

# Smooth Operators

Barry Clasper

CALLERLAB Convention 2016

## Introduction

This is a handout for a session at the 2016 CALLERLAB convention. It provides additional information for some of the examples discussed during the presentation. For best results, read it together with listening to the session recording.

This session deals with things to think about when designing smooth choreography. A smooth dancing experience involves more than good choreography, of course. It requires well designed choreography married to effective presentation. Presentation includes timing, music, cuing, helper words, managing difficulty, and other elements associated with delivering the choreography. This session does not deal with presentation factors, even though they are crucial to smooth dancing.

The focus of this session is on building strings of calls with motions that flow well from one to the next. These principles apply to all forms of choreographic management. When we say "designing choreography", some may think we are talking only about pre-written choreography. But whether you are creating sequences and modules in your living room or making it up in front of dancers, these principles apply.

## The Secret

The secret of smooth choreography can be summed up in one sentence.

*Smooth choreography features movement with transfers of momentum that feel natural and pleasant.*

In other words, when dancers are required to change their direction or speed of movement, they can do so in a way they find comfortable.

As you will see, there is definitely more art than science to this subject. There are many "no-nos" described below, some of which are regularly defied in commonplace choreography that is widely considered smooth. And there are others which in theory should feel great but in practice do not. Therefore, the best way to gain a solid insight into this subject is to do a lot of dancing and take note of the way various combinations feel.

## The Secret Unpacked

Of course there are factors that either contribute to or detract from natural transfers of momentum. We'll look at each in more detail.

### Changes of Direction

Dancers can move in one of 4 directions: forward, backward, left, or right. They may also move in certain combinations of those (forward and left, for instance). Think of forward and backward as vertical movements and right and left as lateral (sideways) movements. Abrupt changes of direction between opposites (forward/backward or left/right) are not normally smooth. However, converting a vertical movement to a lateral movement, or vice versa, can often work. For example, think of the original trailers in the combination Split Circulate, Walk and Dodge. That trailing person walks straight forward then slides sideways. Or consider the call Dosado: each dancer walks forward, steps sideways to the right, backs up, steps sideways to the left. In general, combinations that allow a step or two to reverse momentum will feel smooth. For example, the combination of Flutterwheel followed by Reverse Flutterwheel feels smooth even though it requires clockwise momentum to be redirected to counterclockwise.

Even without the allowance of steps to reverse momentum, sometimes dancers compensate for us. Think

## Smooth Operators ... cont'd

of Circle Left, Allemande Left. For the girls this is an abrupt reversal of direction. However, because they are used to this combination, the girls use a kind of "basketball turn" to stop their leftward momentum and turn to their right. It takes a couple of beats of music to do, and if the caller gives them that time, the girls will tell you it feels smooth. Another common combination is Right and Left Thru followed by Veer Left. As the Courtesy Turn completes, the boys are moving backwards and to their right, so the Veer Left represents an abrupt reversal of momentum. But the boys hear it coming and brace and push off on their right foot and think it feels smooth.

In some cases continuing a motion can feel awkward. For example, from waves, Hinge followed by Swing Thru can feel jerky. After the Hinge the dancers need to know where they are so they know where the turn half for the Swing Thru starts. Many dancers cannot do that mentally. They have to dance the Hinge, stop and see where they are, then start the Swing Thru. However, the combination Hinge and Swing Thru is exactly equivalent to the A1 call  $\frac{3}{4}$  Thru, which dancers perform smoothly because they know ahead of time they are arm-turning  $\frac{3}{4}$ , rather than turning  $\frac{1}{4}$  followed by  $\frac{1}{2}$ .

### Centers of Rotation

Many calls involve dancers moving in a circle around some center point. For example, Circle Left/Right, Trade, Hinge, Cast Off  $\frac{3}{4}$ , Sweep  $\frac{1}{4}$ , Right and Left Thru, Ladies Chain, Flutter Wheel, Roll, etc. Other calls do not finish with rotation around a center: Walk and Dodge, Pass Thru, Tag The Line, etc. There are four possible centers of rotation:

- 1. Single Dancer:** The center of rotation is within the body of a single dancer: e.g, Roll, and U-Turn Back.
- 2. Two Dancers:** The center of rotation is between two dancers: e.g. Trade, Hinge, Cast Off  $\frac{3}{4}$ , Courtesy Turn, Wheel Around.
- 3. Four Dancers:** The center of rotation is the center point of a group of 4: e.g. Sweep  $\frac{1}{4}$ , Wheel and Deal, Flutter Wheel, Fan The Top.
- 4. Eight Dancers:** The center of rotation is the center of the square: e.g. All 8 Spin The Top, Promenade, Ladies In Men Sashay.

Handling movement around a center presents a dilemma. A sudden reversal of movement around the center will not be smooth, but on the other hand, continuing movement around a center for too long produces overflow. Flutterwheel followed by Veer Right will NEVER feel good. Flutterwheel followed by Sweep  $\frac{1}{4}$  feels good, but another Sweep  $\frac{1}{4}$  feels less good. There are 2 basic strategies for handling this:

- 1. Break The Rotation:** Convert the rotational momentum into a forward or lateral movement. After Ferris Wheel, Double Pass Thru smoothly transfers the rotational momentum to forward movement. Sweep  $\frac{1}{4}$  followed by Veer is an example of transferring rotational momentum to lateral movement. After a Flutterwheel (assuming standard arrangement) Boys Walk, Girls Dodge does some of each.
- 2. Change the Center of Rotation:** For example, from 2-Face Lines: Couples Trade followed by Bend The Line. The center of rotation moves from between the centers of the 2-Face Line to between the individuals in each couple, but the general momentum is in the same direction. Another interesting example, from 2-Face Lines: Couples Hinge followed by Wheel and Deal. In this case the center of rotation migrates from the center of the 2-Face Line to a point in the middle between the resulting Facing Couples.

Even with changes in the center of rotation, however, too many consecutive calls driving the same direction of rotation will produce overflow. It is easy to do this to a subset of dancers without realizing it, consider: Right-Hand Tidal GBBGGBBG, follow the innermost boy; Spin The Top, Circulate, Recycle, Touch  $\frac{1}{4}$ , Scootback, Boys Run .... how many times has he turned right? It is important to consider the motions of all 8 dancers.

## Smooth Operators ... cont'd

### Leverage

Now we have to revisit the above two sections and point out there is more to it than we said. It's not that the principles stated are not true, but they apply to "unsupported" movements. That is, to movements where dancers cannot use contact with another dancer to make a transfer of momentum feel smooth.

Why does the call Swing Thru feel smooth? Does it not involve an abrupt change of direction for the people doing the turn half left? True, but there are two reasons it feels OK. First there is a change of the rotational center from between the centers and ends to between the centers. But more important is the fact that the center dancers have hands with each other and can use that leverage to make it easier to pivot around the center point. That effect is even more pronounced with this combination: from waves; Cast Off  $\frac{3}{4}$ , Centers Cast Off  $\frac{3}{4}$ . Cast Off generates considerably more momentum than a turn half.

In general, combinations that involve the alternating use of hands will feel smoother to dancers.

### Actual vs Theoretical Body Movement

We usually plan out choreography by pushing around checkers or dolls (or have a computer do it for us). Usually their shapes have little resemblance to human proportions, making it easy to misjudge how much space real dancers might need to feel comfortable with the action. When doing the pushing, we usually have a viewpoint from directly above, looking down on the "dancers". Which, of course, is not the same view dancers have when working their way through the call. Neither are we likely to be completely aware how things will feel – what hand pressures will be like, how a rotation will seem, or other sensations that might distract or disorient. Also, dancers will position themselves differently in a vertical direction than a lateral direction. People are quite comfortable standing shoulder to shoulder, but back away to a minimum comfortable distance when facing someone. Dancers will stand closer together in columns than in facing lines, even though the theoretical footprints are in the same places.

All this makes it easy to misjudge how a combination of calls might feel. It is important when creating choreography to imagine how the motion will feel to the dancers. This is most effectively done if you have actually danced the combination yourself.

And then, of course, there are calls that dancers do not execute "according to the book". They shortcut, add flourishes, add noises, etc. Many callers take the attitude "That's their problem, if they did the call properly this would feel good .." Maybe so. But if your objective is to design smooth choreography it is something to take into account. If providing an object lesson is a higher priority, then go for it. That is a judgment call for you to make.

### Anticipation

Many call combinations are very common and therefore familiar to dancers. This allows them to smooth out combinations that may break some of the rules we are discussing. For example, from RH waves with boys on the end: Swing Thru, Boys Run. This combination is called so often dancers sometimes do it even when you haven't called it. But look at the actual mechanical action. At the completion of the Swing Thru the boys have left hands and a very strong counterclockwise rotation around their left handhold. The Run requires them to stop that rotation and redirect their momentum to their right – unsupported. Most dancers will tell you this combination feels fine, but on paper it should be awkward. But when the Boys Run is delivered properly, the boys hear it before completing their turn half left and can comfortably redirect their momentum to their right. This is a case where good presentation and timing mask theoretical bad flow.

### Call Difficulty

Calls and combinations the dancers find hard will seldom feel smooth to them. Figuring out what to do causes hesitation which disconnects them from the music and makes their movement feel ragged. Sometimes they will feel this even if they do not physically hesitate because the mental experience of solving the problem distracts them from the physical experience of the dance.

## Smooth Operators ... cont'd

### Overflow

Overflow is the situation where dancers feel they have turned too often in the same direction. They often describe it as “getting dizzy” or “being screwed into the ground”. This is most likely when the radius of rotation is short – e.g. centered between two people or a single dancer. But dancers also feel it when they move in larger arcs for too long. Our standard choreography tends to be “right-handed” and favors clockwise rotations. It is very easy to create choreography in which the ends of lines move almost continuously in a clockwise direction. Even if the center of rotation does change, dancers will eventually grow tired of it.

### Summary

Smooth dancing is the holy grail of square dance calling. It starts with well crafted choreography designed to permit natural transfers of momentum from one movement to the next. Presentation factors do play a crucial role in making a dance smooth, but they cannot do much to rescue poorly designed choreography. In fact, smooth delivery of bad choreography can make it feel even worse.

A solid grasp of the ingredients of smooth movement is necessary to create choreography that is smooth by design. The best way to acquire that understanding is a combination of checker-pushing and observant dancing to callers with a reputation for being smooth.

In summary, the factors promoting smooth transfers of momentum are:

- No abrupt unsupported reversals of forward/backward motions or left/right sideways motions.
- No abrupt unsupported reversals of rotation.
- Alternating use of hands or other natural opportunities for leverage.
- Familiarity enabling appropriate anticipation and dancer accommodation.
- Regular supported reversals of flow or cancellations of rotation to avoid overflow.