BROOKE GLADSTONE: When was the last time you actually saw someone sawing their arm off? How do sound editors know what it really sounds like? Slate's senior editor, Daniel Engber says it's all in their gruesome imaginations. Dan, welcome to On the Media.

DANIEL ENGBER: Thank you.

BROOKE GLADSTONE: So a lot of the sound editors that you spoke to said that they aren't even going for realism.

DANIEL ENGBER: You know, it's almost like they reject the idea that there is a real sound because who would know what it sounds like to hear a head being stomped in an elevator-

[BROOKE LAUGHS]

-and so they talk about sounds that access some emotional response directly. You don't think, does that sound realistic? You just react with fear or disgust.

BROOKE GLADSTONE: And you mention in your piece that the face-stomping scene in *Drive* is a potent and precise soundtrack for brutality. Could you describe it as we play it?

[CLIP FROM DRIVE PLAYING]:

DANIEL ENGBER: So it starts out with a hum and creak of the elevator as they're heading down to the garage. And at this point the character played by Ryan Gosling sees that the other passenger in the elevator is carrying a gun. And he concludes that this is a hit man. As he realizes that he and Carey Mulligan's characters are in danger, the elevator noises start to sort of suck out of the scene. [NOISE] It gets very kind of surreal and there's this slow motion segment, and the lights fade and the music comes up.

[MUSIC UP AND UNDER]

The Ryan Gosling character kisses the Carey Mulligan character, and you don't know if this is really happening or in his head. [MUSIC] Aside from the music, there's no sound effects whatsoever. [MUSIC] And then as they finish the kiss, the elevator sounds come back and he erupts in violence. And he grabs this hit

man, smashes him against one wall of the elevator and then another, [KNOCKABOUT NOISES] knocks the guy on the floor and then begins to stomp on him. [STOMPING SOUNDS] And then you'll hear the stomps, and he stomps on his head 17 times in this sequence. And you can also hear the Ryan Gosling character breathing.

BROOKE GLADSTONE: You know, it's almost worse to hear than it was to see. **DANIEL ENGBER:** [LAUGHS] Yeah.

BROOKE GLADSTONE: And I guess that's the point. You say that a lot of times these violent scenes are orchestrated like musical chords.

DANIEL ENGBER: The sound editors describe it as orchestrating musical chord. One talked to me about how you would create all the different frequency bands of the sound. So you'd start with the most basic part of a – of a Hollywood punch is swinging a piece of wood against a side of beef. That's how the sort of thudding base note is generated. Then you need to add some sort of high frequency stuff, a little bit of crackle. So maybe you're snapping some dry twigs or crumpling up some plastic cups. And then you want to add something to fill out the middle of the sound, a little goopy, like dropping a fruit on cement. And by mixing those three components, you can get a really full layered sound.

BROOKE GLADSTONE: Well, let's talk about sound inflation. You talked about punching before.

DANIEL ENGBER: Mm-hmm. [AFFIRMATIVE]

BROOKE GLADSTONE: That's a great place to begin.

DANIEL ENGBER: Mm-hmm.

BROOKE GLADSTONE: There is something that was called, way back in the thirties, the Paramount punch. And you said it's still used today in some places. It's the sound of leather on leather, right, like two baseball mitts being flapped together.

DANIEL ENGBER: Mm-hmm. It's a simple sound, and then as over time sound editors have added bits to it and, and layered on top of it, such that now when we hear a punch in a movie, we expect to hear something bigger, louder, more resonant.

BROOKE GLADSTONE: I wanted to take you on a little trip –

DANIEL ENGBER: Mm-hmm -

BROOKE GLADSTONE: - to 1976, *Rocky.* And we're going to put that right up

against 2010's *The Fighter*. They both happen in the ring.

[CLIP FROM ROCKY][FIGHT HUBBUB]

DANIEL ENGBER: That's Rocky.

[CLIP FROM THE FIGHTER]

In those two movies, which I do think are comparable, there's such a difference between the '70s and the 2000s. You can really hear the wetness in the more recent film.

BROOKE GLADSTONE: You've also noted that, maybe in reaction, there are some films that actually make use of silence.

DANIEL ENGBER: One of my favorite examples is *Raging Bull*, which has some of the most extravagant and stylized sound effects of punching and violence. And yet, there are also moments where it just gets to almost total silence right before the violence. And it's that contrast – has a tremendous effect. [CLIP FROM *RAGING BULL*]:

Jake LaMotta is about to get knocked out by Sugar Ray Robinson, and there's just a shot of Sugar Ray standing there, and it gets very quiet, there's sort of a rumbling, hissing sound. And then he just unleashes this barrage of punches.

[SOUNDTRACK FROM RACING BULL]

And there's animal sounds and jet engines and, and flashbulbs as that just run of punches goes through.

BROOKE GLADSTONE: Have we just gotten so accustomed to the exaggerated sounds of cinema violence that it has become natural to our acclimatized ears?

DANIEL ENGBER: I hadn't really thought about these issues before. I had one of the sound editors say to me that when people hear things while watching a movie, they'll swear that they saw something on screen that they didn't actually see.

And I've found that it does both ways. Sometimes the sound takes over in my memory and I forgot that I saw things. So in that scene in *Drive* that we started with, I forgot that there's actually a very disgusting image that I think was actually unnecessary. But the sound just took over and I just imagined what I'd seen.

BROOKE GLADSTONE: Do natural sounds begin to sound fake?

DANIEL ENGBER: Oh yeah, I think – you know, if you just recorded someone punching someone else in the face, it would sound ridiculous in a movie, at this point, and probably at any point. You know, I should – I'm saying at this point, as if we've fallen from grace.

[BROOKE LAUGHS]

No, I think in 1933 it would have sounded ridiculous. Even the Paramount punch was just a couple of baseball gloves being slapped together or whatever it was.

BROOKE GLADSTONE: You talked to an ex-Foley artist who said that a good example of a real sound sounding fake was in *Fight Club*, where the fisticuffs begin in a natural register, and that's what sounds fake. And then it starts to sound more real once it gets escalated?

DANIEL ENGBER: Yeah, that example's from Lisa Coulthard who's a professor of Film Studies in Vancouver, and the first time Edward Norton's character punches Brad Pitt-

[FIGHT CLUB CLIP]:

[TRAIN SOUNDS/MUFFLED PUNCH]

It's kind of a more - what she describes as a more realistic muffled sound. And in the movie he's a little tentative. I think that's why they went with the softer sound. But then as they get more into the idea of the Fight Club-

[FIGHT CLUB SOUNDTRACK]

-it sort of comes back to what we expect today as a real Hollywood punch.

BROOKE GLADSTONE: When I'm watching a movie, I tend to buy that, you know, the sound is right. I've never ripped an Achilles tendon but I'll accept

maybe that's how it sounds. I seem to be more demanding about the way the violence looks. Is that weird?

DANIEL ENGBER: Not weird to me. I mean, only since talking to the sound editors and writing this, this article have I started to think about this. I just watched a TV show last night, and there was a sound of someone's neck being broken, and I thought, for the first time I can remember, wow, that sounds ridiculous. But I must have heard lousy violent sound effects in the past, but I think I've always attributed whatever shortcoming there was in the sound to what I was seeing on the screen.

BROOKE GLADSTONE: So what you're saying is that for the last couple of decades realism has been irrelevant, maybe has always been irrelevant. We're just building fake upon fake.

DANIEL ENGBER: I think realism has been ir – irrelevant from the start. We can imagine that we are in the midst of violent sound inflation and that 20 years from now, when someone punches someone else, there's gonna be the sound of a nuclear bomb going off.

[BROOKE LAUGHS]

But I think it's more that, you know, there's, there's no starting point that's real and the convention just drifts. And we're drifting towards squishy now, and we may drift towards crunchy and maybe we'll drift back towards dry in 20 years.

BROOKE GLADSTONE: It sounds like you're describing breakfast cereal.

DANIEL ENGBER: You know, I'm hungry.

BROOKE GLADSTONE: [LAUGHING] Daniel, thank you very much.