# Generations of Audio Work through the Digital Turn in Contemporary Pakistan

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Abstract: Evolving recording technologies presented new challenges and creative possibilities for audio workers in contemporary Pakistan. The availability of digital media in the 1990s led to opposing generational views on how changes in gear, roles, and methods would impact high-fidelity production. In this article, I compare my experiences as a recording artist at two studios, the analog studio at the Sanjan Nagar institute of Philosophy and Arts in Lahore, and the digital Coke Studio in Karachi. My reflexive account examines the friction between seasoned artists who remain committed to analog sound and a younger generation eager to embrace digital innovation.

Résumé: L'évolution des technologies d'enregistrement a apporté de nouveaux défis et de nouvelles possibilités créatrices aux travailleurs du domaine du son dans le Pakistan contemporain. La possibilité d'accéder aux médias électroniques dans les années 1990 a mené à des conceptions générationnelles opposées sur l'impact que pouvaient avoir les changements de matériel, de rôles et de méthodes sur la production haute-fidélité. Dans cet article, je compare mon expérience d'artiste dans deux studios d'enregistrement, le studio analogique de l'Institut d'Art et de Philosophie Sanjan Nagar de Lahore, et le studio numérique Coke de Karachi. Ce compte rendu réflexif examine les frictions entre les artistes chevronnés qui restent fidèles au son analogique, et la jeune génération impatiente d'épouser l'innovation numérique.

Tina Sani was inside a recording studio in Karachi to sing a song composed by Nisar Bazmi. The musicians were to play their instruments live while she sang. She was not used to that kind of atmosphere – being in a room with so many instrument players. She got flustered. As she sang, she realized she was not keeping up with the music. After an hour of trying, she gave up. "You can drop me home now," she asked Mahmud.

On the way, Sani told Mahmud that "the whole ambience" in the studio was making her nervous. Mahmud offered a solution – the musicians and the singer would be recorded separately. She instantly agreed.

Without the pressure to keep up with a live orchestra, Sani recorded her part comfortably. The arrangement, however, posed a problem for the sound engineer, Iqbal Asif. Recording the musicians and the vocalist separately meant he had to "punch in" and "punch out" sound tracks onto a magnetic tape – a complex and tedious method of dubbing one track over the other. One tiny mistake could corrupt the whole previous recording, rendering it useless. He was up to the task, though. (Noorani 2016)

This performance took place at EMI Pakistan's studio in the early 1970s, a time when technically trained sound engineers were limited, and both musicians and producers were only beginning to explore the creative potential of multi-track recording. Tina Sani, one of Pakistan's most successful artists of the 20th century, had just launched her career as a folk and semiclassical vocalist. This was her first experience recording her voice separately onto magnetic tape. The account highlights two types of friction: the tension between Sani and the instrumentalists, and the friction between the sound engineer (Iqbal Asif) and a new method for producing an arrangement with more advanced technology than previously available. Furthermore, these examples of friction illustrate how different generations of Pakistani musicians and producers have had to adapt to evolving technologies to create effective musical pieces together. They also underscore how technological changes have consistently challenged established musical practices in recording studios everywhere, including Pakistan, thereby generating friction that sometimes puts experienced industry workers at odds with those who have knowledge of the latest products and techniques.

Since the turn of the 21st century, digital recording and production technologies have blurred the lines between art and popular music in Pakistan. The digital turn has also altered the social dynamics of professional and interpersonal relationships in the recording studio. In addition to expanding the possibilities of new musical styles and ideas, digital technologies have narrowed the gaps separating the creative contributions of musicians, sound engineers, and music producers in the compositional process. Hence the roles associated with these key positions in the studio have grown more

interdependent in recent times, a historical shift that can be traced to the democratizing effect of the digital revolution. The debate over whether analog or digital recording is preferable has rapidly lost relevance as digital recording technologies have become an equally effective means of achieving high-quality audio tracks. The goal of this article, however, is not to critique the mechanical source of musical production, but rather to examine the attitudes, relationships, and potential frictions between musicians and producers/sound engineers representing different generational cohorts in two Pakistani recording studios in the 21st century.

Until the late 1970s, art musical styles such as regional, classical (khayal, dhrupad), and semi-classical (ghazal, thumri) genres were mediated through live or televised performances and recordings that were primarily produced with analog recording tools and techniques. An integral part of popular culture in Pakistan, popular songs for film and television were produced in the same manner as art music. When digital recording technology emerged and eventually became more widespread, new genres such as Urdu pop, rock, and underground alternative were created and became the central modes of expression for a younger generation of freelance musicians. Due to the convenience and affordability of digital production gear, musicians and novice producers could construct independent studio spaces, which in turn had a democratizing effect on musical production. This point is supported by Ali Suhail, a singer/songwriter, instrumentalist, and producer based in Karachi, who explains how digital technology's accessibility, affordability, and convenience has been beneficial for musicians who otherwise "couldn't record [their music] at a professional studio, for any reason – be it creative differences or the fact that you don't have 75,000 rupees to spend on a song you wrote in your bedroom on a bad day" (Noorani 2016).

Since the early 2000s, several producers began reinterpreting compositions of regional, classical, and semi-classical music through a blend of digital and acoustic instrumentation. These changes have not only introduced new ways of making music. They have also shifted the focus away from recording gear to give more prominence to the sound engineer's ability and imagination to construct and manipulate sound. As Andy Kelleher Stuhl states in his article on the topic:

Digital sound technologies, while acknowledged as a threat to the aesthetic qualities that have come to distinguish certain cultural values, maintain and in many cases bolster the performative status of recording. In resisting analog fetishism, recordists have emphasized a digital-age value system that ascribes deterministic

power to the song rather than to the machine and that reconciles the technology of digital recording with the communication of artistic vision. (2014: 43)

Responding to earlier tendencies to privilege equipment as a primary source of value, Stuhl claims that sound engineers are the key creative agents in the digital age. The rise in status and growing involvement of the producer in the Pakistani music industry adds more weight and global reach to his argument. The most obvious example is the highly successful Pakistani music television franchise Coke Studio, a reality music TV series created with the financial backing of The Coca-Cola Company in 2008 by record producer and composer, Rohail Hyatt. In Coke Studio episodes, the spotlight is on the music producer as the principal source of creativity in the production process. Much of the show portrays musicians in the process of realizing the producer's arrangement on final audio tracks, which are subsequently mixed and mastered through post-production techniques. Technological shifts in musical production like the digital turn behind Coke Studio's success have largely shaped the contours of Pakistan's contemporary music scene.<sup>1</sup>

In addition to my academic training as an ethnomusicologist, I have a decade of experience playing professionally with many of the industry's popular and regional musicians and producers in Pakistan. In this article, I draw on my own personal experience as a recording artist in two studios to examine generational frictions between musicians and producers. The studio at the Sanjan Nagar Institute of Philosophy and Arts (SIPA) in Lahore is owned and operated by my maternal grandfather, Raza Kazim, a music producer who uses primarily analog production methods for recording traditional Pakistani folk and classical music. By contrast, Coke Studio in Karachi, directed by executive producer Rohail Hyatt when I worked there, uses digital production methods. While I recently learned digital production techniques from Shiraz Uppal, one of Pakistan's top music producers, it was as a session artist with SIPA's recording studio (2008) and Coke Studio (2009) that I gained initial exposure to both recording technologies. I draw on this archive of experience to describe the working conditions at two contrasting studio environments from my own reflexive standpoint, thereby adding a musician's perspective from South Asia to the scholarly discourse on the social life of analog and digital sound recording practices.

Although I did not approach these recording studios as a researcher while working as a session musician, my recollections include detailed descriptions of the interactions in these spaces. My auto-ethnographic account thus throws new light on the divergent attitudes and approaches of

two music producers who belong to separate generational cohorts. While there have been several ethnographies of recording studios since the turn of the millennium (Meintjes 2003; Greene and Porcello 2005; Scales 2012), few have foregrounded case studies from South Asia, and moreover, the issue of intergenerational friction in recording spaces has hardly been explored at all. Hence my reflexive account opens a new line of inquiry while also offering preliminary thoughts on how such frictions can be productively channelled to make the creative musical process more constructive and efficient.

## Global Influences in the Pakistani Music Industry

The possibilities for creating new sounds in Pakistan have multiplied exponentially with the rapid development of digital recording tools. During the early years of the digital turn, the technology was perceived as a potential threat in South Asia, one that could eventually result in the replacement or even demise of acoustic instrumentation, especially among musicians of North India and Pakistan. According to Gregory Booth, the growing uses of digital instruments was a serious concern for musicians working in the Bollywood film music industry during the late 1970s and 1980s: "By 1978, electronic keyboards had been a 'wave' for quite some time, of course, but each new development made the wave stronger and more clearly demonstrated the potential problems that they and synthesizers represented for acoustic musicians" (2008: 247). Writing about the wider impact of digital technology on communities of professional musicians, Paul Théberge discusses the impact of Musical Instrument Digital Interface, or MIDI, explaining how "the extension of digital control through MIDI to all aspects of sound creation, processing, sequencing, recording and mixing has also altered the process of musical production for many musicians and called into question prior notions of musical skill" (1997: 84). A similar wave took place in Pakistan during the same era when music producers in Lollywood - the Lahore-based commercial film industry - incorporated digitized percussive and melodic sounds to recorded tracks.

Another concern related to the application of digital technologies in music was its homogenizing effect on Pakistan's regional/art musical styles and genres. Through analog production methods, the music producer relied on his/her skills as a technician and a sound engineer to produce an adequate recording. Tasks such as microphone placement to obtain the optimum and accurate amount of sonic detail from the instrument or voice, as well as mixing and automating the levels during the time of the recording were acquired

skills that the producer needed to learn both theoretically and practically. In addition, the sounds remained organic and distinct, creating the perception of a natural sonic aura with audible traces of live performances, such as the continuous hiss of a live recording or the sounds of musicians' bodily movements. With digital sampling and instrumentation, however, certain sounds became industrialized and used repeatedly across several genres, such as keyboard samples of pianos or violins used in songs of semi-classical ghazal, film, and Urdu pop music. Thus genres of both art and popular music began to sound as if they all belonged to a globalized genre of mainstream music. Eliot Bates describes a similar pattern in Turkish traditional music whereby

The lines between arranged traditional music and other forms – Turkish pop, rock, folk music, and world fusion music – are blurry for numerous reasons, notably the extent to which the arrangers, engineers and studio musicians involved with traditional arranged music are also the prominent creators of pop, rock and world fusion albums. (2010: 85)

Moreover, the success of mainstream popular music among younger generations in Pakistan has led to a sharp decline in musical training on South Asian instruments. The ubiquitous application of digital tools in recording studios has encouraged young people interested in becoming musicians to choose the guitar and keyboard over the *sitar*, *rubab*, *tabla*, and *sarangi*. As a result, aspiring musicians have yet to fully grasp the potential for using indigenous instruments to produce a unique set of sounds that can be creatively altered through digital production in popular genres.

The musicians who came of age in the 1980s adopted digital recording and production practices in Pakistan as part of a wider turn toward setting Urdu lyrics to Western styles of music such as jazz, rock, hip hop, and disco. This trend dominated the Pakistani music scene at the same time as electronic instruments like the keyboard and electric guitar were contributing to a global popular music aesthetic. The growing interest in these instruments was a logical extension of the popularization of Western music genres since the late 1960s through the mass-market musical eclecticism of *filmi* pop music in both Pakistan and India (Arnold 1988). Moreover, another stream of global musical influence that shaped contemporary music was the recasting of *qawwali*, a semi-classical Sufi devotional music, as national music, thereby expanding the performance context for the genre beyond its traditional setting at Sufi shrines to include state-owned studios like

Pakistan Television Network and Radio Pakistan in Karachi, where most recordings of classical, semi-classical, and devotional music such as qawwali, had been made since the 1950s (Qureshi 1999: 83). At the same time as a Pakistani commercial film music industry emerged following Partition in 1947, qawwali gained immense popularity in an effort to promote an Islamic national identity that was distinct from Indian and Hindu cultural values. As musical producers increasingly blended qawwali with popular culture in the urban centres of Pakistan, new creative spaces emerged for experimenting with instrumentation and world music aesthetics. Furthermore, the close association of classical music of South Asia with Hindu culture<sup>2</sup> in predominantly Muslim Pakistan enabled qawwali and other regional forms of music in Pakistan to evolve sonically and lyrically in ways that would not have been possible without the underlying forces of Islamic cultural nation-building. According to Qureshi:

In Pakistan, a significant contributing factor to the rise of *qawwali* to the status of serious public entertainment was the vacuum left by the gradual decline of the art music culture. In part because of the strong cultural identification of art music with India, and because of its negative Islamic valuation, it found no official patronage and the ranks of classical musicians dwindled rapidly. (1999: 90)

Thus the expansion of global influences in Pakistani music encouraged state-owned recording studios such as PTV (Pakistan Television) to invest in popular music instead of art music.

State-owned studios used analog methods to capture sound, a process that also involved mixing and mastering recordings at the time of performance. By the 1990s, however, privately owned studios equipped with some of the latest digital gear had begun to expand the industry. Responding to increasing demand for music as a consumer lifestyle choice among younger generations of Pakistan's urban affluent middle class, multinational corporations began investing in recording studios to promote their brands using global musical styles. For example, in the late 1980s, Pepsi sponsored the popular band Vital Signs, offering them financial support to record an album, create music videos, and organize both local and international tours with the Pepsi brand featured prominently in all the band's promotional materials.<sup>3</sup> The Sufi rock band Junoon emerged from Vital Signs in the early 1990s to become one of the most successful bands in Pakistan (Paracha 2004). Junoon drew wide audiences with a fresh approach to blending Western rock

music with the poetry of famous Pakistani literary figures like Bhulley Shah and Allama Iqbal. Another factor contributing to Junoon's success was the political resonance of their music, including several songs that addressed contemporary issues and concerns that Pakistanis could relate to.

While Junoon was capturing the imagination of a new generation of Pakistani youth, Nusrat Fateh Ali Khan (1948-1997), Pakistan's most renowned gawwali singer, was also experimenting with Western digital collaborations. For example, after early international success working with Peter Gabriel, he collaborated with Canadian guitarist and producer Michael Brook on the Grammy-nominated world fusion album, Night Song (1996), for Gabriel's Real World Label. In an article for the UK-based trade magazine, SOS Sound on Sound, Paul Tingen explains how Night Song was made "in a decidedly hi-tech manner, with sampling, digital editing, looping, sonic manipulation and all" (1995). Nusrat Fateh Ali Khan's experimental recordings and performances on global stages did more than elevate the status of qawwali from Islamic national music to world music genre; his international artistry helped modernize the Pakistani music industry by showing how digital production values could power new innovations with widespread appeal among a growing youth cultural market. High-profile collaborations between emergent world music stars like Nusrat Fateh Ali Khan and producers like Michael Brook therefore laid the foundations for wider use of digital technologies in Pakistani popular and fusion musical production. Furthermore, over the past decade I have witnessed firsthand how many musicians and producers have continued to expand their musical boundaries through the use of digital audio equipment. Artists such as the Peshawar-based duo Sajid and Zeeshan made digitally driven pop songs in English, applying novel effects to the acoustic guitar and human voice. Shiraz Uppal, a singer-songwriter who spent considerable time working with A.R. Rahman in the early 2000s, created his own style of Urdu pop music by combining original melodies with digital percussion and string samples. Kaavish, a Karachi-based band, generated a musical style blending Western harmonies and orchestral instruments with folk and semi-classical based melodies. When I recently asked Kaavish's lead vocalist, Jaffer Zaidi, about the impact of digital recording and production practices on the music of Pakistan, he elaborated: "It obviously has had a positive impact ... that we haven't made the most of it is a different thing altogether, although Coke Studio can be regarded as a step in the right direction" (personal communication, May 15, 2013).

Having briefly traced some of the key developments in the history of global encounters with local Pakistani music scenes, I now draw on my own experience as a session musician to consider how recording technologies in digital and analog studios have influenced values associated with musical production. I begin the next section with a brief description of the two studios that will serve as a basis for comparison.

#### A Tale of Two Studios

The analog recording studio at the Sanjan Nagar Institute of Philosophy and Arts (SIPA) is an independently owned, non-commercial facility located on the second floor of a two-story building. Situated in a quaint residential zone of Gulberg 5 in Lahore, SIPA is also the personal residence of Raza Kazim. Founded by Kazim in 1974 as the Amir Khusro Institute of the Performing Arts, the venue was initially dedicated to musical practice, recording, and learning. When the multi-purpose use of the space proved unsustainable, Kazim decided to concentrate on recording, and in 1995 he renamed the Institute. He has since worked with many renowned folk, classical, and light classical vocalists and instrumentalists, including Pathanay Khan, Reshma, and Ustad Sharif Khan of Poonchwaley. I began performing sitar professionally there in 2008, playing gigs as a session musician as well performing solo renditions of Hindustani classical pieces.

The SIPA studio consists of a recording room and a control room. The recording room is completely soundproofed with padded foam that covers the entire ceiling, walls, and entrance of the room, thereby absorbing enough sound to transform the space into a "dead room." The microphones, which are stored in aluminum cases inside a cabinet, are industry-standard, including a Neumann U-87 condenser mic and AKG dynamic mics. The control room, where Raza adjusts the sound levels while recording, contains an analog mixing console that he acquired in 1960, high-fidelity speakers, amplifiers designed and made by Raza and his team of audio engineers, a spool recorder, and a sitting area (see Fig. 1). According to Raza, the high-fidelity speakers and amplifiers were designed to produce the optimum quality of audio playback and sonic reproduction, enabling musicians and listeners to clearly identify, analyze, and assess the aesthetic and technical value of a recorded track.<sup>4</sup>

By contrast, Coke Studio (also known as Studio 146) is a commercially owned digital recording studio situated in an industrial zone of Karachi. I vividly recall my first experience there in 2009. As I entered the gates of the building, I was surprised by the dull exterior of the building, as if it were designed for assembly-line machines. The walls were bare, painted in charcoal grey and dotted with dark stains. After walking through the



Fig. 1. Raza operating the mixing console at SIPA Studio.

entrance, I found myself in a small dining hall with a vending machine full of Coca-Cola products. A door led to the studio's large hall with a glitzy interior in stark contrast with the building's austere exterior. There were two floors to the studio. On the ground level, there were red and blue neon lights all around, illuminated images of Coke bottles, and a huge video screen in the background with the sign "Coke Studio" on display. The instruments and microphone stands were arranged in front of the screen in a semi circle. The recording and production tools for the producer were set up on the left side in front of the instruments and microphones. Unlike SIPA's studio, the recording and control rooms were together rather than in separate locations. On the second floor, there were dressing rooms, an office belonging to members of the management crew, and a lounge where the artists and crew working at the studio would take lunch and dinner breaks. I was first hired at Coke Studio in 2009, one year after I began performing professionally at SIPA. In what follows, I compare my experiences working as a session artist in both studios, beginning with SIPA.

# Sanjan Nagar Institute of Philosophy and Arts (SIPA), Lahore, 2008

I recorded my first solo instrumental piece at SIPA's recording studio in the summer of 2008. Prior to this experience, I knew SIPA primarily as the home of my maternal grandfather, Raza Kazim, rather than as a leading cultural institute. Throughout my childhood, I would go to his residence often, both

to visit my mother's family and to attend intimate concerts performed by classical musicians from Pakistan and India. My interactions with Raza prior to my journey as a musician were limited, mainly consisting of casual Muslim greetings like "Salaam Alaikum" (peace be upon you) and "Khuda Hafiz" (may God protect you). Oddly, he never allowed anyone, whether they were his children or grandchildren, or even his employees, to address him in any other way besides his first name "Raza." It was only after I joined the National College of Arts (NCA) as an undergraduate student that my interaction with Raza took a new turn - the beginning of an intellectual relationship between a student and a mentor. For the most part, Raza reminded me to think of him more as a teacher than a grandfather. Nonetheless, I was enamoured by the way he treated me and others, and thus our relationship was important throughout my formative years as a student of music and musicology. Everyone around me, whether it was my family, my peers, or the professors in the Department of Musicology, praised his reputation as one of Pakistan's intellectual giants of the late-20th and early-21st century. As our conversations and interactions became more regular, I always felt the need to seek his opinion, criticism, and most importantly, approval of my music. Thus, I treated my first recording at SIPA as rite of a passage, a test to prove my worth as a musician to Raza.

I still recall the overwhelming feeling I had when I walked into the recording room at SIPA. There was an absence of sound, an almost deafening silence. It was ironic that I felt that way, considering there were various musical instruments, microphones, cables, and a mic stand placed in the centre of a room entirely cushioned with foam. As I set my sitar on the floor and began tuning, the recording assistant walked in with a metallic case containing a condenser microphone. Once the assistant set up the mic on the stand, I let him know he could tell Raza that I was ready to record. A few minutes later, Raza walked in with an upbeat "Haan bhai! Tayyar ho?" (Hey there, you ready?), to which I sheepishly responded, "Ji bilkul Raza" (Yes, of course, Raza). He adjusted the microphone stand to my sitting posture and, when satisfied, told me not to move an inch, since the microphone's position was set accordingly and could not be altered once the recording began. He then returned to the control room, where the mixing console, high-fidelity speakers, amplifiers, and vinyl disc recording device were located. Since the control room was eight metres away and not visible to me, the only way Raza would communicate with me was through a "talk back" function through an in-built microphone at the mixing console. The mixing console was connected to the analog recording device, a spool record player. Once all the necessary devices were turned on and ready for recording, Raza asked me

to play the sitar through the talk back function in order to conduct a sound check before initiating the recording. I strummed the sitar for a couple of minutes, after which he announced, "Ok ... we are ready here. Just say 'start' whenever you want to begin." I took a deep breath, collected my thoughts on what I would perform, and said, "start." I heard Raza say the word "rolling" through the talk back function and I began to play.

I remember closing my eyes for most of the recording, as if I were performing live in front of an audience. Since none of the musical phrases was predetermined, and knowing that every gesture was captured and heard by Raza, I felt a great deal of pressure. Nonetheless, I consciously immersed myself in the music. After I finished playing, I said, "stop" to indicate the end of the piece, and Raza paused the analog recorder. I then joined him in the control room, where he replayed the spool while we listened to the piece and analyzed it together. He gave his comments, asked if I was satisfied or not, and then offered me the option of having my music recorded again. I noticed a few errors, including notes that were out of tune, and I decided to re-record.

The recording process described here was constrained by a specific time and space, a musical event that relied on my abilities as a live musician for success. Moreover, the recording was not digitally altered. Kazim was steadfast in his belief that the positioning of the microphone was the key to capturing a detailed and accurate sonic representation of the instrument. The only inconvenience (albeit a significant one) was that the piece had to be re-recorded if there were technical mistakes or unwanted noise, such as the occasional sound of my foot moving or my fingers sliding over the strings. However, what I found intriguing about the recording process at SIPA's studio was that it offered space for both artist and producer to establish a personal bond with each other. In a recent conversation I had with Kazim about his experience recording Reshma, one of Pakistan's leading folk singers, he said:

In December '83 or, maybe November, I recorded Reshma. I spent a whole day, from morning till evening. It was all done in one day. But before that I spent time with Reshma, chatting with her, and trying to wean her away from the humdrum of the EP station scenes and the radio scenes ... so I was trying to get her away from that and take her back to her own childhood, her innocence and her spirit and herself ... because I was aware that the music comes not from your current social reality or environment, but from your own roots ... and during the recording, I was focusing on Reshma while she handled the musicians. I even remember that during the recording, Reshma accosted one of the musicians

for playing out of sync, scolding him in Punjabi, "*Teri boti boti kardoongi!*" (I will literally cut you into pieces!). (Kazim, personal communication, March 20, 2013)

Twenty-seven years later, the dynamics of the interaction between the producer/recording engineer and the artist have changed dramatically, a shift that is nowhere more evident than in Coke Studio.

#### Coke Studio, Karachi, 2009

In contrast with the scene at SIPA's analog studio, digital recording practices offer little room for personal exchange between the producer and the artist during live recording sessions. The producer makes most of the adjustments and edits to the recording in the post-production process. I recall how at Coke Studio, Rohail Hyatt (the producer) required three to four run-throughs of the final version of an arrangement so he could extract the moments/parts of each recording that he felt were aesthetically superior and synthesize them in the post-production process. Digital recording quite literally liberates music from the spatial and temporal constraints inherent in live performance. Mark Katz attests to this, stating: "With the ability to manipulate sound through such technology, musicians have been able to transcend time, space and human limitations, and in the process have created wholly new sounds, works, genres and performance traditions" (2004: 41). What the digital production process lacks in the time and space for personal interaction that was so crucial to the analog recording and production experience at SIPA, however, it makes up for by providing a range of creative collaborative possibilities in the post-production phase of an audio track.

The music-making process at Coke Studio takes place in two phases. The first phase entails the non-recorded exchange between the main artist, folk musicians, and the house band. The house band at Coke Studio plays in all 30 songs that are recorded every season for the show, and includes some of the most experienced musicians in the Pakistani music industry. These artists are highly skilled at playing both Western and local instruments. The house band has been a regular feature since the studio's launch. When I worked at Coke Studio, the main artists would send a sample recording of their songs to Hyatt in the form of an mp3. For example, Ali Noor, the front-runner and lead vocalist for the popular Pakistani rock band, Noori, contacted me in November 2008 to come over to his house and improvise on the sitar for a composition that was going to be featured at the studio. After submitting the demo recording to Coke Studio, the executive producer

(Hyatt) gave his analysis and feedback on the structure, layout, and use of classical or traditional instrumentalists/vocalists to enhance the song's aesthetic appeal.

In the next phase, I travelled to Karachi with Ali Noor and his brother and fellow Noori member, Ali Hamza, to spend time with the house band at the studio in February. We practiced the three songs that would be featured in the live televised studio recording for the show. At the end of March, Hyatt recorded the final versions that would later be produced and released nationwide in May, thereby giving him ample time to work on post-production. In February, we spent three to four days rehearsing with the house band, transforming the studio into a space for musical experimentation. At this stage in the process, the emphasis was on free-flowing exchange of musical ideas and building familiarity between artists. When the arrangement was more or less fixed, Hyatt re-recorded the rehearsals in the studio's recording room. We were then given a month to work individually on the three songs.

We returned to Karachi at the end of March for the final recording. After three more days of practice to improve the flow, Hyatt recorded the performance on the fourth and final day. We all sat in our respective positions, each of us with a pair of in-ear monitors to ensure we could hear our own instruments clearly. Since the ensemble consisted of a drummer, two main vocalists, three backing vocalists, a violinist, a lead guitarist, a dholak player, a bassist, and myself on the sitar, it would have been difficult to hear ourselves without the in-ear monitors (see Fig. 2). After one runthrough, Hyatt signaled that we would record the next one. There were video cameras floating around the room, taking photos and recording us in action. I remember seeing a glass panel placed in front of me on the circular platform I was sitting on in order to prevent extraneous sounds from being picked up by the microphone in front of me. Moreover, there was a small screen in front of me that displayed the tempo of the song, as well as cues that alerted me to when my part in the song was coming up. Hyatt insisted that the songs be recorded several times (usually two or three attempts) in case there were musical errors or shortcomings in a given take. Following the final recording, we wrapped up our instruments, acknowledged the applause from the staff and other musicians, and left the recording space to make way for the next group of artists. It would be several months before I'd hear the final versions of the recordings. Hyatt and his team of sound engineers needed until late May to refine and master the audio tracks for over 30 songs.

Two weeks after the session, Hyatt made a startling discovery. I had played out of tune in the song "Jo Meray" (That Which is Mine). I was asked



Fig. 2. Coke Studio Recording Room setup.

to re-record the piece. Initially, I was shocked and dismayed when I heard the news, thinking I had made a horrid mess of such a tremendous opportunity. Fortunately, the mistake was easily fixed at Ali Noor's home recording studio. Ali Noor asked Hyatt to send the recorded track of "Jo Meray" to his laptop. All he had to do was play the track through a Digital Audio Workstation (DAW) program called Ableton Live, and I was able to re-record the piece using one of his condenser microphones.<sup>5</sup> In comparison to the "classical" analog recording process, in which there is little opportunity to modify the audio track following the recording, the post-production process in digitally crafted music offers both the artist and producer a chance to correct any technical or sonic errors. More importantly, it gives the producer more control over the recording, since it is not bound by any spatial or temporal constraints, and thus can be altered, fixed, or refashioned at any time.

# Situating Proponents and Opponents of Digitally Driven Musical Production

I close with a brief reflection on the merits and constraints associated with analog and digital recording technologies. While analog technology does not offer as many innovative possibilities for creating new forms of music, it does provide a more intimate and organic form of interaction between the music and music producer. However, due to the spatial and temporal restrictions of

the analog recording process, the amount of time available for the musician and producer to establish a common aesthetic vision is limited. The potential for creative agents to merge artistic goals in a given analog recording becomes even more challenging when working across generational lines, which often involves reconciling divergent views on the best way to maximize the high-fidelity experience for listeners. On the other hand, while the music producer remains virtually invisible throughout the recording process at Coke Studio, the digital recording process opens up space for musicians to engage in meaningful, collaborative, and innovative exchanges, while also affording more time to balance and mediate the varying aesthetic expectations of instrumentalists, vocalists, music producers, and audio engineers.

Furthermore, in a country where the socio-cultural environment is plagued with political turmoil and ethnic violence, digital recording studios have helped construct alternative, more progressive images of Pakistan. From the groundbreaking collaboration between Michael Brook and Nusrat Fateh Ali Khan on Night Sound in the 1990s, to the global reach of Coke Studio's emergent and established artists through new media, digital technologies have played a critical role in promoting Pakistani musical talent and intangible cultural heritage to the world. In the years following Coke Studio's launch in 2008, several cultural exchange programs between Pakistan and the US were founded. For example, the US Department of State and the New England Foundation of the Arts (NEFA) launched Center Stage<sup>6</sup> in 2012, an initiative aimed at bringing musicians from Asian and African countries to perform in multiple locations across the US. Artists such as the aforementioned band Noori, the Islamabad-based singer-songwriter Arieb Azhar, and the Karachi-based Sufi vocalist, Sanam Marvi, have all been featured on this platform. Similarly, the US Embassy collaborated with Bang on a Can music organization founded in 1987 by composers Michael Gordon, David Lang, and Julia Wolfe - to launch the music album Travelers: Dosti Music Project in 2015. Produced by Found Sound Nation, which is a part of Bang on a Can and features a collective of artists and musicians, the initiative brought young and innovative musicians from Pakistan, India, and the United States together for month-long residencies and tours aimed at creating new compositions and music videos to showcase their work. Some examples of musicians whose careers took off following their participation in the Dosti Project include Danish Khawaja, an exceptional guitarist from Lahore and a former member of the band Poor Rich Boy, Zeerak Ahmed (known by her stage name Slowspin), a young vocalist and electronic music producer based in Karachi, and Zohaib Hassan, a rare professional sarangi player of the next generation.8

Such bright anecdotes celebrating the digital turn notwithstanding, there are clearly advantages and disadvantages associated with both analog and digital recording technologies, with opinions often divided along generational lines. Coke Studio's critics point to how the show homogenizes regionally distinct folk traditions with global popular culture. Others have argued that the younger generation of producers at Coke Studio adulterate original versions of folk songs with stylistic influences tailored for the global marketplace. In debates over the cultural integrity of new music, some critics immediately equate the commercial with the digital. For example, in a polemical post for *The Express Tribune Blog*, Suleman Akhtar writes:

At the risk of sounding judgmental, let me state flat out that "Coke Studio" is the place where a revitalization of folk culture is endeavored by slaughtering it.... Meeting with the commercial needs of a rapidly expanding electronic media culture, folk culture was distastefully incorporated in the music vestiges and the outcome was a commercial success.... The phenomenon, notwithstanding, cannot be accepted as some kind of a development by any standard of music and art. This is more of a distortion of "original" than a revivification. (2012)

Finally, several critics have argued that the music of Coke Studio has gradually become formulaic, with the overall tone sounding increasingly redundant and lacking in new musical content.

Representing an earlier generation of music producers in the Pakistani art and folk music scenes, Raza Kazim would agree with some of the criticism levelled at Coke Studio. He strongly condemns the use of digital manipulation in his audio work at SIPA. Yet his commitment to analog sound limits creative collaboration to the recorded event itself, thus precluding any form of alteration to the music in the post-production process. At most, he would allow digital plugins that would help minimize extraneous noise captured during the recording. The ideal of establishing an aesthetic understanding between the musician and the producer is difficult to achieve under these conditions, except when the musician and producer work regularly together in the same studio environment, which is rarely the case today given the mobile lifestyles of contemporary Pakistani performers. It remains to be seen whether the doors to digitally driven musical innovation will stay closed at SIPA as younger generations continue to embrace new ways of collaborating musically in the age of Coke Studio.

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#### Notes

- 1. For a concise overview of the history of Coke Studio, see Deepti Unni's article in *Rolling Stone India* (2011).
- 2. Following Partition, the governments of both India and Pakistan sought to establish separate national identities, histories, and terminologies due to their ethnic and national differences. The Indian government sought to establish a cultural identity based on Hindu influences and the regions within their country, and the Pakistani government focused on Islamic values, principles, and terminologies, as well as the regions within the country's borders, as the pinnacles for the nation's cultural identity.
- 3. This Pepsi example shows that the idea of using popular music to promote a multinational beverage brand to youth cultural markets in South Asia was explored by executives well before the extraordinary success of Coke Studio. See Bilal Tanweer's essay (2012) for a vivid description and analysis of how Coke Studio used music to scale up the value of its beverage brand.
- 4. More information on the speakers can be found on the website: http://sanjannagar.org/bhulley-audio-system/.
- 5. The final televised recording session of the song, "Jo Meray," which featured in episode 3 of season 2 Coke Studio Pakistan (aired on July 12, 2009), is available for viewing on YouTube at https://www.youtube.com/watch?v=YjehYh8N1iY.
  - 6. See https://centerstageus.org/
  - 7. See http://dostimusic.org/
- 8. An example of a Dosti Project video featuring Danish Khawaja and Zeerak Ahmed (AKA Slowspin) performing the song "Patience" can be viewed on YouTube at https://www.youtube.com/watch?v=W6IN6-oMkdg.

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