Time After Time

A new book examines why music tweaks our pleasure centers, and how it's facilitated coupling for centuries.

by Catrinel Bartolomeu

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Years ago, you made a mix tape. You spent hours selecting the songs, arranging them in the perfect order, adding up the cumulative minutes to get as close to thirty on each side as possible. You brought it to school and gave it to your crush. He or she stuck it in their Walkman and listened to it on their way home. If all went accordingly, soon you and this person were skipping gym to go down each others' pants behind the cafeteria.

Centuries earlier, a nomadic cave-dweller was doing something similar, says rock-producer-turned-neuroscientist Daniel Levitin. In his fascinating new book, *This Is Your Brain on Music*, Levitin explains how music has facilitated human copulation over time, and why those with musical abilities have enjoyed a historic advantage when it comes to natural selection, from the earliest hunter-gatherers to Britney Spears' achievement of riches, fame and two kids by age twenty-four. — Catrinel Bartolomeu

How does music affect us, physiologically speaking?
Music tickles neural circuits that are involved with pleasure in general. In a study where people listened to music, we found that music triggers the same pleasurable nerve impulses as when we eat chocolate, when we have an orgasm, when we win a pot of money or when someone attractive talks to us. We don't know why.

What about mood music? Is there really such thing?
Most of us use music for mood regulation the same way we use drugs. We drink coffee in the morning to get going, or single-malt scotch to calm us, especially after a bad day. We use music to start the morning and to relax us at night.

Why music?
Stevie Wonder has an apt description of it. He says that he tries to capture the mood of a moment when he's writing a song, and then capture it again when he performs. People connect to music because it makes them feel things that, by and large, the artist himself was feeling. It's just more apparent when talking about moody music. For all I know, Britney Spears feels that vapid ebullience when she does her thing. We sense that and it puts us in the same mood.

Is one particular attribute of music more strongly connected to sexuality?
The rhythm is. The cerebellum is involved in keeping time. It has a primary reaction to rhythm that it doesn't have to pitch. It also coordinates muscle and motor movements. So you can conclude that rhythm gets your cerebellum going, and your cerebellum is what gets your body going.

Getting to orgasm really requires a certain rhythm. Unless you're talking about a sixteen-year-old guy, it's not like you get touched once and that's it. Generally speaking, orgasms for men and women require some sort of repetitive motion, and it has to be just the right tempo — a certain pace and a certain timing, and of course, the timing changes depending on your level of arousal. At some point you want it slower and at a later point you want it faster, and there's a range where certain timings will work and others won't work. Music is the same way.

It seems to me there's a real difference between music you want to have sex to, and music that puts you in a romantic mood outside the bedroom.
I agree, and it's complicated. I dated a woman, and after we slept together the first time, we talked about when and how it happened. She thought the foreplay started a week ago, when I asked her out to dinner, because that's when she began to get aroused. That's not traditionally the moment you'd say foreplay begins. Usually, you'd say foreplay begins with the appearance of the nipple or nudity or something that somehow involves a supine position. But what she was

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acknowledging was that this dance of sexuality evolves outside the bedroom — we talk to each other, establish a personal space between each other, and all of this is often accompanied by some sort of musical soundtrack. So what she calls foreplay and I call flirting are both part of sex. For instance, I find the music of Aimee Mann arousing, as in sexually arousing.

**Because she's so sad and pretty?**
It's because she's unusually vulnerable and open. My instinct is to protect her from further emotional harm, and the part of that that's sexy is that she's revealing things to her listeners that are reserved for true intimates.

**Why does romantic or sexy music sound the way it does? Is there science behind that as well?**
The physical component [of sex] is directly related to this type of music. When I hear what is classically considered to be romantic music, like Chopin or Debussy, I hear that long, slow build — not a sexual episode that's going to be over in fifteen minutes. It'll be a series of connected moments, a sort of timeless quality. That's what I hear in their corollary's, too — the real slow groove music, like Al Green and Bill Withers. You hear less of that in, say, speed metal.

**My friend Brian is a bassist, and he thinks bassists are the best lovers because they've got rhythm and they're manually dexterous.**
I know that guitar players think they're the best lovers, but I'm told by women who've been with famous guitar players — whom I will not name, but like, the most famous guitar players you can imagine — that they were not good lovers. Part of the problem was that they were over-thinking it or that they were over-confident. But I do believe that guitar players get more dates than the bass players.

**Us girls go for the lead guy. Why do you think the rock star is a sexual icon in our society? Aside from the pretty face.**
Like Keith Richards has a pretty face.

**Ok, other than him . . .**

**Okay, many of them are not good looking. Why are they sexual heroes despite this?**
I can speculate that there are a number of factors. I don't know if any one is more important than the other, but for one thing, they tend to be rich. Being rich is sexy, we know that. Being intelligent is sexy. Henry Kissinger, who is really nothing to look at, has had hundreds of lovers, many of them models, says his secret is that intelligence is the greatest aphrodisiac. Rock stars, even if they're not smart, can appear to be smart. Then there's power — if somebody can transport you emotionally to a place you've never been, they've got power over you and power is sexy. And there's the whole evolutionary argument.

**Right, you explain in the book how music is not just hedonic, but how the genes for music survived through natural selection.**
Yes, having abilities to improvise music and dance is a proxy — it's signaling something other than what it is. The argument goes like this: In earlier times, going out on a hunt took a lot of energy and creativity to capture one of these big animals that would serve as food for a couple of days. Women wanted a guy who could capture a lot of meat. But these guys were going on group hunts, so when they got back, it was hard for the women to know who the real warrior was. So what the women could do is observe men demonstrating the attributes required to be a good hunter: If he can dance for hours on end to show his stamina, and if he can sing new songs every few minutes to show his mental flexibility and creativity, that becomes sexy. It's not inherently sexy in and of itself, but rather because it stands for something that's going to be important in a mate.

**You wrote that female robins actually find male robins with the largest song repertory most appealing.**
Yes, and we humans do that too. In a mate, you're looking for adaptive intelligence. If you suddenly lose your house or your food source, you want somebody who's going to be clever enough to fix it. Music might indicate a certain amount of cleverness.

**Is what we think of as the tone and tempo of a traditional love song translatable to other cultures?**
In our culture, we associate long notes, a sweeping melody and a slow, steady tempo with a romantic song, and that's largely cultural. If I threw you down in the middle of Pakistan and I played you what they call a romantic song, it probably wouldn't hold any meaning for you.

**Do you know what a Pakistani love song sounds like?**
I do, actually. And you know what? I can't distinguish a Pakistani love song from a Pakistani work-out song.
What about sexual fantasies? Should they be talked about, or does that ruin them?
There are some people for whom that works, and boy does it work well. It's stimulating, it feels intensely close. But there are some people for whom that kind of innermost thought doesn't work once it's out. But I would say this is part of a loving relationship: Allowing each other to have a little piece that you trust is okay — not too big, not too important, not going to hurt you, not going to hurt them, not going hurt the relationship, but trusting them to have that.

Why do people get so upset when their partner cheats on them?
I think part of the reason is that we want to be the only one has biological access. I want it to be my genetic material. When your partner cheats, it becomes, Who's offspring am I nurturing, feeding, expending my effort and genetic material on? It has biological underpinnings, and then weighed on top of those are more modern thoughts: If you've had sex with someone else, it must mean I wasn't enough for you. It's a rejection.

Taking into account the biological aspects, do you think it's possible for men to have no-strings-attached sex?
The data shows that it's more possible for men, that men are more comfortable with casual sex. But I will say this: When a woman cheats and he says, "Oh, that's fine," it never works out that way. Again, I go back to his primal, biological feelings — he'll be damned if he's going to go out and hunt and gather for someone else's kid.

How common is infidelity?
The numbers are vast ranges, but we can say that women are catching up with men. And we can say that it's not as uncommon in women as we think.

Why are women catching up with men?
It's a combination of factors. Obviously, it's a less repressed society today. You're not going to get a scarlet A. Many more women are in the workplace, which is where a lot of things get started. And today a lot of things get started on the internet, and women are on the computer as much as men.

Do you think that people have a predisposition to cheating?
Well, I will say this: If you had a parent who cheated that you were aware of — because a lot of kids know, even when nobody thinks they know — that increases the odds that that person will cheat later, because it's just not unusual to identify with the parent and reenact some of the same things.

If you know that one person in a couple is cheating on another person, do you keep that a secret?
There isn't one right answer. You need to know who you're telling on. You need to test the waters. I would not come out and say, "I saw Bob sucking face with his secretary." If you say something subtle enough, there are women who will be like, "I don't want to know, I am looking the other way." I've seen plenty of women who knew their husbands were cheating. I just saw this woman who got venereal disease from her husband, and she was like, "Maybe I got it from toilet paper." This is an extremely accomplished and intelligent woman who knows that you cannot get VD from toilet paper.

She had to know.
Yeah, and when you really don't want to know, denial is very powerful, and you're friend ain't going to penetrate that. So you have to float something to see where that person is. There's an art form to confrontations.

Even with yourself.
Right, the biggest message of this book is this: It's not that people should not have secrets, but that people should understand what's going on in their own mind. The unconscious is very powerful. If you don't know what's going on, it can drive you to do all kinds of things. If you do know what's going on, you'll make choices that will be self-informed and generally be quite a bit healthier. n°

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