

STORY OF PAN, PART V

THE ART OF TUNING

I DREAMT the cello and I dreamt the tenor bass. So claims original panman ELLIE MANNETTE in this exclusive interview with American pannist ANDY NARELL. Mannette who now resides in New York where this interview was conducted, traces the evolution of the steelpan in this continuing series.

Q: WHAT'S a tuner?

A: A tuner has to have a heck of a lot of patience and the sensitivity and co-ordination of hand and mind. You have to have the craft and the ear and the love and the determination as there are times notes will give you a struggle and you will want to give up on it. But you rest and come back to it and that shows a determination to get that note regardless of the circumstances. Metal also responds in different ways. There are times you expect it and you could predict what is going to happen, but there are times when it doesn't happen. So at particular times, these senses are very important in tuning.

Therefore there are several things which makes a good tuner and you can have all the education you want, but tuning a steeldrum is something different in character. And I have worked with people across the country - all types of engineers, all types of craftsmen and they have said tuning a steeldrum is the most difficult thing they have encountered because they just cannot figure out how you could envision all those patterns in your mind and how you could move your hands in co-ordination and get certain things to happen on the same metal. So I have to say these senses have to come together to make a tuner and I cannot teach people those senses. All I can do in workshops is to give all the details and fundamentals, you understand? But you have to develop those senses, if you can.

Q: Can you describe how you tune a note?

A: Well the first

thing is I will beat the metal down with a hammer. This way I'll level it completely from the bubble it had. Then I'll knock it back up with a softer hammer like a rubber hammer or a piece of wood which is softer than the metal.

You knock the notes back from inside out and you have the convex on it. Then you start to work from around the sides. You don't ever work from the middle of the note. You work from around the side and you start pushing it down with a sliding effect, not a hammer effect. You slide the hammer towards the front from the back towards the middle. Slide the hammer on the metal and around the notes instead of the middle of the note. And as a result of that movement of hands, the note will gradually begin to drop in pitch and you will hear it going down in your ear from C C C - so you can hear the pitch dropping and okay there are times when you try to accommodate a pitch and the metal will not go to that pitch, it goes higher. That means the metal is not relaxed enough so you start the process all over again. You flatten it down and you knock it up again, so you release some more tension on the steel and you start the process all over. When the metal is relaxed and you get it down to the C you need, you check to see if there is any harmonic patterns on it. You might have a new note on it - a plain C with overtones that are wild and crazy all over the note. So you say: What do I have on this note? You check on the C and you might find a D. How

do I have this D? I will have to low this D down but how do I get it? You have to release tension in the back of the note or in the front of the note and by releasing tension, you get inside of the drum and you could release the line. You release the groove line and up, knock it from inside up and that would release the tension and drop the note to a harmonic low.

right down the line. If you take any dumb-sounding instrument and it's not right on pitch, it would not vibrate, it would not sustain, it would not carry. When you put the first harmonic on it, it will start to carry a little bit and I really cannot explain what is the principles involved that carries the resonance. But as long as you get the first harmonic with

did them?

A: Yes for that matter, I dreamt the cello and I dreamt the tenor bass. I was 'obsessed with it. We had a double cello. I came back from London in the '50s and we had the double cellos, I really did not know what to do. I wanted something deeper than what we had between there and the bass line.

So I laid down and I thought in every respect about it and I saw the pattern of the cellos exactly as it is today. And I got up in the middle of the night and I sketched it out on paper just what I saw. I saw the B, the D, the F, the G, A flat, whatever. I saw it exactly as it is and put it down on paper as quickly as I could so I could not forget it. And as I sketched it out, I was working I think at a machine shop at the time, and the next afternoon I came from work, I started laying it out on a graph on a piece of cardboard

I laid it out in the respective patterns and I began to calculate for notes, and measurements like how wide should I put this and how wide should I put that and I came up with it like that. Then I laid it out on paper and I put it on the drum, the measurements and everything. Later on, two or three years after, I still felt that we had seconds, guitars, cellos and the bass too far away. I thought we wanted something in between the cellos and the bass lines so then I thought I wanted another bass but I didn't know what to call it and I did not know how to tune it. So I dreamt I saw the tenor basses and a short bass in between. It was lower down in height than the big barrel and it had more notes on the surface and it had a different tone and I put it on paper and the same thing that I did the cellos, I worked and worked and eventually I got out the tenor bass. So I dreamt those two, I dreamt the cellos and I dreamt the tenor basses.



THE late Rudolph Charles tuning a bass.

Now in so doing, you will create a slackness on the note. So what you do then is to go on the side-lines of that note and you work on the side-lines and you tighten the note. And well that's the first harmonic note. If you become a good tuner then you go for a second or third harmonic. But all of these principles are very difficult to accomplish, you know.

Q: Explain to me why you need harmonic?

A: Well harmonic is the vibration. Okay I can tune a note. I can put a C and you could look at it and see C

the fundamentals, the harmonic will begin to go. I mean the notes will begin to go; it begins to move, to pick up the speed or vibration. And if you can accomplish the second harmonic, it goes faster, it whistles more and if you can accommodate the third harmonic, you can even go much quicker. So harmonic is necessary to accomplish true perfection and also resonance, yeh.

Q: I understand that some of your developments particularly in the early days, you dreamed of before you