

## Feeling the 4:3 Polyhythm

by Dennis Winge

Rhythms have to be felt in order to be understood. Feeling the 4 against 3 polyrhythm is not as easy as feeling the 3 against 2 one (cf. my article “Feeling the 3 Against 2 Polyhythm”), but it is fun to get and utilize in your music.

We will use a rhythm map of the lowest common multiple of 3 and 4, which is 12. We are going to start with your foot tapping in 3 while your hand taps in 4. [Note: “tapping in 3” means we are feeling each subdivision in groups of 3 beats, which only results in four taps, and vice versa for “tapping in 4”.] First, look at the diagram, then follow the steps below.

**Figure 1 - 4:3 from the perspective of 4**

| unit            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 4 count         | 1 | & | a | 2 | & | a | 3 | & | a | 4  | &  | a  |
| 4 beat          | x |   |   | x |   |   | x |   |   | x  |    |    |
| resulting count | 1 |   |   | 2 | & |   | 3 |   | a | 4  |    |    |
| 3 beat          | x |   |   |   | x |   |   |   | x |    |    |    |

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” and “4” while counting the above, so that you are now playing the “4 beat” line in the table
3. continue tapping and counting each beat slowly, and also add the “& of 2” and the “a of 3” so that you are now saying the syllables listed in the “resulting count” line
4. let your hand tap only the “1,” the “&” and the “a” so that you are now saying everything in the “resulting count” except the “2,” “3” and the “4”. You will now be playing the “3 beat” line on the table

Slow it down, way down, if you have trouble with any of the above. You will definitely be able to do it, but it may require your self-discipline to go very slowly at first. When you start to feel it, though, you can speed it up so that it becomes more physical than mental. When you have mastered the above, read on.

**Figure 2 - 4:3 from the perspective of 3**

|                 |   |   |   |   |   |   |   |   |   |    |    |    |
|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|
| unit            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 3 count         | 1 | e | & | a | 2 | e | & | a | 3 | e  | &  | a  |
| 3 beat          | x |   |   |   | x |   |   |   | x |    |    |    |
| resulting count | 1 |   |   | a | 2 |   | & |   | 3 | e  |    |    |
| 4 beat          | x |   |   | x |   |   | x |   |   | x  |    |    |

Now we are going to do the exact same thing but with your foot tapping in 3 while your hand taps in 4.

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

Slow it down, way down, if you have trouble with any of the above. You will definitely be able to do it. It’s not a question of “how,” it’s simply a question of “how slow.” Be willing to go as slow as you need to, and then once you get it you can speed it up.

As a final step toward mastery of the 4:3 polyrhythm, let’s have you exploring all four possibilities:

|                 |   |  |  |   |   |  |   |  |   |   |  |  |
|-----------------|---|--|--|---|---|--|---|--|---|---|--|--|
| resulting count | 1 |  |  | 2 | & |  | 3 |  | a | 4 |  |  |
| resulting count | 1 |  |  | a | 2 |  | & |  | 3 | e |  |  |

1. Your foot taps in 4; hand taps in 3 as you say the “resulting count” in the first table “1 2 & 3 a 4” as you’ve done already

2. Without changing anything your limbs are doing, switch the count to the perspective of the hand's rhythm by saying the "resulting count" from the second table "1 a 2 & 3 e"
3. Next, your foot taps in 4 while the hand taps in 3 while you say the "resulting count" from the second table above: "1 a 2 & 3 e"
4. Without changing anything your limbs are doing in step 3, switch the count to the perspective of the foot's rhythm by saying the "resulting count" from the first table: "1 2 & 3 a 4"