell and  
360 again you're setting yourself up for  
361 failure but also nobody cares  
362 they do not care they hit play and they  
363 either like it or they don't and that's  
364 a really [0:15:30.0] really important and very very  
365 difficult thing to hold on to as you're  
366 working I now type out long emails with  
367 all of these things in them and then I  
368 delete all of it and I say the mix is on  
369 the server sounds great and hit Send and  
370 sometimes they agree a lot of times they  
371 don't or it's somewhere in the middle  
372 but it doesn't matter because it's what  
373 they were gonna think anyway it's  
374 nothing to do with me saying I forgot [0:16:00.0] to

375 wear trousers when I mix this I mean it  
376 just doesn't matter plus if you're at a  
377 point where you forget to wear trousers  
378 there's all kinds of other problems that  
379 come with that so looking back on my  
380 career I should have realized this much  
381 much earlier because one of the first  
382 things I did was I got to go on tour  
383 with Michael Jackson which is what led  
384 to me working in the studio with him so  
385 we were in South America man a huge  
386 crowd [0:16:30.0] now this is traditionally thought  
387 to be a picture of Michael singing crowd  
388 going nuts we were in I believe Brazil  
389 and does anyone here remember the song  
390 black or white  
391 does anyone remember the video on MTV  
392 heavy rotation so there's this whole  
393 little scene before the song starts kind  
394 of Back to the Future ish but basically  
395 there's a little kid up in his room with  
396 a guitar and a speaker the size of a  
397 house and he hits that opening chord and  
398 the song starts well the Michael [0:17:00.0] Jackson  
399 concert things explode when he hits that  
400 guitar there's pyro everywhere and  
401 Michael comes jumping off a trampoline  
402 through the pyro and somehow always  
403 manages to land right on the downbeat of  
404 the song and the song starts now I was  
405 on tour because I was handling playback  
406 and there was a live band and they  
407 played but there was a lot  
408 other stuff going on and this one show

409 he jumped through the pyro hit the stage  
410 and absolutely nothing happened  
411 nothing came out of the speakers it was  
412 crickets and [0:17:30.0] tumbleweeds in a stadium  
413 with 40,000 people and I could have said  
414 excuse me Michael so four months and it  
415 really got do me and I know we have an  
416 air condition and the button got stuck  
417 so then when we hit a start instead of  
418 starting and nobody cares so that's  
419 actually him saying what the hell is  
420 going on not really but there you go so  
421 but I did not take that lesson to heart  
422 I was still sending emails about  
423 trousers and the bass and did you [0:18:00.0] edit  
424 the drums years and years after this  
425 whereas this is the ultimate version and  
426 any live gig is that version right you  
427 can't you cannot explain away a bad gig  
428 if your mix isn't great you can just  
429 keep working on it so that's the joy of  
430 writing music or working on recording  
431 music is you can keep going until you  
432 think it's time to go okay so now we're  
433 gonna get to the slightly pretentious  
434 part of but if we haven't gotten there  
435 already [0:18:30.0] I don't know we might have so I  
436 just wanted to sort of take this concept  
437 of what comes out of the speakers and  
438 zoom out and more of a form or of a  
439 composition angle and more of an overall  
440 art angle and it's I used to read  
441 articles I don't know why I don't read  
442 articles anymore but I used to read

443 articles where there was a lot of  
444 discussion in literature about author  
445 intent versus reader experience and  
446 there are lots of people arguing that  
447 the [0:19:00.0] author's intent absolutely did not  
448 matter and that made me so angry like  
449 what are you kidding they've spent  
450 months or years writing this book they  
451 have crafted every tiny word of it how  
452 can it not matter what they were trying  
453 to say and over the years I have swung  
454 completely to the others  
455 this argument it doesn't matter what  
456 they were trying to say all that matters  
457 is what you think they said because  
458 that's all you get out of it now I love  
459 to read [0:19:30.0] interviews with authors about  
460 what they were trying to say because I  
461 always feel like I'm an idiot and I  
462 missed the point but if I just read the  
463 book all I get is the equivalent of what  
464 came out of the speakers that is it  
465 unless there's a 26-page forward that  
466 walks you through all of the big points  
467 that's all you get and that's really  
468 important and for composers it is as  
469 well and just a couple of small examples  
470 of this there was a documentary [0:20:00.0] on  
471 Elliott Carter when he did he turn a  
472 hundred or did he not quite make it I  
473 went so it must have been his hundredth  
474 birth there's a PBS documentary which is  
475 the equivalent of the only good  
476 television station in the US and there

477 was a piece of his being conducted by  
478 Pierre Boulez  
479 and they were having a conversation  
480 about the dynamics written into the  
481 score were these the dynamics that the  
482 instrumentalist should try and get out  
483 of their instrument or were these  
484 dynamics that the audience was supposed  
485 to [0:20:30.0] hear because there are things written  
486 in odd ranges of an instrument so on the  
487 bass flute should they be over blowing  
488 because it's written triple Forte but it  
489 would only really get out at mezzo Forte  
490 or do they need to bring the rest of the  
491 orchestra down so that the bass flute  
492 could be the loudest thing in the room  
493 and this is a conversation that you have  
494 to have otherwise your piece is ruined  
495 what comes out of the speakers which is  
496 what comes out of the players [0:21:00.0] is not  
497 what you intended there's also a great  
498 interview with John Adams on an American  
499 masters program another PBS show where  
500 he's talking about watching other people  
501 conduct his works and he's always  
502 invited you know it's always oh it's the  
503 premiere in this country so he will go  
504 but he's not conducting and he was  
505 talking about how much he hates to be  
506 somewhere where the conductor has found  
507 this tiny little internal stream line  
508 and brought it out like John didn't know  
509 what [0:21:30.0] he'd written and he said he hated  
510 it because it completely changed the

511 piece so given that there is a piece I'm  
512 just gonna perform the first two  
513 movements because we don't have a huge  
514 amount of time but there is a piece  
515 that is the ultimate expression of  
516 getting all of that out of the way so  
517 I'm going to put the score up here and  
518 I'll just follow it as we go  
519 I cut it the second movement a little  
520 short when I first [0:22:00.0] heard about this this  
521 is the four minutes 33 seconds by John  
522 Cage it's based in three movements for  
523 any instrument and when I first heard  
524 about it when you hear about it you  
525 think well that's a joke that's not  
526 composition but apparently John Cage was  
527 just obsessed with silence the idea of  
528 silence and how to use it in music and  
529 one of the things he did was to go visit  
530 an anechoic chamber which is a chamber  
531 that has absolutely no acoustics of its  
532 own and he [0:22:30.0] went in expecting to finally  
533 hear silence and if you've ever been  
534 even just in a quiet room you know that  
535 that's not what you hear you hear your  
536 own nervous system and the blood pumping  
537 in your ears and he realized that there  
538 was absolutely nothing that was silent  
539 and so what this piece was and was  
540 premiered at I can't remember which  
541 music festival it was but it was an  
542 outdoor venue  
543 so there were three walls to the venue  
544 and it's in the woods somewhere [0:23:00.0] and it



545 was a full four minutes in 33 seconds of  
546 David Tudor sitting at the piano and  
547 opening and closing the lid twice and  
548 the first 30 seconds everybody's  
549 thinking God would an idiot and then the  
550 next 30 seconds they're probably  
551 thinking government and apparently  
552 people were leaving but the idea was by  
553 about two minutes in if you gave  
554 yourself over to it you would experience  
555 whatever your experience of the room was  
556 and the piece had no influence on you  
557 whatsoever so now not only if you've  
558 gotten [0:23:30.0] rid of the speakers the performer  
559 the conductor everything you've even  
560 gotten rid of the composer and so now  
561 this is in a way pure art because the  
562 listener experience is all there is  
563 there's nothing else there so that's  
564 kind of the ultimate end game to what  
565 I'm talking about man that was  
566 pretentious so just one other thing I  
567 want to talk about before I get to the  
568 kind of last ditch here is the one thing  
569 that music has and movies and TV - [0:24:00.0] to  
570 some extent as art forms that other art  
571 physical art like paintings and  
572 sculpture don't have is the idea that  
573 you actually need playback this is  
574 actually I should have had the jack and  
575 white speaker on this slide but  
576 when you play something back it matters  
577 what speakers you play it on it matters  
578 what room you're in

579 it matters what lewd the listeners in  
580 but that kind of goes with everything  
581 but there are all kinds of factors that  
582 just go to the playback of your piece of  
583 art that [0:24:30.0] changed and I was trying to  
584 think of an example in art and I  
585 couldn't really think of one until I  
586 remembered I'm a huge fan of sight  
587 wombly a very abstract painter and his  
588 later paintings are all just big red  
589 swirls and that's it and I got a  
590 catalogue raisonné I pronounced that  
591 somewhat okay of his final works in  
592 every single page his red swirls and I'm  
593 a huge fan and even I just thought this  
594 is insane this book was so expensive and  
595 it' [0:25:00.0] s just red swirls and the books about  
596 this big beautiful prints and I didn't  
597 really think much of it because I'm  
598 still a fan and I would go see him  
599 everywhere I could and there was one  
600 time I was at the Tate Modern with my  
601 wife and in their permanent collection  
602 they owned quite a few Twombly 's and  
603 they had one gallery room which is  
604 probably about the front third of this  
605 room with one door so you walk in this  
606 door and on the walls are [0:25:30.0] three of these  
607 paintings and they are massive and I  
608 laughed out loud when I saw them they  
609 created such an amazing emotional  
610 response I mean I'm feeling it right now  
611 just thinking about being in the room  
612 with these three gigantic red swirls and

613 that's it and that John Cage's piece was  
614 actually inspired by white canvas  
615 paintings by Mark Rothko this idea of  
616 the size and the scale and we're  
617 actually gonna go see a Damien Hirst  
618 exhibition where there's a statue that's  
619 three stories [0:26:00.0] tall the idea of getting  
620 in the room with that is amazing and  
621 that's very difficult for people who  
622 work with music so I think we actually  
623 have sort of the opposite side of this  
624 where we can't make something that's  
625 just massive because then someone's  
626 gonna listen to it on their iPhone so  
627 you actually have to create art that can  
628 transcend the playback system and  
629 transcend the speaker's that it comes  
630 out of so that what comes out of the  
631 speakers is always the same and [0:26:30.0] always  
632 gets the same  
633 to the listener and I know I've been I  
634 mean I'm known for my punchy mixes  
635 parent I'm also known for my incredibly  
636 loud mixes but those incredibly loud  
637 mixes on laptop speakers are still  
638 aggressive and have energy and I think  
639 that that's something I've always  
640 strived to get is to have what's  
641 important about what I do not be reliant  
642 upon the playback medium because that's  
643 like relying upon a performer to perform  
644 your piece and I'm sure John [0:27:00.0] Cage would  
645 have been appalled at that the timing  
646 was totally wrong I wasn't paying

647 attention really I was just sitting  
648 there thinking oh my god I'm such an  
649 idiot  
650 so anyway back to this idea of playback  
651 already get to questions in just a few  
652 minutes one of the things I said before  
653 they think is really important and this  
654 is where this idea can actually expand  
655 out of the arts and just into your  
656 general life is that these recordings  
657 are the things you can manipulate right  
658 you have control over [0:27:30.0] them you decide  
659 when they start and stop but as soon as  
660 you hit play with other people in the  
661 room you completely lose control and  
662 they go out into the world and that's  
663 all they do so now I've got some very  
664 graphics heavy demonstrations of how  
665 this can apply to the rest of your life  
666 so here are two people all right these  
667 are people in the world and we'll label  
668 them very cleverly that's the speaker  
669 get it get it okay  
670 this is silly but [0:28:00.0] it's also at least for  
671 me it's profound in a way that isn't  
672 mind-blowing but it's something you have  
673 to continually think of over and over  
674 and over as a person  
675 we all have internal dialogues going in  
676 our heads and they can be all kinds of  
677 things good bad indifferent and whatever  
678 so you're thinking bad thoughts and this  
679 is this is how good my graphics are I  
680 couldn't figure out how to make that

681 kind of like a thought bubble so just  
682 pretend that [0:28:30.0] that's got rounded edges on  
683 it the speaker thinking about the  
684 audience is having these horrible  
685 thoughts if they then let those thoughts  
686 come out of the speaker the audience get  
687 sad  
688 this is not good right especially if  
689 that's your wife or your children or  
690 your co-workers or your students or your  
691 professor that's not the way to go the  
692 better way to go is to think stormy  
693 thoughts and talk sunshine this happens  
694 all the time you're on the way to a  
695 meeting you got an email about [0:29:00.0] that  
696 meeting and my good god doesn't get what  
697 I want to do and you walk into me like  
698 hi how are you that's great and I really  
699 I got your email and I'm not really sure  
700 about this thing and then the audience  
701 is happy and you can coerce them into  
702 getting your way but if you don't you  
703 leave a legacy of storm but if you do  
704 this it leads to love and all you need  
705 is love so anyway reality is that that  
706 is [0:29:30.0] a way you can think about your own  
707 legacy either as an artist or as a  
708 composer as a mixer as a sculptor or as  
709 a father as anything it's only what  
710 actually comes out that gets out into  
711 the world where you can't control it  
712 anymore that matters and it's all anyone  
713 will ever remember and if you're lucky  
714 you control it so that you keep the

715 stuff you want inside inside and only  
716 the stuff that goes out goes out so end  
717 of pretension let's [0:30:00.0] have questions about  
718 compresses what do you say  
719 so that's it that's all I have to say  
720 about that  
721 [Applause]  
722 easy one yes and think about coming  
723 through and they're in these now and  
724 they're back then just learning about  
725 how to that's and then how can we like  
726 meat this time that's I imagine to try  
727 America around must be over  
728 yeah I think I think though the core of  
729 what you're saying is starting with a  
730 not a myth but there's [0:30:30.0] no such thing as  
731 sounds good I mean from an audiophile  
732 perspective there are people who will  
733 only listen to Steely Dan in the Yellow  
734 Jackets right but musically you're stuck  
735 with that because that's what sounds  
736 that way there are songs on early stones  
737 records where they use the cassette demo  
738 because it never felt as good so it's  
739 important that it sounds appropriate  
740 it's not important that it sounds good  
741 I just was listening as making a  
742 playlist for this podcast I did and they  
743 wanted a playlist [0:31:00.0] and we talked about  
744 the Dead Kennedys and so I was diving  
745 through fresh fruit for rotting  
746 vegetables I'm not gonna say the name of  
747 the song I chose because it's not for  
748 hallowed halls such as these but it

749 sounds terrible it's horrible but it's  
750 so exciting and I think with a band like  
751 Metallica I mean if you look at what  
752 Rick Rubin did on the album that he  
753 produces he tried to get their writing  
754 back to the way they used to write where  
755 it [0:31:30.0] was about the riffs and these are  
756 seven and a half minutes songs with  
757 sections and it wasn't trying to be  
758 concise and write a four minutes song  
759 but I think there's as a mixer I'm  
760 always trying to make stuff sound great  
761 but the great is that when you get to  
762 the chorus it gets big and it gets heavy  
763 and it explodes and it's wide and it's  
764 more exciting you can't settle for  
765 something that you think sounds good and  
766 you can't force [0:32:00.0] a band to not sound like  
767 what they want to sound like now the  
768 very end of your question where you said  
769 the band comes in and once you decide  
770 tune this and said like I'm the one who  
771 decides what I'm sidechaining or not  
772 side-chaining and so one of the things I  
773 love and it's actually I meant to talk  
774 about it in here I've moved from using  
775 lots and lots of equipment to just on a  
776 laptop and the joy of that is that  
777 nobody [0:32:30.0] comes over I just send mixes so  
778 people actually just listen but it used  
779 to be they walk into this room full of  
780 gear which was up on the screen before  
781 and like hey what are you using on the  
782 bass oh man I

783 that compressor and that was it they  
784 hated the base and you had to change it  
785 and it's that's just perception and that  
786 can hit every single part of the  
787 creative process it's writing a chorus a  
788 certain way because you think you have  
789 to to [0:33:00.0] try and make more money so I think  
790 for mixing I'm always trying to mix what  
791 I'm given I'm trying to understand why  
792 did you give me this to mix and I'm  
793 trying to make it work and every once in  
794 a while I have to say there's something  
795 wrong and I'm going to fix it not my mix  
796 sucks because the song sucks but like  
797 hey that first chorus was twice as long  
798 as it should be I chopped it up and [0:33:30.0] made  
799 a little re intro and I think this is  
800 better and you sort of go that way on  
801 the arrangement but in general I'm  
802 trying to just make the really exciting  
803 version of whatever I was given and  
804 sonically if that can sound good as well  
805 that's great but it's not the mission at  
806 all for me anyway which is why I don't  
807 have any engineering Grammys and may  
808 never  
809 [Music]  
810 yeah but they're on fire yeah though  
811 there are times when it's so is [0:34:00.0] in so  
812 crackly that you actually can't pay  
813 attention to the music so it goes it  
814 swings you know it really does and it's  
815 finding that balance and deciding what  
816 you can use and what you can how to get



..biografische Information

..Unabhängigkeit von Können

..Entscheidungsmomente

817 out of it what you need so I'm gonna let  
818 them decide who gets to ask questions  
819 though because otherwise I'll get in  
820 trouble  
  
821 I don't, I'm ..  
822 [0:35:26.2] I was a hundred percent on gear until I wasn't. And now I'm a hundred percent in the computer, period. And whether I'm using emulations of analog gear or not doesn't, .. it doesn't matter. I don't .. that transition was very difficult for me and it caused a lot of angst. It's like my power is in the analog gear, you know. This is why I'm good. And that's in that second list of things that don't come out of the speakers. The gear doesn't come out of the speakers. So I had to get over myself and realize that either I had the talent to be good, no matter what the tools were. And obviously, (you know, to say that is a little disingenuous) you do need a set of tools that are up to some level, otherwise you just can't do certain things. But there isn't a single plug-in I can't work without. There isn't a single piece of gear I can't work without. And I think that if I ever get to the point where I feel like I can't work without him, I have to change and I've done that.  
  
823 [0:36:20.9] I've, actually in the last month, stopped using a compressor on my mixes that I've been using for the last 15 years both analog and in the computer. And I finally changed the way it was set up, so it would be a little bit quieter when I listened with it. And that, of course, nothing sounds better than louder, like "No, I don't need that compressor" and I've actually managed to wean myself off it and it took forever. But there's, no, ..  
  
824 [0:36:45.8] I think .. for mixing it, the process is completely irrelevant. While you're recording, the process can be relevant only in terms of how it affects the performers. There are sessions that are great to do on tape, because you're making people make decisions. "Do you like that guitar solo or would you like to record over it?" Not make a playlist. It will be gone forever even if the new solo sucks and then we'll just have to do another one. So you make these decisions along the way. And I think, creatively some musicians really thrive with that or some musicians need it. But the analog versus digital as a gear slash process thing, I don't .. I don't know. For me right now it's not really that that's not a concept that makes any sense to me. I just try and make them super loud and exciting.  
  
825 How many people in the room don't know what it's talking about I just want to  
826 just want to find out because  
827 unfortunately [0:37:00.0] rear bus has become a  
828 thing that I'm known for it's what did  
829 it's a stereo parallel compressor that I  
830 use while I'm mixing and everything in  
831 the mix except the drums usually goes to  
832 that stereo compressor and it's blended  
833 in so everything still goes to the mix  
834 buss there's nothing that ever the way I  
835 mix is all of the tracks go to the mix  
836 buss and then they also all go off to

837 lots and lots and lots of other places  
838 the way [0:37:30.0] you would think of using reverb  
839 czar delays but it happens to be  
840 distortion and compression and then all  
841 that stuff gets blended back in so the  
842 uncompressed version of everything makes  
843 it to the mix and then it's blended in  
844 with lots of over compressed combined  
845 versions so the rear buss is just the  
846 stereo compressor for lots and lots of  
847 stuff but it is a parallel one see  
848 that's easy  
849 talk about gear  
850 they do they hate me um there are some  
851 mastering engineers that just don't like  
852 what [0:38:00.0] I do but then there's some who take  
853 what I give them and they're really  
854 happy with it because they don't have to  
855 do anything so it comes down to  
856 - just musical tastes really I mean  
857 because most of the successful mastering  
858 engineers have a thing that they do and  
859 they're pretty consistent with what they  
860 do so they basically have a mix chain  
861 they have compressors in EQ they like to  
862 put everything through when it's a  
863 really quiet uncompressed mix they can  
864 do that and [0:38:30.0] then they get out the  
865 character that they like to put on mixes  
866 and I only sort of twig - exactly what  
867 was going on when I had a conversation  
868 with someone who's saying it makes it  
869 too loud I need quieter versions  
870 I said well but if I take that

871 compressor off its gonna feel completely  
872 different and he actually said to me on  
873 the phone I hate the way you compress  
874 your mixes like oh right okay which is  
875 fine but then I shouldn't have him  
876 mastering my [0:39:00.0] mixes someone else should  
877 be mastering so it is problematic my  
878 mixes have actually been getting quieter  
879 and quieter lately and I think getting  
880 rid of that compressors helped quite a  
881 bit but it's not I mean it's never loud  
882 because I think like oh the mix feels  
883 great now I'm gonna make it loud that's  
884 how the mix gets built and I'm always  
885 fighting it and I hate how loud they are  
886 I really really do I've got three  
887 different places in my template I [0:39:30.0] can  
888 make it quieter and I'm constantly  
889 striving to make it quieter and quieter  
890 but still have it feel the same and  
891 there are people who will say well when  
892 you listen to the mix you can just turn  
893 it up well that's true but that's only  
894 if you're on something where you can  
895 turn it up if you're gonna listen  
896 through your phone or through your  
897 laptop speakers it's not gonna get that  
898 loud and it better sound huge coming out  
899 of something tiny and [0:40:00.0] I have not figured  
900 out a way to do that without the mix  
901 being loud because that's what makes it  
902 do that it gives you the appearance of  
903 driving speakers and driving the air in  
904 a room in this sawed off waveform

905 oh yeah mastery engineers don't like me  
906 but I just find ones that I can work  
907 with because the ones that like the way  
908 I do things will tell me when  
909 something's wrong and I actually believe  
910 them because the other ones are just  
911 telling me everything's [0:40:30.0] wrong  
912 yeah you've got um yeah Catherine Brooks  
913 coming up right now they're they're a  
914 few it's it's look it's a it's a locker  
915 room every studio is a locker room I  
916 mean traditionally it was worse I think  
917 than it is now because you always went  
918 to a studio and there was always money  
919 which meant everybody was drunk all the  
920 time nobody acts right when you're drunk  
921 they're filter goes off right everything  
922 comes out of the speakers when you' [0:41:00.0] re  
923 drunk so I think that's part of it that  
924 it was just a very not friendly place  
925 for and even for men who had  
926 sensibilities you know you had to be a  
927 bro to get on in a lot of sessions but I  
928 think also I think it's it's this it  
929 happens across every single industry  
930 where if you walk into a room and you're  
931 there for so anything even slightly  
932 technical and there's a man and a woman  
933 in the room everyone assumes that the  
934 man [0:41:30.0] is the one who does the job and the  
935 woman is their assistant or hanging out  
936 or whatever isn't the one there to do  
937 the technical thing so you immediately  
938 have a hurdle when you're a woman that

939 you have to overcome where any guy can  
940 sit in the back of the room and suck at  
941 his job but no one questions why is  
942 there in the first place he actually has  
943 to screw up to get fired whereas a woman  
944 has to prove themselves to just stay [0:42:00.0] in  
945 the room and it's not good but I think  
946 it's also why like Sylvia Massey does  
947 lots of artwork she does books she does  
948 a guerrilla recording that's become a  
949 thing and she loves doing it but you  
950 also make a name for yourself shooting a  
951 piano with a shotgun  
952 that's something that people say oh  
953 right Sylvia and so she's really really  
954 cool for that Katherine Marx has her  
955 thing there unfortunately as a woman I  
956 think you have to have a thing to stick  
957 around you [0:42:30.0] have to have something that  
958 makes people think oh right that's  
959 exactly why words are there because it  
960 is questioned as soon as it comes up so  
961 I don't have an answer how to fix it at  
962 all I mean society is getting a little  
963 bit better now that you're actually  
964 allowed to accuse people of molesting  
965 you all of a sudden out of the blue but  
966 it's it's tough  
967 I should have stopped talking two  
968 sentences ago  
969 no you just record him I mean he's [0:43:00.0] such  
970 a good bass player with all of these  
971 people it's what comes out of the  
972 speakers and for them it's what comes

973 out of their fingers and it's what they  
974 play and how they play it so to record  
975 them you just get out of the way I try  
976 to make it as transparent as possible my  
977 microphone setups are very simple  
978 recording the Chili Peppers is one of  
979 the easiest things to do in the world  
980 you get natural sounding microphones in  
981 a decent sounding room and it's the  
982 Chili Peppers I mean that to me one of  
983 the most defining things about them is  
984 Chad's hi-hat I can spot Chad playing on  
985 anything from a mile away within one bar  
986 because his hi-hat does this weird  
987 swimming thing that no one else's does  
988 that's the chili peppers fleas bass is  
989 the Chili Peppers and surprisingly  
990 they've managed to go through three  
991 guitar players because I don't count the  
992 little spot in the middle who have all  
993 been part of the Chili Peppers and  
994 Hillel and John and Josh are all very  
995 individual guitar players but within the  
996 context of the band they sound like the  
997 Chili Peppers so it's just about getting  
998 out of the way and making sure that  
999 they're comfortable and happy and are  
1000 hearing what it is that they're already  
1001 doing coming back to them  
1002 get away from it that's all you can do  
1003 (45:31.7) One of the genius things about mixing in the box (I'm pointing at a  
laptop, even though the laptop I use [is] a slightly larger, because otherwise it  
wouldn't be as cool. You ..) it's a hundred percent instant recall on everything,  
right?  
1004 So I don't mix one song at a time, when I get a record to mix. I go through and  
do all the boring stuff first. I prep the sessions, like color code, get the tracks in  
the right order, import my template, work on the drums, to kind of get it working

..Standpunkte zur Diskussion um

.. if it's a band with drums. And then I mix the whole album and I'll do it in alphabetical order, because that's easy, that's the way the folder is. So, I open up a song and I work on it for as long as I know what to do. And as soon as

1005 I feel like either I don't know what to  
1006 do or I know what I have to do but I'm  
1007 just not up for it like I need to deal  
1008 with something that's gonna take me a  
1009 long time and be problematic I just  
1010 close it and open up the next one and  
1011 I'll cycle through and every once in a  
1012 while I'll cycle through starting at the  
1013 bottom of the alphabet cuz otherwise you  
1014 spend way too much time at the top of  
1015 the folder and then I'm always surprised  
1016 by how far along the mixes are because  
1017 you open it up you're immediately fresh  
1018 you listen and you only react to what  
1019 you're hearing I'm reacting to what  
1020 comes out of the speakers and nothing  
1021 else because I don't remember what [0:46:00.0] I did  
1022 just before I closed it because when  
1023 you're mixing on a console it sits there  
1024 and you have these times during the day  
1025 when you're not being productive  
1026 so you just loop the mix and it's just  
1027 playing and you check your email or you  
1028 go to lunch and you come back but you  
1029 still remember everything you did when  
1030 you close it and open up the next song  
1031 immediately that all gets wiped out and  
1032 when you hear it you just hear where  
1033 you're at [0:46:30.0] and like oh right I need to do  
1034 this so I never take notes on anything I  
1035 just I'm always being led by what I hear  
1036 and this way instead of having like if

1037 when you mix on a console if you think  
1038 about it you usually get two times where  
1039 you come back to that mix fresh one  
1040 would be after dinner cuz lunch is never  
1041 long enough and you're not far enough  
1042 along and one would be the next morning  
1043 if you're lucky enough to leave [0:47:00.0] it up to  
1044 print the next morning and then start  
1045 the next mix before lunch so you're not  
1046 along itself that's it if I'm mixing a  
1047 record now I might get seven or eight  
1048 times where I've opened up that song and  
1049 heard it as if someone else had mixed it  
1050 to this point and it's brilliant and it  
1051 makes me get out of my own head it makes  
1052 me only not pay attention to all those  
1053 lists of stupid things I had up on [0:47:30.0] the  
1054 board it's it's really about not keeping  
1055 track of what you've done up to a  
1056 certain point and just reacting to where  
1057 you are and the only way to do that is  
1058 to either go to sleep for a long time or  
1059 work on something else so work on  
1060 something else if you can  
1061 well when I mixed on my Neve console it  
1062 had buttons for each speaker there was a  
1063 left button and a right button if you  
1064 put them both in it was in the middle [0:48:00.0] if  
1065 you wanted anywhere else you had to  
1066 switch in a pan circuit which would drop  
1067 the level and because it got quieter I  
1068 convinced myself it didn't sound as good  
1069 either I turned it up again and like no  
1070 it's not the same so I've mixed very



1071 much hard pan left center right as soon  
1072 as I moved into Pro Tools I goo put  
1073 stuff anywhere because that pan circuits  
1074 always active and if you put it there  
1075 and it stays there as opposed to an old  
1076 Neve [0:48:30.0] where you put it there and it kind  
1077 of wanders around a little bit in  
1078 different frequencies go different  
1079 places so I use panning a lot to make  
1080 the arrangement work if you've got three  
1081 picking guitars in a chorus or a bridge  
1082 or something like that just messing with  
1083 the panning to get either two of them to  
1084 work together as one or to spread all  
1085 three apps you hear all three I'm  
1086 constantly doing that I have no  
1087 preconceived notion of what it should be  
1088 I like the kick [0:49:00.0] the snare the bass the  
1089 vocal in the middle as a rule but that  
1090 doesn't always happen but for the most  
1091 part it does then there like other stuff  
1092 to be wide I love using plugins that  
1093 stretch the stereo spectrum like what's  
1094 the name of the isotope just put out the  
1095 ozone stereo imager ozone imager I think  
1096 it for free get it it's amazing you just  
1097 go poor it goes full either from amount  
1098 of a thing or a stereo thing so I love  
1099 using spatial [0:49:30.0] effects but I think that  
1100 really that sort of spatial thing is to  
1101 build your arrangement to get things to  
1102 work together but then it's things like  
1103 delays and reverbs and EQ if you dull  
1104 something off it sounds like it's coming

1105 from further away so using that to try  
1106 and get front to back that's where you  
1107 make a mix that's really good if you're  
1108 just really spread out here that's great  
1109 but it's also very difficult to listen  
1110 to after a while [0:50:00.0] but if you can spread  
1111 out that way then what it does is it  
1112 lets the listener focus on the really  
1113 important things the first four or five  
1114 times and then start diving inside  
1115 because they start to know the things  
1116 that are up front and  
1117 start to hear the weird little piano  
1118 fill and the guitar reverb that's  
1119 opposite the guitar and all of the  
1120 really cool stuff that you did is a  
1121 mixer which nobody cares about but if  
1122 they love the song they'll get in there  
1123 and find it [0:50:30.0] so that's I try to use front  
1124 to back I've just made this up I've  
1125 never said this before out loud so it  
1126 could be true  
1127 but I think the front to back is where  
1128 you kind of really build something  
1129 that's gonna be a mix that really will  
1130 stand the test of time as opposed to  
1131 just spreading there left and right I  
1132 have to write that down every single mix  
1133 I've ever done every single one I mean  
1134 sitting here listening before it's [0:51:00.0] like  
1135 yeah I'm lucky and those mixes suck yeah  
1136 everything there's always something but  
1137 but it doesn't matter you know it's that  
1138 is the version of that song and if the

1139 artist was happy with it then there you  
1140 go and there's some mixes where you do  
1141 things because the artist wants them and  
1142 it doesn't necessarily end up where you  
1143 want it there's some mixes you do that  
1144 you're absolutely thrilled with when you  
1145 finish them and then you listen a week  
1146 later you [0:51:30.0] know or a month later what's  
1147 good is it sometimes years later when  
1148 you haven't heard it you can actually  
1149 appreciate it because you've forgotten  
1150 all the little stuff about it and you  
1151 hear the big picture like 99 problems is  
1152 one of those mixes which like wow that's  
1153 actually pretty cool that's good in  
1154 Danny California I think that's a do  
1155 deny there are little things in there  
1156 they're still bugging me but it will  
1157 always bug you but it has to if [0:52:00.0] you're  
1158 not a perfectionist you're not an artist  
1159 and there's a great saying that no  
1160 record has ever finished they're only  
1161 abandoned and it's true you could  
1162 there's nothing to say that any artistic  
1163 decision is right therefore you're never  
1164 done making decisions you're never done  
1165 working on anything ever you just have  
1166 to stop otherwise you'll be someone who  
1167 never puts out the one record that  
1168 they've been making their whole lives so  
1169 yeah it's actually when I do I do [0:52:30.0] this  
1170 seminars in France and mix with masters  
1171 seminars and there are a lot of people  
1172 there who are really really talented but

1173 they spend months on a mix of their own  
1174 stuff  
1175 my the best advice I can give them is  
1176 start mixing that again from scratch and  
1177 give yourself three hours because you  
1178 know it inside out you know where  
1179 everything is do a three-hour mix leave  
1180 it for a week come back and tweak that  
1181 and you'll be done in probably five  
1182 hours total because you just get up [0:53:00.0] your  
1183 own you know no I mean yeah it's it's  
1184 actually really good question because of  
1185 course you would think then at some  
1186 point I'm just giving up because  
1187 otherwise how would I ever send a mix  
1188 but I do I get to the point where in the  
1189 short term I don't know what else I  
1190 would do and it's not that I don't know  
1191 what else I could do to make it better  
1192 it's I don't hear anything that needs to  
1193 be fixed [0:53:30.0] anymore  
1194 I get to the course and it goes it's  
1195 exciting I get goose bumps in the bridge  
1196 because I got the reverb balance on the  
1197 vocal right all of that kind of stuff  
1198 and I just get to the point where I  
1199 don't know what I would do to it and  
1200 that's when I have to send it sometimes  
1201 it's done and sometimes I get comments  
1202 back from the artists like hey did you  
1203 mean to do this and it's something  
1204 that's just crazy [0:54:00.0] that I was so used to  
1205 that I didn't hear anymore but it's much  
1206 faster to have somebody else hear that

„Recall-Möglichkeit“

1207 and then fix it you know

1208 [0:54:07.0] And that's the other thing about mixing in the computer. I'm not on a time crunch for doing recalls and making changes. It doesn't matter when it comes in. I get an email, can open up the session, make changes and I'm hearing it fresh. And it might be an hour later, it might be three weeks later. It doesn't matter.

1209 [0:54:21.2] But I do get to the point where I have no reservations about sending the mix for precisely the reasons I said before. you can't fill up

1210 an email with all that stuff to explain

1211 why you're sending the mix now so you do

1212 have to get to the point where you think

1213 it's done or as done as you can make it

1214 without input

1215 [Music]

1216 I mean I could talk about it a lot but I

1217 won't but the only thing [0:55:00.0] I'd say is you

1218 you have to mix for the way people are

1219 gonna listen but you don't mix in mono

1220 because iPhone speakers are mono because

1221 you're already at the point where their

1222 iPhone speakers you might as well buy

1223 yourself an AM transmitter and mix

1224 through that you need to know what's

1225 going on you can't build a mix where if

1226 you aren't hearing everything below 40

1227 Hertz it kind of falls apart so you need

1228 to be smart and mixes need to translate

1229 the [0:55:30.0] EQ in and even panning in mono is a

1230 technique that I never understood and I

1231 never came to terms with it and never

1232 worked for me for other people it works

1233 really really well

1234 I don't discount it and if it's

1235 something that works for you you should

1236 continue to do it I personally just have

1237 no it doesn't help

1238 yeah if you're producing I mean the most  
1239 important thing is the songs there's  
1240 nothing that matters more than that and  
1241 then the second most important [0:56:00.0] thing is  
1242 the performance of the songs and the  
1243 most important thing about that is the  
1244 vocal if there is a vocal so you have to  
1245 get that right and my favorite part of  
1246 record making is pre-production because  
1247 you're sitting in a room playing like  
1248 human ProTools like hey let's make that  
1249 two bars longer hey why don't you play a  
1250 drum fill like that ooh the kick pattern  
1251 in the chorus should line up with the  
1252 bass and I love that but you very much  
1253 have to change [0:56:30.0] hats like if I'm  
1254 producing an engineering which is  
1255 usually case because there's never any  
1256 money  
1257 I will engineer for the first three or  
1258 four hours and get sounds on everything  
1259 and then I switch it off completely and  
1260 if I'm lucky enough to have an assistant  
1261 say just please tell me if something  
1262 breaks because I'm not gonna notice at  
1263 that point I'm only listening as a  
1264 producer because I can't do both things  
1265 at once and then when you start mixing  
1266 it's really important [0:57:00.0] to stop producing  
1267 because otherwise you're mixing and the  
1268 chorus isn't happening you're like hey  
1269 let's put another guitar on there no you  
1270 decided already that the arrangement was  
1271 right there has to be a way to make it

1272 work and if there isn't you will exhaust  
1273 every option trying to make it work and  
1274 then go back and say well I guess I  
1275 better put a guitar on here so I think  
1276 it's really important to  
1277 compartmentalize the jobs that you do  
1278 especially because if [0:57:30.0] you're a composer  
1279 you're gonna do every job right you're  
1280 gonna write it perform it mix it through  
1281 all the pre-production yourself arrange  
1282 it it's it's brutal and I think that if  
1283 you try and do it all all at once and  
1284 solve production problems by writing or  
1285 mixing problems by recording you're  
1286 never gonna finish it's impossible  
1287 I'm not I'm not that great at that but  
1288 it's the coming back to the mixed fresh  
1289 I mean I come I know that [0:58:00.0] I'm a really  
1290 picky horrible consumer I hate  
1291 everything so I know that so I have to  
1292 make myself like it whereas like Rick  
1293 Rubin is the ultimate consumer he  
1294 happens to share tastes with millions of  
1295 people and that's why people buy the  
1296 records he produces but you're always  
1297 making the record you want to hear with  
1298 the caveat that it's not your record  
1299 it's the artists record and you have to  
1300 make the record that the artist wants to  
1301 make and hopefully you make that [0:58:30.0] version  
1302 line up with how you want it to be but  
1303 you are subservient to the artist but  
1304 just as a pure producer you are the  
1305 consumer so you have to make yours based on you as the consumer

1306 all the time a lot a lot it's just there  
1307 there were reasons for logistic reasons  
1308 of moving and not having a great room to  
1309 set up my speakers things like that so I  
1310 started doing work and headphones  
1311 thinking well when I get onto the  
1312 speakers I'll do the heavy [0:59:00.0] lifting and  
1313 as I've gotten more and more used to  
1314 them I just do less and less saw less  
1315 and less means to be done on the  
1316 speakers the great thing about it and  
1317 any recording professor will hate me for  
1318 this because they will say you need to  
1319 mix on speakers and you do especially  
1320 when you're learning but the great thing  
1321 about headphones is you are wearing your  
1322 studio you don't have to worry about the  
1323 fact that you're in a rectangular  
1324 bedroom that has horrible [0:59:30.0] acoustics  
1325 you're wearing it it's the room as well  
1326 as the speakers so if you can manage to  
1327 find headphones where you can actually  
1328 hear what's going on and not create  
1329 problems for yourself it's amazing it's  
1330 brilliant and it frees you up to work  
1331 absolutely anywhere and be confident  
1332 about what you're doing as opposed to  
1333 second-guessing which as soon as you get  
1334 too comfortable with a pair of speakers  
1335 in a room anything about that changes  
1336 and you second-guess everything you do  
1337 because you're not [1:00:00.0] sure if you're  
1338 hearing it right cheap headphones just  
1339 buy another pair



1340 break them in for an hour-and-a-half and  
1341 you're good so yeah I'm a I'm a fan of  
1342 headphones but it's difficult oh we have  
1343 to go eat  
1344 [Music]  
1345 [Applause]