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| **Production Techniques** | | |
|  | **Rolling stones** | **Britney SPEARS** |
| **Recording Techniques** | -High recording levels( Input gain) resulting in tape saturation. High noise levels of tape machine and electronics resulted in engineers having to record at high level to ensure a good signal to noise ratio. REDUCED DYNAMIC RANGE  -Lead Vocals in Verse up front  -Backing Vocals further back in the mix, possibly one microphone used to record vocals  -overdubbed vocals | -Sequenced parts  -Multiple vocal takes  -Combination of audio and sequenced tracks  -close microphone techniques allowing for extensive processing in the mix stage |
| **Technology** | Early analogue tape recording(60s)  -Mono  -Guitar Noise at the start and end of track.  -Distortion( Tape Saturation)  -Analogue tape  -Electric guitar | Digital technology(90s)  -stereo  -sequenced drums  -synthesizer  -clean and clear production because of the increased dynamic range( better signal noise ratio)  -sampling( orchestral stabs and reverse sounds)  -synth FX  -Digital keyboards used to create sounds e.g. acoustic steel string guitar. |
| **Balance and Blend** | -Electric guitar riff and bass up front in the mix  -Acoustic guitar and tambourine send to the back of the mix.  -“I can get know satisfication” up front in the mix  -vocals and backing vocals further back in the mix  -Driving 4/4 kick and snare up front in the mix. | - thumping kick and synth bass up front in the miss  -lead vocals up front  -backing vocals panned |
| **Stereo Field** | -Mono. All instruments appear in the centre | -wide stereo image  -Lead Vocals centre  -backing vocals panned L and R  -synth bass, kick and snare centre  -synth FX panned to |
| **Dynamics Processing** | -wide variation in dynamics, no compression used to even out levels  -“shouted” vocal performance, further away from the microphone  -no use of compression, most instruments played at maximum level | -extensive use of compression results even dynamics throughout  -narrow dynamic range  -limiter to ensure maximum level of pop production. |
| **FX Processing** | -Fuzz on electric guitar  -overdubbed vocal dry, no reverb used  -natural ambience of the room used for backing vocals  -reverb on tambourine( possibly natural or echo chamber) | -Lead vocal is dry  -multiple takes of backing vocals adds to an ensemble effect.  -Long Reverb time at the start of the song on vocals  -steel string guitar has |
| **EQ** | -narrow frequency range  -mid-rangy( twangy) electric guitar  -boomy bass guitar  -boxy | -heavily filtered vocals  -automated filter FX |
| **STYLE** | Rock  Standard rock instrumentation  -Drum kit, bass, electric, vocals including acoustic guitar and tambourine | Pop  -synth bass, sequenced drums( possible drum machine and/or sampling) |
| **Texture** | Very little variation. Driving kick and snare drum and bass throughout. Fuzz guitar drops out when the dry overdubbed vocals enter provides a short change in texture. A few transitions with just the drums | Starts with a thin texture with vocals, steel string acoustic guitar, kick and finger snaps. Texture builds as more synths and FXs is addedd |