## On ultimate 1. Possession and dumping

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Welcome to (Reynolds) on ultimate, a series of two-pagers about strategy and tactics for playing frisbee. There's a lot to learn<sup>1</sup>, and explaining stuff on the field or at trainings can be challenging. These notes aim to be a written resource instead, focusing on horizontal and vertical offensive structures (against person-match defence) and offense against 3-3-1 and 2-3-2 zone structures<sup>2</sup>.

EACH POSSESSION might end in: 1) a score<sup>3</sup>; 2) a turnover because of defensive actions (a 'D', stall out, forced error, etc.); or 3) a turnover through unforced error ('throwaway', 'cold drop' etc.). The difference in score is related to the difference in turnovers. Probability of a turnover instead of a score is a function of the number of passes made prior to scoring and the pass completion rate. Hence, fewer passes<sup>4</sup> and/or higher completion rates<sup>5</sup> might be preferred.

Reality is more complex, with completion rates varying by thrower, receiver, throw and situation<sup>6</sup>. There's a balance to be found, but if you receive the pull the 'desired' result is retaining possession until you score<sup>7</sup>, the 'neutral' result is to score despite losing possession at least once<sup>8</sup> while the 'bad' outcome is they score and you receiving the pull again next point<sup>9</sup>.

DEFENCE SETS THE AGENDA; OFFENSE RESPONDS TO IT: Defend each person individually ('person-match') and throwing into space may be easier; Covering space instead ('zone', 'clam' or 'junk') may leave open throws to unmarked people, but delay downfield progress; Forcing forehand makes backhands harder; Forcing 'straight up' makes it harder to throw long and to the centre of the field; Covering 'deep' likewise makes long throws harder; and so on.

Figure 1 shows a 3-3-1 zone<sup>10</sup>, which might make throws amongst the handlers (O5, 6 and 7) easier as they are unmarked, but make throws to downfield players (O1-4) more challenging. But what happens once you get the disc to someone downfield, say O3? Until D12-14 arrive (Figure 2, left) it might be two (O4, O1)-versus-two(D8 and D11 or 9) downfield of the disc, suggesting more progress towards the endzone may be relatively easy. Once D12-14 arrive, however (Figure 2, right), the cup reforms and downfield receivers are outnumbered. It is probably time for O3 to 'dump' back to an unmarked handler (O5-7), get downfield and be a receiver again.

- <sup>1</sup> And plenty of opinions. These are mine, but you can always fork the github repository (https://github.com/James-Reynolds/Ultimate-strategy-and-tactics) or make a pull request if you want to put yours to paper.
- <sup>2</sup> They obviously simplify everything as much as possible. For example: the force is assumed to be forehand unless otherwise stated; O1-4 are the cutters, O5-7 are the handlers, D8-14 are on defence; Offence is always going down the page (the enemy's gate...). Some prior knowledge is assumed.
- <sup>3</sup> Then pulling to the other team to start the next point.
- <sup>4</sup> One throw to the endzone, with a 50% chance of completion...
- <sup>5</sup> ...versus five throws to score, each with a completion rate of 90% (total 59%) or only 85% (total 44%).
- <sup>6</sup> Plus SECOND-ORDER FACTORS, where someone takes bigger risks because a turnover is likely anyway.
- 7 A 'clean hold'
- <sup>8</sup> A 'hold', but an opportunity given to them to score instead
- <sup>9</sup> "Defence wins games. Offence loses them". Old handler proverb (probably)

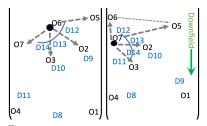


Figure 1: 3-3-1 zone

<sup>10</sup> The first 3 are D12,13 and 14 (the cup, limiting downfield throws, often forcing throws to go over or around the cup)). The second 3 are limiting movement (around) to the wings (D9, 11) or (over) to the 'middle middle' or 'short deep' (D10), while the 1 is D8 limiting the 'deep deep' throws downfield)

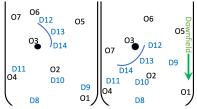


Figure 2: 3-3-1, with O3 before (left) and after (right) the cup catches up

When to dump might depend on your role<sup>11</sup>. As well, against person-match defence it might take a while to get a dump off. One rule of thumb is to look to dump from stall 4 or 5 until 8 or so 12. That said, defenders might give you an early dump so as to 'poach', as in Figure 3(left) where D14 is preventing downfield progress rather than matching up on O7.

O7 positioning back at 45 degrees forces D14 to choose whether to poach or match up. A poach is easily exploited, as in Figure 3 where O6 makes a 'give-go' throw (left) then cuts (right) 'down the line', taking advantage of the way that D13 is on the wrong side of them to prevent the pass back from O7. This simple pattern: is difficult to stop; resets the stall count to zero; puts O6 in 'power position'<sup>13</sup>.

Figure 4 (left), however, shows how if O7 stands further downfield D14 might cover O7 AND limit throws from O6 to others downfield. Even if O6 gets it to O7, (Figure 4 (right)), the give-go may be more challenging because D14 is amongst the action and the angles are less favourable. Figure 5 shows another variation where O7 crosses behind to the break side, opening the whole field (as long as O6 gets out of the way) or a pass back to O6 to keep things moving.

VARIATIONS WHERE DEFENDERS ARE PLAYING PERSON-MATCH, rather than defending space are shown in Figure 6. In each O6 has multiple options to throw to, with: A putting O<sub>5</sub> or O<sub>7</sub> into power position; and B and C potentially opening the break side. D is probably the hardest throw, but again puts O<sub>5</sub> into power position. D<sub>12</sub> and D14 have 3 or 4 places to defend, advantaging offense<sup>14</sup>.

D12 and D14 cannot see everything at once and will likely have to choose between looking mostly at the thrower or mostly at the person they are marking. One approach to take advantage of this is the (so called) 'feldrunner' technique, where if the defender is looking at the thrower (O6) the receiver (O5 or O7) simply runs to one of A, B, C or D and O6 throws it to them. Alternatively, if the defender is looking at  $O_5/7$ ,  $O_6$  simply throws a soft pass to A, B, C or D that O<sub>5</sub> or O<sub>7</sub> can run onto. Importantly this tends to work better if the dump(s) (O<sub>5</sub> and/or O<sub>7</sub>) are stationary until the thrower (O6) has 'engaged the dump' and is no longer looking to throw to a cutter downfield. And 'engaging the dump' tends to work better if you do it before the stall count gets too high<sup>15</sup>.

TAKEAWAYS are: (1) turnovers lose games; (2) find the balance between maintaining possession and minimising throws taken to score; (3) with clean positioning dump throws might have a high completion rate; (4) a handler standing at 45 degrees (open side) or level with the disc (break side) may give the defence too much to cover.

- 11 If you are a cutter, probably dump and run ASAP. Get it back to the handlers and they'll throw it to you again!
- 12 Then huck for position on 9

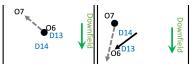


Figure 3: Person-match: open-side poach countered by 45 degree dump

13 where, because they are downfield of D13, there is no force and they can through almost anyway, opening the break side and/or making a huck easier.

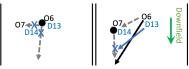


Figure 4: Person-match: open-side poach, O7 being inline not ideal.

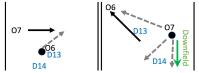


Figure 5: Person-match: open-side poach, attack the break side.

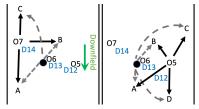


Figure 6: Person-match: tighter defence, open-side (left) or break-side (right)

- 14 As well, to get to C first the defenders would need to run through / past the receiver, making an intercept (without committing a foul) even more difficult.
- 15 1-4 early but great, 5-6 good, 7-8 not as good, 9 possession over, huck it downfield for territory instead