RUCK RESEARCH IN MODERN RUGBY
BY
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Nowadays, many people in the world of rugby speak about 'modern' rugby because, since professionalism, the 'old' meaning of the game no longer applies. The game of Rugby Union officially turned professional after the 1995 Rugby World Cup held in South Africa, although before then it was 'semi-professional' for those playing at the higher levels of the game (Edwards & Bills, 2002). Over the last 20 years, the structure of play has changed profoundly with rugby evolving into the game as we know it today (Varela, 2004). Because rugby encompasses many diverse skills and techniques, which are far too vast to discuss, this paper will specifically focus only on rucking in the modern game.

A ruck is a phase of play where one or more players from each team, who are on their feet, in physical contact and close around the ball on the ground are putting an end to open, general play (IRB, 2006). Players are considered to be rucking when they are in a ruck and using their feet to try to win or keep possession of the ball, without being guilty of foul play. Rugby provides many opportunities to recycle the ball through the ruck. This tactical element is used to maintain possession and gain territory, two things which are extremely important in the game. The ruck will now be discussed in greater detail - including the various arguments and different styles of rucking used around the rugby world. Therefore, the purpose of this paper is to present these different arguments about the ruck in rugby and highlight some implications for the future evolution of this skill in the sport.

In most cases, a ruck is formed immediately after a tackle situation where the ball carrier has gone to ground with the ball and one or more players from each team close over the ball on the ground together in physical contact (Stewart, 1987). Here the laws of open play end and the laws of the ruck begin. The law tell us that a tackled ball carrier must immediately place or let go of the ball once he is on the ground and he is not able to play the ball again until he back on his feet. The same rule applies to the tackler. The tackler may not play at the ball until he too is on his feet The game of rugby must be played on your feet and, while the ball is in a ruck, it may only be played at by using the feet, unless the intention is to clear the ball from the ruck by passing it immediately (IRB, 2006). See Photograph 1 below:

Photograph 1.

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In this photo, the player on the ground in red has just been tackled by the player in black on top of him. Neither player is on his feet. Therefore, according to the laws of the ruck, they cannot play at the ball until they get back to their feet The third player in this photo (on top of the player in black) can be referred to as a 'snake' or a 'cleaner', in that he is the first support player of the ball carrier and is trying to 'clean-out' the tackler from the ruck situation and make the ball available.

Thorburn (2004) argues that, if players are not encouraged to stay on their feet and keep the ball off the ground, rugby will continue to be a game of pile-ups and static ball. He believes that 'true' rucking is a dynamic phase of play which is becoming a thing of the past. Williams and Hunter (2001) agree, claiming that rucks in the modern game are created by players deliberately falling to ground prior to the imminent tackle. This is, in part, due to law changes and the evolution of the modern game. According to Thorburn, a 'true' ruck is when the ball is on the ground and all participating players are on their feet, bound and on-side, apart from the ruck setters who have gone to ground in the tackle to set the ruck. Following this, there must be a drive forward over both the ball *and* the players on the ground, with any foot movement being in a backwards motion, *not* in a kicking motion. The nearest thing to true rucking in the modern game, he says, is the 'clean-out' situation (Thorburn, 2004). He compares the clean-out with a mini-maul, where the ball carrier goes into the tackle situation and works to remain on his feet. When support players (or snakes as he calls them) arrive, the ball carrier then goes to ground with the ball and the snakes then 'clean-out' or drive the original tackler away from the ruck that has formed, but a pile-up. See photograph 2 below for an idea of what a 'mini-maul' may end up like:

Photograph 2.

In this picture we see that the player on the ground (in red) has been tackled by the player in the light-coloured top who is on her feet. The 'snake', or support player in red, is attempting to 'clean-out' the tackler (in yellow) from the tackle situation. Before the arrival of the 3rd player (or the 'snake') this is only a tackle situation, not a ruck. The tackler in yellow may play at the ball because she is on her feet. It is for this reason that Thorburn (2004) talks about creating mini-mauls and staying on your feet until support arrives and then going to ground after the 'snake' has arrived.

Schwarz (2003) is also an advocate of a similar style of rucking because it also produces clean and quick ball as in the example above. However, his coaching of technique at the ruck is a little different from Thorburn's (2004). Schwarz calls this style the 'Two-man Drop' where the ball carrier stays on his feet, going hard in to the contact (tackle) situation. The next arriving team-mate (support) then converts the 'would-be maul' into a ruck by going to ground with the ball, leaving the original ball carrier standing in position as a legal blocker. The subtle difference is that the original ball carrier stays on his feet and the arriving support player (or 'snake'), takes the ball to the ground, thus legally placing another body ahead of the ball on the ground. As an example, look at Photograph 2 above. Here, the support player (or 'snake') is behind the ball and ball carrier, who has gone to ground in the tackle situation. Instead, Schwarz's method would see the 'snake' (or the player with blond hair) on the ground with the ball. Meanwhile, the player in red with brown hair would still be on her feet and legally in front of the ball with the 'snake' on the ground. O'Connell (in Schwarz, 2004) is a huge advocate of this style of rucking for the simple fact that it puts two bodies between the ball and the next arriving player from the opposing team.

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According to Bicsombe and Drewett (1998), every player in a rugby team, regardless of position, needs to have the knowledge and technique to set up and/or provide support at a ruck in order to maximise the benefit to their team from that contact situation. In the past, rucking has been a task mostly associated with forwards and to

forward play. But in the changing times of modern rugby it is becoming increasingly important for every player on the field to possess such skills. Traditionally, backs never ended up in rucks unless they were very unlucky. However, modern rugby requires that backs have the ability to do the same job as forwards at the ruck and, in turn, forwards these days are also required to have a variety and high level of skills that backs have (Edwards & Bills, 2002).

Biscombe and Drewett (1998) break the ruck contest down into two specific phases. The first phase they call 'ruck preparation' and the second 'ruck execution'. The first phase involves six simple steps:

    Step 1 – the ball carrier uses a long, low, last stride to bump up and into opponent's lower chest.
    Step 2 – ball carrier makes contact with the leading shoulder so the ball remains visible to support.
    Step 3 –bump defender away or, if held, turn towards the support.
    Step 4 – go to ground slowly.
    Step 5 – place the ball at arm's length behind you, closer to your support.
    Finally, Step 6 – place your hands over your ears, with elbows up, to protect your head.

They also break the second phase, ruck execution, down in to six simple steps.

    Step 1 – support players drive over top of the tackled player who is on the ground.
    Step 2 – bind onto the opposition or another support player.
    Step 3 – drive in low with eyes open, head up and looking forward.
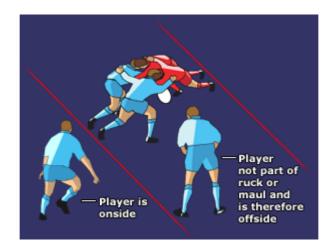   Step 4 – keep a flat back and your shoulders always above your hips.
    Step 5 – shrug shoulders and loosen neck on contact.
    Finally, Step 6 – stay on your feet, driving opponents backwards keeping them on their feet.

Biscombe and Drewett (1998), like Thorburn (2004) and Schwarz (2003), also believe that you can create rucks that have a particular balanced shape or structure, depending on the actions of the ball carrier and their first support players. They believe in creating either 2-3-2 rucks or 3-2-3 rucks (refer to Figure 1 and Photograph 3 below).

Figure 1: The start of a possible 2-3-2 Ruck

Photograph 3: The start of a possible 3-2-3 Ruck

(Note: the red lines in Figure 1 indicate the off-side lines for both teams)
In Figure 1, the first two players form the front line, followed by a (potential) second line of three players with a third line of two players in behind them. In Photograph 3, the first line is made up of three players, followed by a second line of two and a final line of three players behind them (Biscombe & Drewett, 1998).

Dan Cottrell (2006) explains his own variations to what he calls 'effective rucking' that produces quicker ball in only five steps. These steps are similar to those above from Biscombe & Drewett (1998), but there are some subtle differences. For Cottrell, Step 1 involves the support players aiming to arrive 2 or 3 metres beyond the ball while, preferably, staying on their feet, thus, preventing the danger of having too many bodies over the ball in what Thorburn (2004) calls a 'muck' (as opposed to a ruck). According to Cottrell (2006), players too often just rest or lean on the ruck, adding to the traffic with more legs and feet getting in the way of the player attempting to clear the ball. This is a point that Thorburn (2004) also agrees with.

In Step 2, Cottrell specifically states that support players should place their inside foot beyond the ball on the ground. He believes this creates a strong body position through the centre of the ruck, allowing players to drive through and out, clearing away more players effectively. He goes in to further detail in Step 3, claiming that a player's

spine should be parallel to the touch-lines of the field for players to gain maximum power through the contact area. In Step 4, he says, the arriving support players should have their shoulders and hips lower than the shoulders and hips of the players in front of them. Moreover, he states, if players can also touch the ground with their finger tips just before contact, it should be very powerful as long as their hips are lower than their shoulders. In Cottrell's final step, he asks players to leave the ball alone because if they try to pick it up they will be penalised for using their hands in a ruck (2006).

The New South Wales Rugby Union (NSWRFU, 2006) in Australia also suggests similar coaching points to Cottrell's for effectively cleaning-out a ruck. They believe that the body height of the 'cleaner' must be lower than the player attempting to 'Jackal' (or turn-over) possession of the ball. Moreover, they concur that a player's

body shape must be strong and stable in the contact situation, that their hips must be square and facing forward and below the height of their shoulders while the head is up and looking forwards. They also suggest that a lead arm be extended or 'punched' forward under and inside the Jackal. After the initial contact, or 'hit', they suggest you 'stick and chase' at the cleanout. The 'stick', as they call it, involves drawing or pulling an opponent in towards you and then 'chase' the 'hit' and 'stick' by applying quick, short steps.

However, Hynes (2004) believes a ruck is the consequence of what is often a poor decision or a good tackle. He believes that the ball carrier must control the contact area by aiming to contact the weak parts of the defender. In approaching the contact area, Hynes (2004) says that players must think to put their body before the ball because it is too late to do so effectively once contact has been made. After contact, Hynes, like Thorburn (2004), encourages ball carriers to fight the ground by continuing to stay on their feet as long as possible in order for support to arrive. He believes that a player who goes to ground immediately in a tackle increases the likelihood of giving over possession to the opposition. Hynes, like Cottrell (2006), claims that clean ball is best presented when the support players (or 'cleaners' as he calls them), have gone beyond the ball on the ground and the other players can see it presented neatly. On the contrary, he says that 'dirty' or 'unclean' ball is when the ball is held too close to the body by the tackled player and the opposition is allowed to organise their defence while a Jackal slows down the delivery of the ball because the 'cleaners' have failed to deliver quick, clean ball (Hynes, 2004). A 'Jackal' is an opposition player who is on his feet and therefore legally allowed to play at the ball before the ruck is formed.

These notions above are also supported by the results of the Nakagawa & Hirose (2005) study of 15 International Rugby matches during the 2004-05 Southern and Northern Hemisphere's International seasons. In their study, they researched turn-overs at the contact situation in rugby as an effective attacking point. The matches they viewed included 10 from the Northern Hemisphere's 6 nations competition and 5 from the Southern Hemisphere's Tri-Nations competition. Their definition of a turn-over is when the possession of the ball is lost by the attacking team either by their own handling error or by the efforts of the defending team. Out of 188 turn-over situations in their study, (an average of 12.5 turn-overs per match), over 1/3, or 67, were 'Jackal' turn-overs. Meanwhile, ruck turn-overs accounted for 1/9 (22 cases). A

Jackal turn-over is a post-tackle/pre-ruck turn-over where an opposition player on his feet has legally taken the ball from a tackled player on the ground. This was the most common turn-over found in their 2005 study (Photograph 4).

Photograph 4 – The Jackal Turn-over

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In this picture you can see that the tackler (on the ground in blue) is off his feet and is unable to play the ball. The ball carrier (in red and white) is also off his feet and, therefore, he must release the ball. The 'Jackal' is the player in blue who is still on his feet. He is entitled to play at the ball because he is still on his feet. This was the most common turn-over found in Nakagawa & Hirose's (2005) study. This is not yet a ruck because there is no other player from the opposition team on his feet in physical contact with the 'Jackal'.

A ruck turn-over would see the 'Jackal' in Photograph 4 (above) being joined by another (or more) of his team mates and one or more opposition players in physical contact over the ball. The Blue team would then win the resulting ruck turn-over by pushing their opponents backwards and, therefore, making the ball available on their side of the ruck. In the 15 games of Rugby in their study, this rucking turn-over example only occurred on 22 occasions (Nakagawa & Hirose, 2005).

Hutchinson (2005) believes that rucking is a more an attacking mode as opposed to mauling, which he says is more of a defensive strategy. His belief is that the game of rugby is all about attacking and scoring points rather than defending. Therefore, the ruck is a very important part of the game and it should be used more frequently as the preferred method of demonstrating an attacking mindset, committing the opposition

forwards and providing clean ball. He also discusses the technique of cleaning out or 'blowing over' and past the ball while staying firmly on your feet. He calls this 'blowing over', the Kiwi (New Zealand) approach to rucking. He also highlights the importance of maintaining contact because the driving position puts the centre of gravity outside the wheelbase of support.

Rucking has its own problems, of course. More penalties are awarded at the tackle/ruck than at any other phase in the game and they are mainly awarded for holding the ball and not releasing it, diving over the ball/tackle and failing to move away from the ball after a tackle.

Photograph 5: Old-fashioned rucking (seen less since rugby has been professional).

Hutchinson suggests that the long body 'squeeze' ball prevents this from happening because going down parallel to the touch line, (as opposed to the more traditional and widely used goal-line), allows you to place the ball back between your legs. It also allows the support players to stay on their feet more easily as there is less body to fall over with this technique. In using the long-body 'squeeze' ball, Hutchinson (2005) suggests one arm be used to place the ball back between your legs while the other arm should be used to protect your head due to the close proximity of it to the opposition's boots (see Photograph 5 above for an example of what can happen if you do not).

The long-body 'squeeze' ball is also a concept that Schwarz discusses in his article (2004). He suggests that, after perfecting the two-man drop, the natural progression is to move on to the long-body ruck (2005). Johnson (2006.a.), after reading the Schwarz (2004) article, went even further with his team and developed four types of ruck, which he calls:

1. The Standard ruck – behind the advantage line and slower than the quick ruck.
2. The Quick ruck – the delivery of high speed ball for the backs to utilise.
3. The Double ruck (similar to Schwarz's strategy of the two man drop).
4. A maul from what was looking like a ruck (which never did occur).

The aspects of rucking that he focuses on in his coaching are as follows:

1. Ball carrier:

   a) The hit – approach defender with both hands firmly holding the ball.
   b) As late as possible, change direction to attack the space on either side of the defender.
   c) Put the ball under the opposite arm to the one used to make contact.
   d) Take a final BIG step to the side of the defender's body and make sure the inside leg makes the contact.
   e) As the ball carrier lowers the body, make sure eyes are looking forward, hips are down and posture is low. A final elbow push from the ribs to the defender as an extra pressure play if the tackle is a bit high.

2. Going to ground:

   f) After contact and before going to ground, try to take two short, quick, power-driving steps forwards, placing your body behind the line of defence.
   g) Then go to ground on the non-ball carrying elbow, with the ball firmly pressed into the stomach.

3. Release of the ball:

   h) On the ground, rotate your body towards your support and place the ball down in a long arm action.
   i) Keep the ball as far away from the opposition payers as possible.
   j) Thrust hips and backside out violently at any nearby defenders on the ground, keeping them as far away from the ball as possible.

Johnson (2006.b.), like Biscombe and Drewett (1998), also expects that all players on the team must be able to create and support rucks regardless of their playing position or size. For him it is also very important to go to ground over the advantage line (or gain line) and, like Cottrell (2006), driving over and past the ball on the ground is essential in order to produce quick, clean ball that is ideal to launch an attack from.

Another way of thinking about the ruck is offered by McClymont (2006), who discusses the 'clean out' situation at the ruck and after a tackle with a new and unique way of thinking. His ideas are well within the laws of the game as he knows that the tackled player is required by law to release the ball and all other players on their feet, including the opposition, are entitled to play the ball (IRB, 2006). However, some of his ideas differ in that he goes beyond talking about the techniques involved in 'cleaning-out' the opposition or 'blowing over' them. Some of his ideas are similar to the ideas of the other experts in that he agrees the player attempting to retrieve the ball can be 'cleaned out' by the next arriving support player of the tackler who is known as the 'cleaner'.

However, he suggests approaching the clean out situation a little differently by considering the balance of the players on their feet attempting to retrieve the ball.

Depending on their balance, McClymont suggests either pulling the player and/or rotating the player (retriever) who is attempting to collect the ball from the ruck situation instead of attempting to push him/them backwards. The very notion of pulling a player at the ruck or contact area, instead of pushing, is contrary to the ideas of those given previously by other experts. It is very much a new way of thinking about the ruck area in rugby, but his argument has some merits. Pulling and rotating players outside their centre of gravity support, instead of pushing them at the breakdown, makes sense because, in some cases, pushing them can make them stronger. For example, a player who has overbalanced forwards will benefit from being pushed backwards, because it will move him back to a stronger position. Some players also over-compensate on purpose because they expecting to be pushed

backwards. Therefore, they calculate and prepare for this to occur. Although we are yet to see this technique utilised in games, McClymont (2006) suggests in some cases it may be more beneficial to take an opponent by the upper arms and pull him forwards outside of his centre of gravity support. However, these ideas are mainly theoretical and are yet to be used very often in higher levels of the game.

Photograph 6: To push over or to pull towards? That is the question.

Photograph 6 above provides an example of McClymont's (2006) argument. Here, he believes that the support player in red, standing over the tackler and tackled player on the ground, is being helped by the blue, hoop-shirted 'cleaner' at the ruck breakdown. The red support player has overbalanced forwards, allowing for the inevitable contact and push from the arriving blue 'cleaners' or 'blowers'. What McClymont says is that in this situation it is more beneficial to arrive at the ruck, take the support player by the upper arms and either rotate or pull him forwards and off his feet; then you can play for the ball, providing that another opposition player is not in contact with you.

To conclude, there are many different variations and arguments in modern rugby about how, which, when and why to ruck. Some of these differences are minute and very subtle, while others are extremely different in contrast to the current 'norms'. All the arguments, although differing, have valid points. However, there are some ideas

and concepts that are very similar in all of them, no matter which you agree with most.

The following are the constants and do not change at each and every ruck. Firstly, you need to approach the ruck with a low and strong body position. Every expert agrees with this. Upon contact, no matter if you are the attacker or the defender, you need to go forward in order to have a decent chance of keeping or turning over possession of the ball. If you are the attacker, all the experts recommend staying on your feet until sufficient support arrives before going to ground. They suggest the same for the defender; to try and make a tackle which allows you to stay on your feet where you can contest for the ball. Rugby must be played on your feet because a player on the ground has no rights to the ball. Other similarities across all the experts and

arguments include the necessity for arriving support players to have their eyes open and head up looking forwards. This way, players can better assess the situation and also avoid any potential injuries as opposed to having their head down and eyes closed. Whether your intention is to pull or push the opposition at the breakdown area, a good knowledge and execution of the correct technique is required. Finally, we must remember that the views presented in this paper are only the present ideas and ways of thinking about rucking in rugby. It is a game that continues to grow and evolve and it will continue to change and develop over the coming decades just as it has done so over the last two decades. However, basic fundamental principles such as gravity, force and friction seem to have withstood the test of time and, as long as rugby needs to be played on your feet, I cannot see those ideas changing quickly.

References.

G. Azzali & C.Beccardini, *Il Libro del Rugby,* Edizione Mediterranee, Roma, 1987, Italia.

U. Baldin, *Condizionamento fisico nel Rugby,* Società Stampa sportiva, Roma, 1986, Italia.

A. Boscolo Anzonetti, *Rugby,* Sperling e Kupfer editori, Milano, 1951, Italia.

G. Edwards & P. Bills *"Tackling Rugby - The changing world of Professional Rugby",* Headline Book Publishing, London 2002, United Kingdom.

IRB International Rugby Board, *Rugby: The laws of the game,* p.87 New Zealand Rugby Union 2006, New Zealand.

New Zealand Rugby Football Union, *"Rugby A guide for Teachers, Coaches and Players",* Government Printing Office, Wellington 1987, New Zealand.

New Zealand Rugby Football Union, *"Rugby Football",* Government Printing Office, 1987, Wellington, New Zealand.

J.J. Stewart, *"Rugby A Tactical Appreciation"*, Rugby Press Ltd, Auckland, 1987, New Zealand.

T. Williams & G. Hunter, *"Rugby Skills, Tactics and Rules"* Colorcraft Ltd, Auckland 2001, New Zealand.

T. Biscombe & P. Drewett, *Steps to Success*, Human Kinetics, 1998, p.66-79.

Internet references:

BBC Sport, *Rucking and mauling offence,* 2005.
http://news.bbc.co.uk/sport2/hi/rugby_union/rules_and_equipment/4204342.stm

D. Cottrell, *Five step to More Effective Rucking,* Better Rugby Coaching, Galles 2006
http://www.betterrugbycoaching.co.uk/BRC11_5_Steps_to_More_Effective_Rucking.asp

M. Hynes*, Contact Skills at the Breakdown,* RFU Technical Journal, 2004 (www.rfu.com/tj).

A.Hutchinson *Ruck or Mauls?* Rugby Coaching Notes 2005.
http://www.eurekastreet.com/rcn/zloose.htm#ruck

IRB, *La Charte du Jeu,,* p. 70-74, Geneve Suisse 2006.
http://www.google.it/search?sourceid=navclient&ie=UTF-8&rls=SKPB,SKPB:2006-51,SKPB:en&q=melee+spontanee

S. Johnson, *Further Comments on the Ruck, ,* RFU Technical Journal, 2006.
(www.rfu.com/tj).

S. Johnson, *Options after the well-performed ruck,* RFU Technical Journal, 2006
(www.rfu.com/tj).

D. McClymont, *Rotation in the Clean Out,* Coaches' infoservice sport science information for coaches New Zealand 2006.
http://coachesinfo.com/category/rugby/365/

A. Nakagawa & K. Hirose, *Turn-over in Contact Situation in Rugby Football: The Effectiveness as Attacking and The Mechanism of Occurrence,* Football Science Vol 2, 8-19, Japan 2005 http://www.jssf.net/home.html

New South Wales Rugby Union, *Ruck: Contest Ruck*, Coaching resource-Ball Winning (tackle contest), New South Wales site 2006.
http://www.nswrugby.com.au/00_Uploads/NSWRU_Website/documents/coaching/NSWRU_Coaching_Resources-[Tackle_Contest_-_Ruck].pdf

Petrarca Rugby, *La ruck è morta,* Padova 2005.
http://www.petrarcarugby.it/content.php?article99

Rugby-Info, *Mele spontanee o "Ruck",* France 2006.
http://www.rugby-info.fr/Melee-spontanee-ou-ruck.htlm

R. Schwarz, *The two-Man Drop, Producing Lightning-fast recycled ball,* RFU Technical Journal, 2004 (www.rfu.com/tj)

P. Taisne, *L'Art du Rucking,* Le Site de Rugby, Conseil de Pro, France 2006.
http://www.lesiterugby.com/conseils_du_pro/Articles_108090_De-l'art-du-rucking.shtml

P. Thorburn*, The ruck (or Muck)- Trying to create a positive thought process into the shambles of the post-tackle,* RFU Technical Journal, 2004. (www.rfu.com/tj)

L. R. Valera *Analisis de las caraterìsticas de los agrupamientos ofensivos en el rugby moderno*, Universidad de extrematura Congreso : "Las Cinecias de la Actividad Fisica y el Deporte en el macro de la convergencia Europea", Valencia Spania 2004.
http://www.unex.es/eweb/cienciadeporte/congreso/04%20val/pdf/p22.pdf

Wikipedia, *Editino Rugby Union "Ruck",* Free Encyclopaedia 2006.
http://en.wikipedia.org/w/index.php?title=Rugby_union&action=edit&section=13