

# Keith's Klass

by Keith Rubow

Welcome to the first installment of Keith's Klass in the Zip Coder. I am going to take a look at NESTED CONCEPTS. Simply put, nested concepts is simply using two or more concepts together with one call.

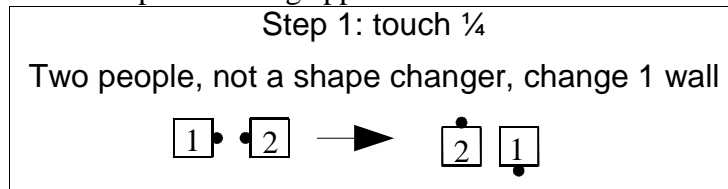
Sometimes using two concepts can be very easy because the order of the concepts does not matter. For example AS COUPLES, TANDEM,  $\frac{1}{4}$  right is exactly the same as TANDEM, AS COUPLES,  $\frac{1}{4}$  right. In either case the whole box of four acts as one solid unit to do the call.

Other times the use of multiple concepts is easy because the concepts only make sense in one order. For example, if you have a butterfly it makes sense to say BUTTERFLY, ONCE REMOVED, circulate. But it makes no sense whatsoever to say ONCE REMOVED, BUTTERFLY, circulate.

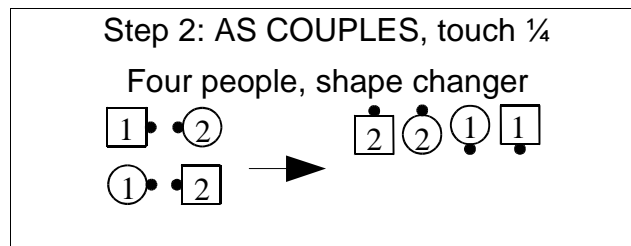
The interesting cases are when the order of the concepts matters. For example, ONCE REMOVED, AS COUPLES, touch  $\frac{1}{4}$  is not the same as AS COUPLES, ONCE REMOVED, touch  $\frac{1}{4}$ . So how do you figure out how to properly execute calls with nested concepts? I'm going to show you how.

When a concept is given, it modifies the call that follows. That seems simple enough. But (and this is very important) it modifies the *whole* call that follows, including any other concepts that call might have. I like to show this with parenthesis, so that a CONCEPT modifying a call is written like this: CONCEPT (call). When there are two concepts, it looks like this: CONCEPT1 (CONCEPT2 (call)). When it is written like this, it is clear that CONCEPT2 modifies the call. It is also clear that CONCEPT1 does NOT modify the call. It modifies CONCEPT2 (call). Now, to figure out how to execute the call we must start at the innermost parenthesis and work our way out to the outermost parenthesis. In doing this we figure out the concepts in the REVERSE ORDER in which they were given.

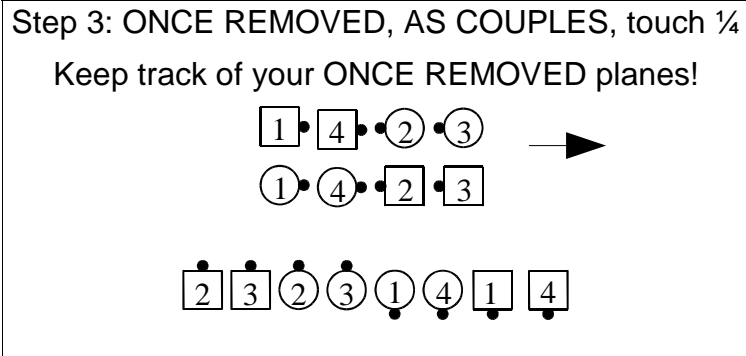
To figure out ONCE REMOVED, AS COUPLES, touch  $\frac{1}{4}$  we must first figure out how to do the call. This seems obvious. But you must understand the call thoroughly. Think about how many people it takes to do the call, whether or not it is a shape changer, what wall do you face at the end of the call, etc. Sometimes you need to think carefully about a call if concepts are being applied.



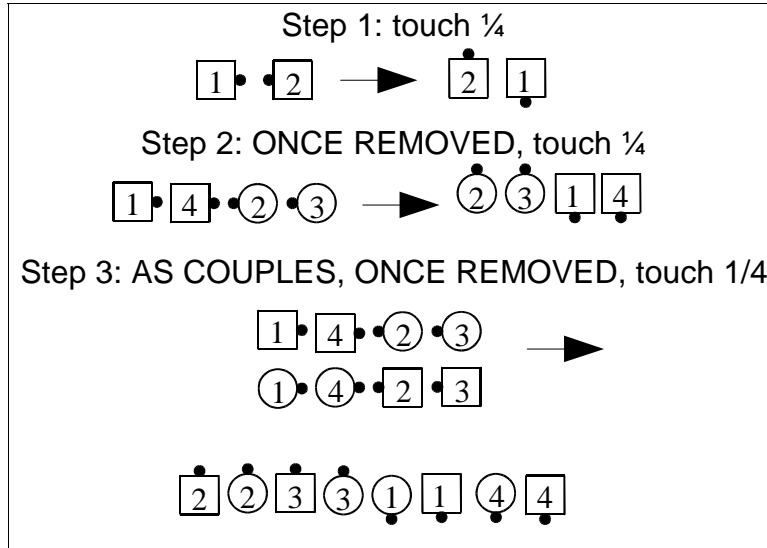
Next we apply the AS COUPLES concept. This was actually the second concept given, but it is the first concept we must think about. Applying the AS COUPLES concept to touch  $\frac{1}{4}$  makes it a shape changer that changes a 2x2 matrix into a 1x4 matrix. This becomes very important when we apply the final concept in a moment.



Finally we apply the ONCE REMOVED concept. ONCE REMOVED modifies the whole AS COUPLES, touch  $\frac{1}{4}$  call. That is why we needed to figure out how to do that first. To do it ONCE REMOVED we must add the other people (the other once removed group), and figure out how to keep our group of four dancers once removed at the end of the call.



Now lets take a quick look at AS COUPLES, ONCE REMOVED, touch  $\frac{1}{4}$  (putting the concepts in the other order):



To summarize, always evaluate nested concepts in the REVERSE ORDER that they are actually given to you, with each concept modifying EVERYTHING that follows it.