

Multitrack Recording in Taxman and What's Going On

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Introduction

Multitrack recording transformed popular music by allowing performances to be separated, combined, replaced, and shaped after the initial session. The Beatles' "Taxman," recorded in 1966 on four-track equipment at EMI Studios, and Marvin Gaye's "What's Going On," created at Motown in 1970 and refined through layered recording and mixing, demonstrate different stages of that transformation. Both songs use the studio to strengthen political commentary, but their sonic strategies differ. "Taxman" creates force through limited tracks, aggressive rhythm, vocal response, and a cutting guitar solo. "What's Going On" creates an immersive social conversation through layered voices, percussion, orchestration, and fluid spatial depth. Technology becomes part of composition rather than neutral documentation.

What Multitrack Recording Changed

In a direct recording, musicians perform together and the balance captured at that moment largely determines the result. Multitrack machines divide sound among separate tape channels, allowing engineers to adjust levels, add overdubs, replace parts, and create a final mix later. Early systems offered only a few tracks, so producers had to plan carefully and sometimes combine several recorded parts onto one track through reduction mixing or bouncing. Each reduction created space for new material but also committed earlier balances and introduced tape noise. These limitations encouraged creative decisions. By the late 1960s and early 1970s, additional tracks increased flexibility, enabling denser arrangements and more detailed control over vocal, instrumental, and spatial relationships.

The Four-Track Environment of "Taxman"

"Taxman" was begun at EMI Studios on April 20, 1966 and substantially remade the following day during sessions for *Revolver*. The Beatles worked with producer George Martin and engineer Geoff Emerick on four-track tape. According to session documentation, one track contained the basic guitar, bass, and drums, two tracks carried George Harrison's lead-vocal overdubs, and the remaining track included Paul McCartney's lead-guitar solo, Ringo Starr's tambourine, and backing vocals by McCartney and John Lennon. This allocation illustrates the discipline required by four-track production. Several sounds had to share a track, limiting later separation but allowing the arrangement to gain

density without losing its hard, economical character. (Emerick & Massey, 2006; Everett, 1999; Lewisohn, 1988)

The Basic Rhythm Track

The foundation of “Taxman” is a tightly coordinated rhythm performance rather than a large collection of overdubs. McCartney’s prominent bass line moves actively around the harmony, while Starr’s drums establish a dry, insistent pulse. The rhythm guitar emphasizes the song’s dominant-seventh sonority and creates a tense modal quality associated with D major and D Mixolydian. Because guitar, bass, and drums shared a track, their internal balance had to be achieved during recording rather than reconstructed freely at mixdown. This restriction contributed to the feeling of a band playing as one unit. Multitracking did not eliminate performance; it captured a strong ensemble foundation and then provided space for carefully chosen additions.

Vocals, Call and Response, and Political Tone

George Harrison’s double-tracked lead vocal gives the lyric additional weight and steadiness. The backing interjections from Lennon and McCartney function as sarcastic responses, turning a complaint about taxation into a staged exchange between authority and taxpayer. Multitracking makes this dramatic relationship possible without requiring every vocal part to be performed simultaneously. The repeated voices also sharpen the song’s humor, naming political leaders and exaggerating the reach of the tax collector into ordinary life. Vocal layering is relatively sparse compared with later productions, but its placement is precise. The studio helps transform an individual grievance into a collective chant whose repetition makes the political argument memorable without relying on a complex narrative structure.

Paul McCartney’s Guitar Solo

The lead-guitar solo was performed by Paul McCartney, not Harrison, and its sound is central to the record’s identity. The part uses rapid bends, angular phrases, and an Indian-influenced melodic character without featuring an actual sitar. This distinction corrects the original essay’s claim that a sitar can be heard. The solo’s abrasive tone cuts through the compact rhythm track and interrupts the vocal sections with controlled disorder. Its return during the fade gives the recording circular energy. Because the solo shared a tape track with tambourine and backing vocals, later mixing choices were constrained. The result demonstrates how one overdub could carry several arranged events when track capacity was scarce.

The Count-In, Cough, and Constructed Spontaneity

“Taxman” opens with a count-in and studio sounds that create the impression of musicians beginning informally. The released count does not simply document the exact start of the master performance; it is part of the record’s construction. The cough, spoken numbers, and brief noise draw the listener into the studio before the full rhythm enters. Multitrack editing and mixing allow such fragments to become compositional elements. The opening signals impatience and human presence, fitting a lyric that sounds like a direct complaint. This moment is an example of produced authenticity: the recording feels spontaneous because carefully selected studio material is arranged to suggest an unpolished beginning. Technology creates immediacy rather than removing it.

Mixing “Taxman” in Mono and Stereo

During the Beatles’ era, mono mixes often received primary attention because most listeners used mono equipment. Stereo versions could place instruments and voices widely across channels, partly because four-track tape offered limited options for centered placement without combining channels. These differences affect how the arrangement is perceived. A concentrated mono image emphasizes rhythmic force and vocal unity, while stereo can expose the recorded layers and their separation. Neither format changes the basic performance, but mixing reorganizes relationships among its components. The example demonstrates that multitrack recording creates several possible versions of one song. The final work is not only the tape of the performance; it is the specific balance, placement, editing, and level decisions selected for release.

Building “What’s Going On”

Marvin Gaye’s “What’s Going On” emerged from a different production culture and a broader track-based palette. The basic song was recorded at Motown’s Studio A in Detroit in June 1970, with musicians associated with the Funk Brothers and contributions developed through later overdubbing, orchestration, and mixing. Gaye took unusual control over production and moved away from a conventional Motown single focused on a clear lead vocal over a tightly standardized backing. The arrangement combines bass, drums, guitar, keyboards, percussion, strings, horns, background conversation, and layered vocals. Instead of placing a political message over a neutral accompaniment, the recording creates a social environment in which the listener seems to enter an ongoing gathering. (Buskin, n.d.; Ritz, 1991)

The Double Lead Vocal

One of the track’s defining features is the presence of two lead-vocal performances by Gaye. Accounts of the session describe the doubled result as partly emerging from an accidental or

exploratory playback of separate takes, after which Gaye chose to preserve the combination. The voices do not align as mechanical duplicates. Their differences in timing and emphasis create an internal dialogue, as though one person is reflecting with another version of himself. Multitrack recording makes that ambiguity possible because separate performances can coexist rather than requiring one to replace the other. The technique supports the lyric's central question by presenting concern as communal, spiritual, and psychologically layered instead of as a solitary declaration.

Rhythm, Percussion, and Flow

The rhythm of "What's Going On" is rich without sounding rigid. James Jamerson's melodic bass moves around the harmony, while drums and several percussion colors create continuous motion. Congas, hand percussion, and small rhythmic accents fill spaces without turning the track into a dense wall. Multitrack recording allows these elements to be captured and balanced separately enough for each to contribute to the groove. The pulse feels conversational rather than militaristic, which is important for a song addressing war, police violence, poverty, and social conflict. Gaye's production does not match anger with sonic aggression. It surrounds the listener with warmth and movement, making moral concern feel inviting and collective rather than accusatory.

Strings, Horns, and Orchestral Space

Strings and horns expand the record beyond the basic rhythm section. David Van De Pitte's orchestral arrangement adds sustained lines, responses, and transitions that support the vocal without overwhelming it. Additional tracks allowed the production to preserve detail in these sections and position them within a spacious mix. The orchestration gives the song elegance associated with pop sophistication while maintaining the intimacy of conversation and street sound. This combination challenges the idea that protest music must be rough or musically minimal. Studio layering allows Gaye to place personal reflection, urban community, church-like vocal feeling, jazz harmony, and orchestral color within one coherent environment. The arrangement itself argues for connection across divided social worlds.

Ambient Voices and the Social Scene

The voices heard around the performance contribute to the impression of a gathering rather than an isolated studio booth. Greetings and conversational fragments blur the boundary between song and environment. These sounds are mixed as part of the composition, not treated merely as mistakes to remove. They establish community before and around the lead vocal, reinforcing the message that social crisis must be discussed among people rather than delivered from a distant authority. Multitracking gives producers the ability to retain atmosphere while controlling musical clarity. In "What's Going On," the studio becomes a designed public space. The listener hears not only a singer

and band but a world of people recognizing one another and asking how violence can be interrupted.

Comparing Track Limits and Creative Choices

“Taxman” demonstrates creativity under severe track limitation. Multiple parts share channels, and the production depends on a decisive basic performance plus a small number of overdubs. “What’s Going On” uses greater separation and layering to create orchestral and social depth. More tracks did not automatically make the later song better; they allowed a different aesthetic. The Beatles pursued compression, sarcasm, and hard-edged contrast, while Gaye pursued flow, multiplicity, and immersive warmth. Both recordings show that track count matters only through arrangement and judgment. A limited machine can produce a complex record when musicians plan effectively, and an expanded machine can produce confusion when layers lack purpose. Technology enlarges choices but does not make them.

Politics through Production

The songs address public power through different sonic forms. “Taxman” attacks fiscal authority with compressed rhythm, direct accusation, and mocking vocal replies. Its studio construction feels confrontational and contained. “What’s Going On” responds to war, social division, and suffering through layered empathy. The recording invites listeners into a communal conversation and refuses a simple separation between personal feeling and political reality. Multitrack production strengthens these positions. Harrison’s complaint becomes sharper through repetition and the cutting guitar break, while Gaye’s appeal becomes broader through doubled vocals, ambient voices, and orchestral integration. In both cases, production is rhetorical: the organization of sound shapes how the listener understands the argument.

Conclusion

“Taxman” and “What’s Going On” reveal how multitrack recording changed the studio from a place of capture into a site of composition. The Beatles used four tracks to combine a forceful rhythm performance, double lead vocals, backing responses, tambourine, and McCartney’s guitar solo with remarkable economy. Gaye used a broader multitrack environment to layer voices, percussion, rhythm, orchestration, and social atmosphere into a fluid protest record. The comparison is not a simple story of primitive versus advanced technology. Each song turns technical limits and possibilities into an expressive design. Multitracking matters because it lets artists construct relationships among sounds that could not exist in the same way during one live performance.

References

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