Feeling the 5:4 Polyrhythm

by Dennis Winge

Feeling the 5 against 4 polyrhythm is not as easy as feeling other polyrhythms such as 4:3 or 3:2, but it is well worth the effort.

We will use a rhythm map of the lowest common multiple of 5 and 4, which is 20. We are going to start with your foot tapping in 4 while your hand taps in 5. [Note: "tapping in 4" means we are feeling each subdivision in groups of 4 beats, which only results in five taps, and vice versa for "tapping in 5".] First, look at the diagram, then follow the steps below.

unit																				
5 count	1	Е	&	а	2	е	&	а	3	е	&	а	4	е	&	а	5	е	&	а
5 beat	Х				Х				Х				Х				Х			
resulting count	1				2	е			3		&		4			а	5			
count																				
4 beat	Х					Х					Х					Х				

Figure 1 - 5:4 from the perspective of 5

- 1. say the "5 count" above, out loud, slowly, where every syllable is equally spaced
- 2. tap your foot on the beats "1" "2" "3" "4" "5" while counting the above, so that you are now playing the "5 beat" line in the table
- 3. continue tapping and saying each beat aloud slowly, and add the "e of 2," the "& of
- 3," and the "a of 4" so that you are now saying the "resulting count" line
- 4. let your hand tap only the "1," the "e of 2," the "& of 3," and the "a of 4" so that you are now saying everything in the "resulting count" except the "2," "3," and the "4". You will now be playing the "4 beat" line on the table.

Mastering this may require a significant degree of self-discipline to force yourself to go very slowly at first. When you start to feel it, though, you may increase the tempo gradually. When you have mastered the above, we'll move on to the same relationship from the perspective of 5.

Figure 2 - 5:4 from the perspective of 4

unit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
4 count	ta	di	ge	na	ka	ta	di	ge	na	ka	ta	di	ge	na	ka	ta	di	ge	na	ka
4 beat	1					2					3					4				
resulting count	1				ka	2			na		3		ge			4	di			
5 beat	Х				Х				Х				Х				Χ			

To break up our 20 units into four groups, each group has five subdivisions. For this "4 count" we will take syllables from the South Indian musical counting language called "Konnakol." Even though you will have to get used to saying "ta-dee-gay-na-ka" for each subdivision of 5, It is much easier to count this way than to say "1 2 3 4 5" quickly four times in a row. Notice also that instead of x's in the "4 beat" line, we have put the beat numbers in, unlike we did in Figure 1.

Now we are going to do the exact same thing but with your foot tapping in 5 while your hand taps in 4.

- 1. say the "4 count" above, out loud, slowly, where every syllable is equally spaced
- 2. tap your foot on the beats "1" "2" "3" "4" while counting the above, so that you are now playing the "4 beat" line in the table
- 3. continue tapping and saying each beat aloud slowly, and add the "ka of 1," the "na of 2," & of "ge of 3" and the "di of 4" so that you are now saying everything in the "resulting count" line
- 4. let your hand tap only the "1," the "ka of 1," the "na of 2," & of "ge of 3" and the "di of 4" so that you are now saying everything in the "resulting count" except the "2," "3," and the "4". You will now be playing the "5 beat" line on the table.

As a final step toward mastery of the 5:4 polyrhythm, let's have you exploring all four possibilities:

resulting count of 4	1		ka	2		na	3	ge		4	di		
resulting count of 5	1		2	е		3	&	4		а	5		

- 1. Your foot taps in 5; hand taps in 4 as you say the "resulting count of 5"
- 2. Without changing anything your limbs are doing, switch the count to the perspective of the hand's rhythm by saying the "resulting count of 4"
- 3. Next, your foot taps in 4 while the hand taps in 5 while you say the "resulting count of 4"
- 4. Without changing anything your limbs are doing in step 3, switch the count to the perspective of the hand's rhythm by saying the "resulting count of 5"