Remixing Music Together: The Use and Abuse of Virtual Studio Software as a Hobby

Phillip Brooker and Wes Sharrock

Remixing and producing music in a virtual (digital) music studio is, for some people, a career (i.e. writing a jingle for an advertisement, a film score, or similar), and for others, it is a hobby with no such defined goals and no defined methods with which to undertake it. For hobbyists, there is a notable lack of dependency on being able to produce a finalised end-result, and a notable lack of tried and tested routines for producing results. This chapter presents various aspects of ‘constructing a remix’ as a leisure activity, where there are no guidelines or restrictions on the ultimate end-result (i.e. there is no ‘ideal song’ to orient the day’s efforts towards), few abiding standards on either what a desired outcome may sound like or the methods by which such a remix may be generated. This analysis concerns how an activity in which those involved have no real dependency on the outcome (other than their own enjoyment) is ordered and organised through the use of available technologies and the management of creative ideas.

Hobbyist remixers and music producers may: collaborate remotely as well as in person; use piano-keyboard instruments to input musical ideas as well as programming them in with computer mice and qwerty keyboards; take samples of existing audio pieces as well as composing their own; utilise software that enables them to play at performing and recording music as well as producing, mixing and mastering it; focus intently on one piece or less intently on a broad array of half-ideas; and so on. Hence, the activities collected under the term ‘remixing music’ are legion, and the activities themselves may be very broadly defined. Yet somehow, despite the limitless horizons where no defined end-product is set apart as the-thing-to-be-achieved, hobbyist remixers are able to produce a song. In this remixing, limitless possibilities are honed down to concrete details, and aims to examine some of the practices through which the end-result of ‘a completed remix’ is achieved.

We focus on the activities and practices in a collaborative musical project involving constructing a suitable entry for submission to a remix competition, through utilising various software packages to manipulate and reformulate an original piece of music into a further original audio creation. These activities involve the principal author (PB) and a friend (LC), whose shared (and collaborative) hobby is designing virtual instruments and using those to assemble pieces of music1.

Two software packages form the basic tools through which this is achieved. The primary tool (program #1) is a virtual music studio package, which provides,

1 The end-product of this activity is available to interested readers online, at: http://snd.sc/ztxWHe
amongst other things: a selection of digital ‘synthesisers’ (some designed to emulate analog sound synthesis and some more unashamedly digital); rhythm sequencers for drum and loop programming; sampling units for playback of audio files from outside of the software package itself; a variety of sound effects units (including reverb, distortion, phasing, delay, etc), and; auxiliary ‘equipment’ such as mixing desks, merger/splitters, equalisers, compressors and stereo imagers2. This package also facilitates the generation of musical arrangements, and users can input musical phrases (through either the computer’s mouse and QWERTY keyboard, or a MIDI-enabled piano keyboard controller connected to the computer) into the program and structure them into whatever arrangement they choose. Having done so, structured ‘songs’ can be played back, listened to and analysed within the package, and can be converted to Waveform Audio File Format (.wav) files that can be treated as any other digital music file (i.e. they can be listened to, loaded onto portable music players, shared online, etc).

The second package (program #2) is for editing audio samples and loops to be used in the first. It is the use of this package particularly that forms the basis of the activities under investigation in this chapter.

The principal author and LC entered a remix competition hosted by a band, wherein competitors were to download ‘stems’ of an original song by that band, and reformulate them, tweak them, add effects to them, re-structure them, incorporate their own audio additions and so on. Here, the term ‘stems’ refers to audio files of an original track, broken up into its component instrumental tracks. Hence, the ‘stems’ being dealt with in this activity were six different files, each containing the recorded audio of separate instruments (i.e. bass guitar, drums, lead guitar, rhythm guitar and two vocal tracks). The ultimate aim here was to create a new version of the original song that is sufficiently audibly distinct from it, yet retains identifiable features of it. The competitive element is that the stems of this original song had been made publicly available, and the band who initially recorded it had offered to pick their favourite remix entry to feature as a B-side on the officially released single version of that track. The ‘play’ here then is in the competitive nature of the task, and in the creative re-working of an original song out of its component parts. The fun is in the manipulating of old material into something creatively ‘new’ (and traversing the technical difficulties involved in doing so - literally, coercing the software into processing the given audio inputs in the ways desired), and in the addition of personal stylistic ‘flourishes’. Although the audio stems were to some extent ‘untreatable’, in that it was impossible to create sounds from those stems that were not present in some form in the original audio files, much could be done to them to make them sonically distinct from the original song they came from. For instance, the remix

2 We apologise for the possibly gratuitous use of technical terms, although we feel this brevity necessary in the interest of providing an account of the activities and practices involved in collaborative remixing as opposed to a lengthy description of the functions available in a virtual music studio software package. Readers wishing to learn more about some of the more esoteric items listed above would do well to refer to Izhaki (2008) Mixing Audio: Concepts, Practices and Tools, and Owsinski (2008) The Mastering Engineer’s Handbook (2nd edn.).
in question ultimately featured, amongst other things: layered stems with new melodic and rhythmic ideas arising from the counterbalance of re-structured original material; the loading of stems with ‘digital-sounding’ effects so as to distance their remix from the original conventional band setup recordings (which featured a singer, two guitarists, bass guitarist and a drummer); loops and samples taken from guitar parts and vocals, both sped up and slowed down to create cross-rhythms between stems that differed from the original; the more prominent use of less identifiable guitar sections (i.e. textural sounds) as achieved through altering the overall mix of amplitudes of individual tracks, and so on.

Though this remixing enterprise was competitive, this particular remixing activity was treated as ‘low stakes’ – though the drive to produce something of ‘winning quality’ (an endeavour which required the technical know-how of how to use the two software packages as well as the musical creativity necessary to produce something audibly appealing) and an idea of what such a thing might be was a goal to bear in mind throughout, the principal author and LC did not depend on their entry being chosen as the winner. Indeed, the principal author and LC have previously on several occasions downloaded stems from other remix competitions and worked them up into half-songs with unfinished ideas. As such, the main play was simply in the making of the song itself.

We turn now to some features of the practices involved in collaborative remixing descriptions and to do so we draw on ideas from a corpus of video data collected by the principal author, capturing both the action and interaction occurring before the screen (i.e. between the principal author and LC) as well as on-screen (through use of video screen capture software)\(^3\). Firstly, we look at how creative ideas are (and can be) gradually honed down from a vast array of possibilities, which is an activity made feasible through building up a familiarity with the catalogue of available components. Secondly, we analyse how the activity is shaped by the definition of the music-to-be as specifically ‘a remix’, and what that means for the practices that are undertaken in light of that definition. Finally, we present a more fundamental problem for the study of members dealing with sound – how specific audio ideas and concepts are communicated between members who have no standard techniques for reproducing exact sounds vocally or otherwise. Through analysis of these three features, we hope to come closer to an understanding of 1) some of the defining aspects of ‘a remix’ and how these aspects inform the practical collaboration of the activity, 2) how the activity is gradually made more and more ‘realisable’ through the iterative developing of approaches to it, and 3) some features of the collaborative talk surrounding the activity that contribute positively to its completion.

1. **Managing the preservation of ‘identifiability’ with the display of creativity**

\(^3\) It should be noted that the transcriptions we present are not to be read as exercises in Conversation Analysis. Rather, we have simply aimed to review and represent the practices and activities discussed with as much reference to the actual goings-on of the setting as possible, and this is reflected in the loose (although we hope informative) transcripts provided.
To return briefly to the underlying motives to the participants’ remixing activities, one salient feature of a remixed version of a song is that the remix should be a creatively and structurally new piece but one that retains elements of the original song in some form – either literally sampling the original song itself, or ‘re-composing’ identifiable features of it (a melody, a bass line, a drumbeat, etc) with different instrumentation, or both. Hence, the activity is oriented to the re-use of old materials in creatively new ways, and this objective is reflected in the remixing. For instance, although the principal author and LC did not use the original drums or bass guitar, the constant endeavour was to keep the original song recognisable through use of other elements, such as a melodic guitar riff, or a sung vocal line. There is an ever-present objective of making the remix sound sufficiently different from the original song (otherwise, why bother?), yet not so different that it is unrecognisable as a remix (otherwise, the activity would have to be reframed as ‘composing original music’). Aside from their audible appeal to the principal author and LC (as discussed in the following section), part of the motivation to choose which parts to keep and which to discard was centred on the issue of what makes the new composition recognisable as a re-working of the original song. The constant questions throughout were: will listeners (and the band themselves, as judges of the competition) be able to recognise the original song through our reformulation of its component parts? And how can the sounds of these original elements be altered to mark them out as creatively new, while still retaining a sufficient degree of recognisability in the overall composition? The activity at hand was not to create entirely new music but to create a remix of a band’s song that is of high enough quality to be suitable for submission, high enough possibly even to win, in a remix competition, and this fact gave direction to the participants’ approach.

It is useful at this point to outline some features of how exactly this space between the “identifying details” (Garfinkel, 2002, 222) of parts and the creative aspects of remixing is achieved in practice. Key to the activity is that the song – any song – features certain recurring motifs prominently, which count as the most identifying details of that song. This is to say that had you heard the song yourself and someone asked you to sing ‘how it goes’ (inclusive of how, say, a guitar riff sounds as well as vocal melodies and lyrics), these are the essential parts that you would choose to sing – it is this fact that makes such details identifiable to remixers and ethnomethodologists (and anyone else) alike. Hence, part of the activity of remixing is to listen to the original song as a song, to identify these details and take those as a basis for reconstructing the song into a new piece. For the principal author and LC, such a listening to the song provided a sense of the places of individual components in the wider structure (i.e. the guitar line in the verse, the textural noise in the intro, and so on) and as they occurred in relation to other components (such that it is recognised that the guitar riff might be the most easily identified detail of the song, or that the snare hits of the drumbeat are what gives the song its particular swing). Thus, a listener’s perspective is required to provide remixers with an initial set of guidelines from which to continue their remixing, setting the context and conditions of the overall recognisability to be preserved. Additionally, listening
this way draws attention to those details of the song that aren’t immediately identifiable (say, an introductory texture that is not repeated throughout). These non-immediate details themselves may also hold some interest for remixer, in that they make up the *underplayed* elements of the original song, less identifiable but which may be interesting to turn into something that holds a more prominent focus in the remix.

However, taking such identifiable (and perhaps also overtly less identifiable) details is not quite enough for a remix – if the remix is to be more than a simple looping of particular identifying details, these elements must be creatively changed, and can be done so in countless ways. This could be achieved, for instance, through layering them with sound effects (chorus, delay, reverb, distortion, etc), or stretching them out or over longer periods of time (or shortening them), or changing their pitch, or panning them (i.e. changing the extent to which the sound plays through either the left or right speaker or headphone), or filtering out specific frequencies (i.e. bass, mid, treble), or playing them backwards, and so on. Additionally, the choice of tool – a digital music studio – provides the most striking means of differencing the remix from the original band recording, allowing for the making of stylistic decisions to emphasise and give prominence to the ‘digital’ or ‘glitchy’ sounds that can be produced by such software but not by the band’s original setup of guitars, bass guitar, drums and vocals. However, such creative changes must be balanced against how much of the identifiability of the original material is preserved, in that it is possible to disfigure samples to such an extent that they are no longer identifiable as anything other than newly produced material. For instance, imagine a sample of a sung chorus so saturated with distortion (literally, the controllable degradation of sound through ‘overdriving’ analog equipment, or through digital signal processing to emulate analog distortion) that it is impossible to discern any remnants of the original melody, words or tonality of the voice. Hence, remixers have to identify various details of the original song which they might want to include, whilst being careful to adapt and modify their sound in ways that ensures they stay identifiable.

Identifying details and creativity also become apparent when structuring a remix into a cohesive song. It is not a stipulation of remixes that they must feature an identical structure (made up from elements such as intros, verses, choruses, bridges, outros, etc) and as such, remixers can create new structural arrangements of songs so as to distance their own output from the original song. In this case, the participants built up an arrangement that differed greatly from the original song, but in such a way as to ensure its identifiability through more than just the careful re-use of stems. Taking one identifying detail, a guitar motif, as a basis, its melodic and rhythmic ideas were programmed and played through an original synthesised instrument designed by the principal author and LC in program #1, so as to recycle this particular motif on a different instrument. However, to make this more recognisable as a remix, the principal author and LC positioned the inputted motif as a ‘build-up’ to a final section, as an attempt to create a different ‘feel’ out of the re-use of these original materials. In this section, the melody played is an identifying detail of the original song (although
the instrumentation it was recreated on is, notably, not), but as opposed to positioning this piece as in the original recording (where it was used to draw the main riff to a close), it was repeated in a loop, gradually including more and more instrumentation – some from stems, some newly composed – thereby creating the effect of a more gradual build-up to a finish. Again, this serves to retain an identifying detail of the original song – a melodic line – whilst changing other details – chiefly, this melodic line’s structural role and its instrumentation. Hence, the effect is to produce something that can be recognised as specifically a remix of the original song and not some other type of composition (say, a new song, a cover version, a promotional ‘teaser’, etc). It is through the careful management of these audio classifications (i.e. original identifying details vs. new creative details) that the remix gradually begins to take shape, and the original stems start to sound recognisably different as part of the remixing of them, to (what is hoped will be) pleasing effect.

2. *The remix as a ‘potter’s object’* 4

![Figure - Listening to, selecting and writing an index of a catalogue of sampled sounds.](image)

To begin the remixing activity, the first thing the principal author and LC turned to was a discussion of how best to approach the material at hand, and it was agreed that a better understanding of where to begin could be achieved through listening to each of the available stems and reconstructing the original song from

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4 (Garfinkel, Lynch and Livingston, 1981, 137).
them. This in itself prompted a discussion of how the available software packages might be used to achieve the desired result:

**Excerpt 1**

LC: “I think... a *good* thing to do might be to... erm... if you cut the start off the drums, yeah? And then note where—exactly what time that is, and then cut everything else at the same point.

PB: “…yeah.”

LC: “Then it’ll all be in time then.”

PB: “Weren’t we going to... fuck the drums off altogether?”

LC: “Yeah I know, but, the drums are obviously in time aren’t they?”

PB: “Yeah.”

LC: “At all times...d’you know what I mean? It’s a nice...like...sharp peak of a sound that (program #2) would pick up nice and easily.”

PB: “Yeah, it will...So, do the drums first...”

Here, LC’s suggestion of cutting out elements of the drum stem was regarded by the principal author as a possible waste of time, relating to a previous day’s discussion about programming a creatively new drum sequence against other stems, since a programmed beat would be more malleable than one derived from an audio sample (in terms of making variations on it). However, in the interest of generating some creative momentum - to keep the task moving in some way or other - and given the principal author and LC’s belief that program #2 could accomplish this task with little fuss, the practical activity of reconstructing the original song became the first task at hand, despite having already agreed not to make use of each of the individual components being dealt with.

Having then edited the drum stem, the principal author and LC moved on to listening to and reviewing the stems of one guitar part. This revealed a multitude of possible exciting ways in which to manipulate the source material, heralded by the activity of listening to the guitar part and making use of program #2’s ability to automatically detect component ‘slices’ in audio files given a user-inputted level of sensitivity. This function of the program facilitated a collaborative listening to individual sections of audio, which are contained in groups of slices.

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5 Although there is undoubtedly much to say on the matter, this chapter will not attempt to broach many of the more fundamental agreements surrounding music-making that the principal author and LC share. For example it is taken for granted by both remixers that the remix should: be based around assonant compliances with Western major and minor scales; feature specific kinds of structural arrangement; represent a broad range of frequencies (i.e. with some instruments focussing on bass frequencies, some on treble, and some in between) and that these frequencies should be mixed accordingly; have a tempo set to a ‘listenable’ pace (and what exactly ‘listenable’ might mean) and so on. All of these things are agreed on by the principal author and LC without any explicit acknowledgement. How this is done is undoubtedly relevant to the activity at hand, but will require a different approach based on more than the few hours of video of two members in one setting that we have at our disposal.

6 Program #2 allows users to chop audio files up into individual ‘slices’, which can then be arranged to preserve the original temporal order or otherwise in program #1’s looping device. Hence, a slice refers to the level of granularity of an individual drum hit in a 4-bar drumbeat, or an individual guitar chord in a longer chord sequence, or an individual word in a vocal chorus, and so on.
(see figure 2). At this point, the talk turned to how appealing (or not) certain sections of stems were, in terms of what could be done to and with them as part of a broader remix:

![Audio waveform](image)

**Figure** - A guitar track in program #2. The black lines intersecting the blue audio waveform are ‘slices’, which can be placed manually with the cursor or automatically using the slice sensitivity slider (‘sens’) near the top left of the screen.

**Excerpt 2**

PB: “Do we want this? [Plays a series of slices] I want that as well.”
LC: “Like, chops of that?”
PB: “Yeah, yeah.”
LC: “Yeah, I’d like that.”

**Excerpt 3**

LC: [Plays a long slice] [Commenting on the guitar playing evident in the slice] “That was a strange drop wasn’t it?”
PB: “Hmm?”
LC: “I don’t think I want any of that.”
PB: “I don’t.”

At this point, the principal author and LC scrapped the idea of listening to stems for which a representation in the ultimate remix was not intended – for instance, the drum and bass guitar stems, on the dual grounds that retaining these elements would restrict the vista of what could possibly be done with the structure of the remix, and that it would be more audibly interesting to program in creatively new and different bass and drum patterns. Reassembling the track

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7 ‘Chops’ is a term sometimes used interchangeably with ‘slices’, and sometimes used to refer to a level of granularity above ‘slices’ but below ‘stems’ (for instance, a whole guitar riff, or a sung verse). Confused (with good cause!) readers should refer to the later section of this chapter that deals with the development and usage of such impressionistic impromptu slang in order to see what sense, if any, can be made from it.
from the available array of component stems in the hope that this would
generate ideas was already being achieved, more easily and quickly, through
focussing on only those stems that were actually planned for usage. Moreover,
though reconstructing the song as originally planned would serve as perhaps the
most systematic way of preparing to assemble a catalogue of candidate sounds,
this was nonetheless a laborious task which was ultimately abandoned for this
less rigorous, but more fun, way of doing things:

Excerpt 4

[Listening to slices]
PB: “I- I reckon we just get these as chops and not bother about reconstructing
the song.”
LC: “Yeah, I reckon as well.”
PB: “We got ideas already.”
LC: “We probably won’t need to reconstruct any of it, actually…”
PB: “No.”
LC: “…thinking about it, so...which is good, I’m glad we’ve listened to it
through now.”
PB: “Yeah, yeah.”

At this point, the principal author and LC began to write down which sections
were most audibly appealing in terms of generating creatively new material, so
as to be able to quickly refer back to these sections and ‘rip’ (i.e. isolate) them
from their parent audio files after the listening activity was over. These short
episodes of talk and activity, spanning roughly ten minutes in total, see a
movement towards reconstructing a song from stem components, which
necessitates a closer listening to them, and playing with them, and ultimately
moving ‘off-task’ when the talk turns more towards which parts to take from one
of the guitar stems. In diverting from the original task onto a more fun
collaborative activity – a discussion of which elements of the stems are most
audibly appealing – a new focus is developed that both counts as a positive
contribution towards the assembling of a catalogue of sounds from which to
construct a remix, as well as being more enjoyable than the technical task of
reconstructing the original song.

What the presentation of this ten minutes or so of plan-formulation and
first-steps is intended to demonstrate is despite having absolutely no guidelines
- no clue even! - as to how the eventual remix might or should sound, the
principal author and LC can methodically begin to hone down the limitless
possibilities into something that will contribute positively to the activity. Whereas
the stem tracks are, as yet, unfamiliar fragments of audio (making it difficult to
choose exactly which parts are or are not appealing), it is possible for the
principal author and LC to rely on a shared prior knowledge of the virtual studio
as a tool. The principal author and LC have collaboratively made music with
these software packages since 2010, and in doing so, have learned how to make
use of the devices and functions it offers. Having built a repertoire of fifty or so
songs using these software packages – some finished, many not - the principal
author and LC consequently have a good idea of how to use each piece of
software to make the kinds of music that hold personal (and shared) audible
appeal. This practice at the craft of the hobby strikes an obvious similarity to Sudnow’s development as a jazz pianist:

“I recall playing one day and finding as I set out into a next course of notes...that I was expressly aiming for the sound of those particular notes...that I had gone to do them, as when walking you bring ‘attention’ to the sounds of your steps and thereby, by the same token and with that very ‘act,’ you begin to expressly do the soundedness of your walk.” (1978, 37)

This familiarity with the tools of the principal author and LC’s music-making brings about “A different sort of directionality of purpose” (Sudnow, 1978, 38), and a “melodic [and rhythmic, and structural, and tonal, and so on] intentionality” (Sudnow, 1978, 41), which serves to helpfully constrain the ways in which the activity (might) be approached. Given this, repeated listenings to and commenting on the stems and the instrumental sections within is part of an iterative process to come up with ideas of what this remix should sound like, in the name of generating a catalogue of candidate slices with which to achieve that sound. Although not all candidate slices were used, assembling the catalogue allowed for the development of a clearer sense of the musical ideas the remix could feature, and this was a positive step in moving towards a finished piece of music. However, this is not a step in the sense that having assembled a catalogue it can be confidently claimed to be finalised – the principal author and LC may at any point find need for slices that had not yet been ripped from the stems (as they did), necessitating a return to the original stem to add to the catalogue retrospectively. However, the fact that assembling such a catalogue of pieces relies on vaguely ‘feeling out’ the way towards possible ideas and sounds through playing with them does not make the activity redundant. Rather, the activity is a musical version of the ‘potter’s object’ (Garfinkel, Lynch & Livingston, 1981, 137), which refers to how a potter might embark upon creating an object from a lump of clay without being sure of what is to be made from it. A potter can start the wheel and begin shaping the clay while unsure as to what the result will be, but having started working the clay, the potter can begin to ‘feel’ an object residing somewhere within the raw material. As the shaping gradually unfolds, so does the object itself, and the potter can come to an understanding of what-is-to-be-made from simply starting to make something and using his hands in the familiar ways of ‘making’. In much the same way, the principal author and LC are able to work up a finished remix out of the collected elements of an original song, by beginning to assemble a catalogue of sounds to use as an initial ‘jumping-off point’ from which to start thinking and talking increasingly clearly about the kinds of thing that could be done with the burgeoning collection of slices.

Assembling the catalogue, then, is simultaneously a ‘finding out’ activity (in terms of the principal author and LC finding out what exactly what could be done) and a ‘generating materials’ activity, where the two proceed in tandem and refer to each other constantly. This is achieved through first listening to stems, then writing down which elements hold some audible appeal, and then finally ripping these elements from their parent audio tracks. The reformulation of the ever-provisional plan from reconstructing the original song to taking
candidate slices is not simply a choice between two possible-though-arbitrary starting points. For the principal author and LC, the immediate goals of the plan, at first, extend no further than being able to reconstruct the song – a strategy which is not followed to completion. The decisive move is when the listening to and playing with guitar sounds becomes more productive (in terms of the grander goal of creating a remix) than the original plan to reconstruct the song, and this avenue becomes the one on which to focus in order to move towards achieving this goal. Moreover, each of the choices being made has important limiting implications for how the remix is ultimately to be done. For instance, a decision is made not to work with the drum stem provided and this has the consequence that it will be necessary to input a creatively new drumbeat, giving the principal author and LC the choice as to whether or not to feature a different beat to the original (perhaps emphasising a different ‘swing’ or perhaps in a different time signature). It is also decided that the bass guitar stem will be disregarded and this has the consequence that the bass frequencies will be under-represented unless new creative ideas are generated in that specific frequency range, perhaps not following the original melodic and rhythmic ideas featured in the bass-line, and perhaps making more use of the synthesiser tools that are available when creating synthesised bass instruments. A decision is made instead to take elements of guitar and vocal tracks only and this has the consequence that those elements can be turned into looped sections (literally, looping them at specific points so as to create an interesting ‘stop-start’ feel to them), or layering them with sound effects, or altering their pitch and speed in audibly appealing ways. For the principal author and LC, merely playing with the available sounds and deciding which parts of a song are of most audible appeal (and which might be happily disposed of) makes early decisions as to how the wider activity of remixing a song might be approached. Although these decisions are far from concrete at this stage, they nevertheless tighten the boundaries within which the rest of the remixing can take place, in such a way as to render the task actually achievable against its background as a daunting, limitless field of activity.

3. Talking about (and with) audio ideas

When developing, trying out and playing with musical ideas for the remix the principal author and LC are inevitably drawn into communicating these ideas to each other. Indeed, the ‘doing together’ of collaborative music-making and the sharing of a common interest in making music (both of which feature talking as a necessary though enjoyable element) is part of the fun of the activity. However, given that all of these ideas ultimately refer to a specific sound to be achieved, it becomes necessary for the principal author to develop pieces of ‘impromptu slang’ to facilitate communication. There is no ready-made vocabulary at hand, and hence the principal author and LC have fun playing at developing an impromptu slang out of various audible identifying details of the sounds at hand:

8 The elements of talk parenthesised with asterisks are to indicate where the speaker has made a noise outside of standard English language usage. This is to say that these utterances are unlikely to be understood outside of the context of their utterance, which hopefully will not present too much of a difficulty for readers.
Excerpt five demonstrates some of the features of how the principal author and LC develop impromptu slang terms and incorporate them into any discussions that may follow. Here, the activity is one of listening back to a stem track to identify candidate slices to take from it, and LC interjects with the noise *dwerrrr*, which refers to the slice just heard. In replaying the slices through the computer speakers, both the principal author and LC can hear the same thing. As such, the sequentiality of the event – the hearing of a noise and then LC’s vocal repeating of it – marks it as one to direct the principal author’s attention to the slice containing the noise just played (although notably, not the noise just vocalised by LC). As the sequence of slices continues to play, LC interjects again, referring to one of the panorama of noises just heard by both members (the “that” of LC’s “I quite liked that bit”). As yet, the exact noise to which LC refers is not known by the principal author, in that it could be the *dwerrrr* which LC chose to emulate or some other noise following it. At this point, LC pauses the playback of the sequence and selects a single slice for a more focussed repeated listening. The principal author then adds to the discussion with a claim as to the possibility of synthesising the noise just heard (“We could do that.”), although exactly which “that” that could be done, is not clear from the video data alone. This brings up the possibility that the principal author and LC may in fact be talking about different noises, and LC reorients the conversation to the noise to which he is actually referring by replaying the slice itself, and repeating the noise vocally (*Tcka-tck*). His talk here – “This? Not that.” – is a question designed to reorient the principal author to his “this”, assuming that it is the wrong “that” to which is being referred (i.e. another noise, perhaps the previously heard actual and vocalised *dwerrrr*). Having heard the noise as played in the slice, and as confirmed as the-noise-to-be-heard through LC’s vocalisation of it, the principal author concurs with LC’s liking of the noise, and LC offers a further confirmatory description demonstrating that the topic of discussion is now, conclusively, shared – the topic is the noise that is “Sounding quite percussive”. What this shows is how the principal author and LC begin to express ideas to each other that exist, for their simplest referrals, in an audio realm (as opposed to being ‘easily spotted’ on-screen visually). Here, the principal author and LC draw on such resources as vocally reproducing identifying details of sounds, as well as relying on features such as the sequential unfolding of events coupled with the use of grammatical indexicals (i.e. when LC asserts that he likes “that”, the “that” to which he refers is to be taken as having only just been heard) and with resources provided by program #2 itself (i.e. the ability to replay individual slices for repeated listening).
Two notable ‘types’ of talk about audio ideas can be drawn from the analysis of the collected video data. Whilst all the talk presented here involves the discussion of audio ideas and things that the principal author and LC can hear, clearly such talk takes contextual cues as to what resources are available to facilitate discussion. For instance, there is both talk about noises which have identifying details that allow them to easily be vocalised, and talk about noises which do not so readily support such reproductions. With the former, the principal author and LC can rely on features of the noises themselves (and their accompanying vocal emulations) to support the discussion, whereas with the latter, other resources must be drawn upon. To further elaborate, two excerpts are presented:

**Excerpt 6 - Using impromptu slang**

[PB plays through a series of slices as identified by program #2’s automatic finding function]

**PB:** I’m happy with *chocks* like that. [Replays the first set of two slices that program #2 has divided the *chocks* into]

**LC:** Yeah, don’t cut that [points to second set of *chocks*, which are undivided] any further.

**PB:** [Moves cursor over the first – divided – set of *chocks*] So, you happy with that?

**LC:** That’s fine.

**PB:** Do you want me to delete this?

**LC:** Er, no?...Cos...play the- play the two separate ones...like...

[PB Plays the two divided *chocks*]

**LC:** *T’p. b’p.*

[PB replays the two divided *chocks*]

**LC:** I dunno.

[PB continues replaying each of the divided *chocks*]

**LC:** Doesn’t ma-. We won’t use that. I can’t imagine it.

**Excerpt 7 - The availability of on-screen resources for clarifying grammatical indexicals**

**PB:** [Moving slice dividers around the screen] Are they about...even?

[PB replaying slices in background]

**LC:** Actually, yeah, go on, do that again.

**PB:** What, just backwards?

**LC:** No, just th- play- play those two again.

**PB:** Which two sorry?

**LC:** The two you just played. They’re the same.

**PB:** I- I don’t know.

**LC:** Oh right. [Pointing to last slice then first slice] L- I think it was the first one last one.

[PB plays the slices LC pointed to]

**LC:** [Pointing to last slice then second slice] No, first one second one.

[PB replays last slice and second slice repeatedly]

**LC:** [Pointing to last then second slice] That’s like a more in tune version of that one.

There are significant contextual differences between the talk in the two excerpts above which frame how each instance of talk unfolds, such that what is being talked about dictates (to a large extent) the available resources for talking about it. Excerpt six deals with an instance of talk about a noise with an easily
identifiable detail (*chock* - a percussive noise produced by a guitar when the strings are muted then struck). This particular noise – the *chock* – is easily talked about precisely because it is easily picked out from the other surrounding noises. Hence, the principal author is able to vaguely vocally reproduce the noise for LC to orient the talk to the topic of the only recent occurrence of the *chock* in the current playback activity. By contrast, excerpt seven (which could be characterised as a ‘trying’ sequence featuring multiple ‘tries’) is not so easily talked about by reference to the audio qualities of the noise in question. This is because each individual noise in this sequence is, broadly speaking, similar to the last, and this presents a difficulty in LC’s attempt to orient the principal author towards the two particular slices he wants to have replayed. The topic of talk here is about an eight-slice sequence of a vocal melody, and although the melodic features of the slices show changes in pitch (i.e. the note being sung) over the course of the sequence, some slices play sounds that are in fact at the same pitch. Hence, the major audible differences between these slices are more to do with the lead-ins and tail-offs from and to the preceding and following notes, which may feature quick transitions (rises and falls) between pitches. It is these lead-ins and tail-offs that identify each slice as unique. For the reasons outlined above, the origins of this eight-slice sequence as a sung piece do not make it any easier for LC to vocally reproduce the desired noises for the purposes of an explanation. In this case, simply singing the notes of the two slices is not enough to cause the principal author to understand exactly which two of the note-bearing slices is meant, since any attempted reproduction of the very subtle identifying details of slices – the lead-ins and tail-offs – might go unnoticed. Hence, given the unavailability of a definitive vocal reproduction as an explanatory resource, LC coerces the principal author into an understanding step-by-step (see figure 3). First, he relies on an indexical term (“play those two again”), then refines this with a temporal attachment (“The two you just played”), then directs the principal author’s gaze towards the relevant slices through pointing and referring to their position in the whole sequence (“first one last one” and “No, first one second one”). The decisive move in the explanation is LC’s visible pointing to the two desired slices, which results in the principal author’s successful understanding of which ones to repeat. At this point, a comment on them is made (“That’s like a more in tune version of that one.”), drawing the activity of ‘communicating which two slices are the topic’ to a close.

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9 It is interesting to note that LC’s pointing and talk about which slices he means does not seem to tally up on first glance in the video data, in that he refers to the order of slices in reverse. The principal author’s replaying of slices follows LC’s order of pointing rather than the order suggested by his talk (which is the reverse of what might be expected, in that it plays out as a right-to-left reading of the slices as they appear on-screen). This reversal, where a said first is a visual last and vice versa, is a possible result of the principal author’s last action prior to the talk having been to play the sequence of slices in reverse, in which case LC may be referring to a sequential order not based on a visual reading of on-screen slices, but on a temporal understanding of the actions the principal author has just performed (i.e. playing the slices in reverse). However, this posited explanation is not drawn entirely from the video available.
What the presentation of these excerpts (and the accompanying storyboard of excerpt 7) is intended to show is a few of the different features by which the principal author and LC communicate audio-based ideas to each other (which itself is a practice that informs the kinds of collaboration that produces musical compositions of varying kinds, including remixes). In excerpt six, it is, in principle, possible for the principal author and LC to refer to the properties of the noise in question through use of the technical language relating to music composition. Here, the principal author and LC could rely on purely technical verbal description, calling that noise “a sequence of two muted percussive semi-quavers”, and from thereon use those descriptive properties in the discussion. But such a protracted description is not considered for use, despite both the principal author and LC being capable of sharing an understanding of what those technical terms might refer to. Rather, the principal author and LC pick out the salient audio features from the surrounding audio ‘mess’ (where lots of other audio things are going on simultaneously) and put those into words. The “sequence of two muted percussive semi-quavers” (or any other such description) becomes a more palatable “*chock*”, and it is the “*chock*” which is referred to from that point on. However, not all of the talk is so easily boiled down to identifiable details of various noises, and in cases where it is more difficult to differentiate between a corpus of noises to find specific ones, other resources must be referred to in order to facilitate any discussion. These include visually-directing gestures (i.e. pointing at “those two”) and the temporal history of events (i.e. “The two you just played”). Here, the principal author’s confusion is resolved through a gradual refining of terms, until there comes a point where an understanding is achieved. LC attempts an explanation based on one set of resources, then evaluates whether the principal author has understood or not.
When it’s clear that no such understanding is achieved, he calls upon another set of resources to try another and then yet another (ultimately successful) means of explanation.

The point to be drawn here is that for both remixers (and ethnomethodologists) it is not so easy to talk about or understand ideas and concepts that take their ultimate shape in a purely audio field, and the principal author and LC rely on a “mutual tuning-in relationship” (Schutz, 1976, 161), whereby one of two people recognises and situates the actions of the other to frame their own. In much the same way, the principal author and LC are able to collaborate, drawing on an existing set of shared knowledges – what Schutz calls a “preknowledge” (1976, 168) – which is used to structure the unfolding interactions. Hence, what each of the three presented excerpts demonstrate is how the practices of listening to stem tracks as part of constructing a remix involves a reliance on various shared knowledges, using both common features of ordinary language (i.e. indexicals, temporality, sequentiality, etc) and various ‘technical’ terms, some of which may be developed on-the-spot and embedded episodically for the purposes of facilitating discussion. The fact that this is achieved naturally and easily highlights what might be taken as one of Garfinkel’s fundamental “preposterous problems” (Lynch, 2006, 487) – given the uncertainty of the possibility of a definitive agreement on the noises being talked about, there is nothing to say that when LC refers to a noise, the principal author understands that reference as referring to the same noise. Put simply, LC’s “*Tcka-tck*” might not be the same as the principal author’s. Yet somehow, the principal author and LC have always found that such agreements on which noise is being referring to are easily achieved, and this is largely because these noises may be considered as the ‘technical terms’ which, when used in conjunction with ordinary language, imbue the hobbyist activity of remixing with a shared and shareable order and organisation.

Although it may at first glance (to non-remixers at least) appear to be a potential source of problems for the activities that principal author and LC involve themselves in, in that these impromptu terms are fleeting and are in no way established prior to being drawn on in conversations, these on-the-spot technical terms are embedded in an ongoing course of action which has its basis in the audio (audible) properties of a given set of tracks. Hence, the use of these terms addresses the problem of having only a limited pre-established vocabulary with which to discuss musical ideas, through utilising the identifying details of relevant audio topics and making onomatopoeic vocal representations of them. How any sensible meaning might be drawn out of the kinds of nonsensical nomenclature that the remixers put to use is in large part due to the fact that the principal author and LC are playing on assumptions about what each other might be able to make sense of. LC is aware of the range of things that the principal author might understand and can appeal to them to communicate ideas, and vice versa. From this point, an impromptu slang is consolidated such that it can even become a topic itself – for instance, should the principal author talk about a “*Tcka-tck*”, LC might ask “do you mean a *Tocka-tock* or a “Tacka-tack*?”, with the answer to that question made possible through the ordinary language of
question-answer sequences as well as the technical language of the noises to which we are referring. As Caton notes, an essential element of hobbyists’ activities is the usage of these kinds of ‘technical language’, which may seem esoteric (i.e. talk about the finer detail of virtual music studio equipment) and bizarre (i.e. the noises we make at each other as part of our talk) to a casual listener. However, in the episodes of talk and interaction presented here, hobbyists such as the principal author and LC “do not find it necessary to devise new kinds of questions in order to cause their colleagues [or collaborators] to explain what they are saying: new questions to be sure, but not new \textit{kinds} of questions” (1963, ix). As Caton notes, “technical language is always an \textit{adjunct} of ordinary language” (1963, viii), and it is this framing of technical terms (which includes both the shared technical vocabulary and any impromptu noises or slang developed throughout the talk) within the broader structure of ordinary language use that ultimately makes sensible meaning of them.

\textit{Concluding remarks}

The aim of this chapter has been to present and unpack some of the features of the order and organisation of a play activity, namely, producing a remix for a competition. Broadly speaking, for the principal author and LC one possible difference between the music-making activities outlined here and music-making as work is perhaps that if the principal author’s and LC’s music was being produced as work, the end result would be the deciding factor as to whether the efforts made had satisfied some set of pre-established objectives. For example, such an objective might be to produce an advertising jingle that could be sold, or even just to produce something that would count as a winning entry in the remix competition. This is to say that should the end result not meet the expectations made of it, the work would not be satisfactorily complete. However, since the activity is one of play, to a large extent the satisfaction with the activity determines the end result – the principal author and LC have had several collaborations not resulting in a finished song - the fun has run its course in the time spent tinkering with fragmentary musical ideas. The principal author and LC may or may not return to these fragments in the future, but the output is, in a significant sense, not the only motivation for these music-making activities. This emphasis on the activity as ‘not-work’ also facilitates the taking of diversions from the music-making activity. At any point, talk could turn in any direction and participants’ activities can step outside those related to music-making. Framing the activity in this way, the practices presented here are ‘low stakes’ – like Sudnow, the remixers are “not tied to the occupation and a need to make a living at it” (1978, 34) - and are treated as such. Nothing would have been lost had the principal author and LC not been able to submit an entry to the competition, and there was no dependence on winning it.

Yet despite this relaxed attitude towards music-making, it is clear that there is a solid organisational basis to it, grounded in the ordinary and technical knowledges shared by the principal author and LC. The motivations of the practical and technical usage of the two software packages outlined above is, ultimately, purely for the fun of it. The fun is in both the creation of a piece of
music built up from selected elements of source materials and the problem-solving required to manipulate those materials into audibly appealing (to the principal author and LC at least) sounds and musical structures. The playful collaboration and the various features therein (i.e. the not-so-systematic approach to the task, the talking about possible things to do with audio files, and so on) is organised around the enactment of various practices relying on all manner of features of shared knowledge, all of which are performed in the name of playfully constructing a remix.
References


