

Look Who's Talking

Recognition Primed Decision Making in Elite Australian Rules Football Umpires

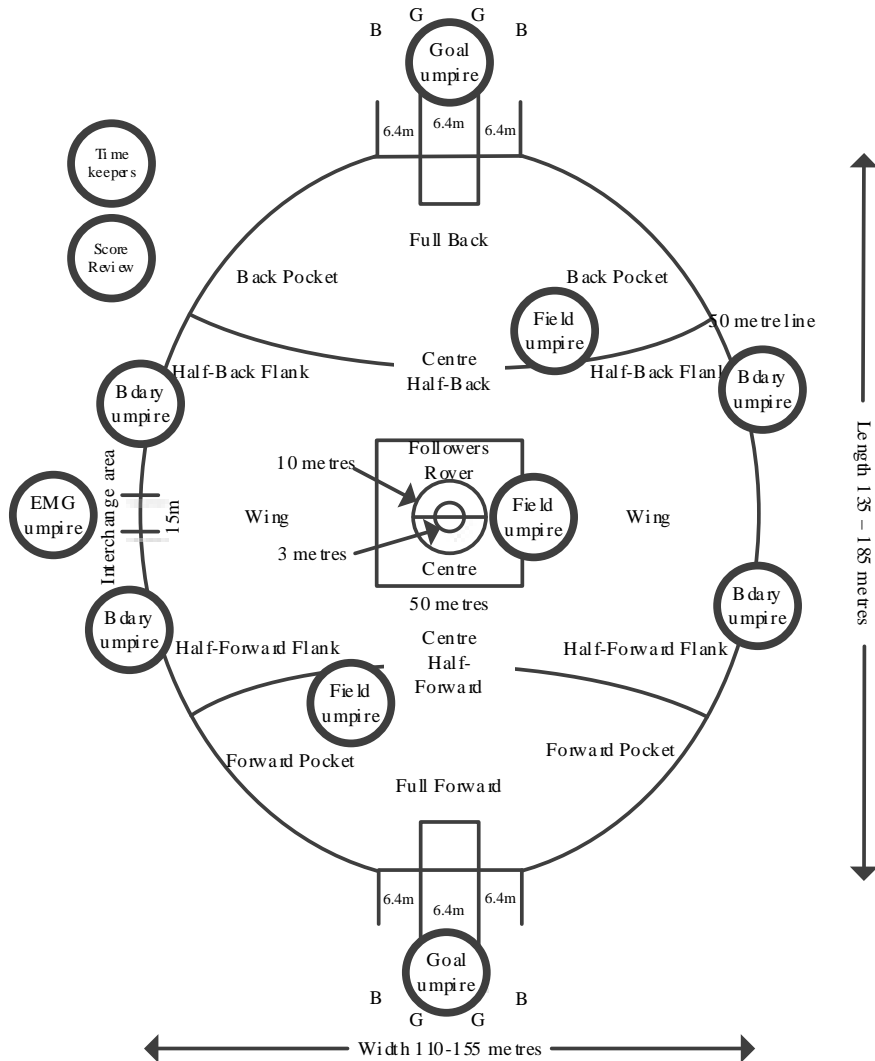
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Umpiring System/Team



Common Decisions

Mark – Catching the ball on the full after being kicked

Free Kick – Rule Infringements Penalty including High Tackle, Holding the ball, Push in the back, marking interference.

Ball out of play – Boundary Throw In (BTI) and Out of bounds on the full (OOBF)

Dead Ball – Ball Up

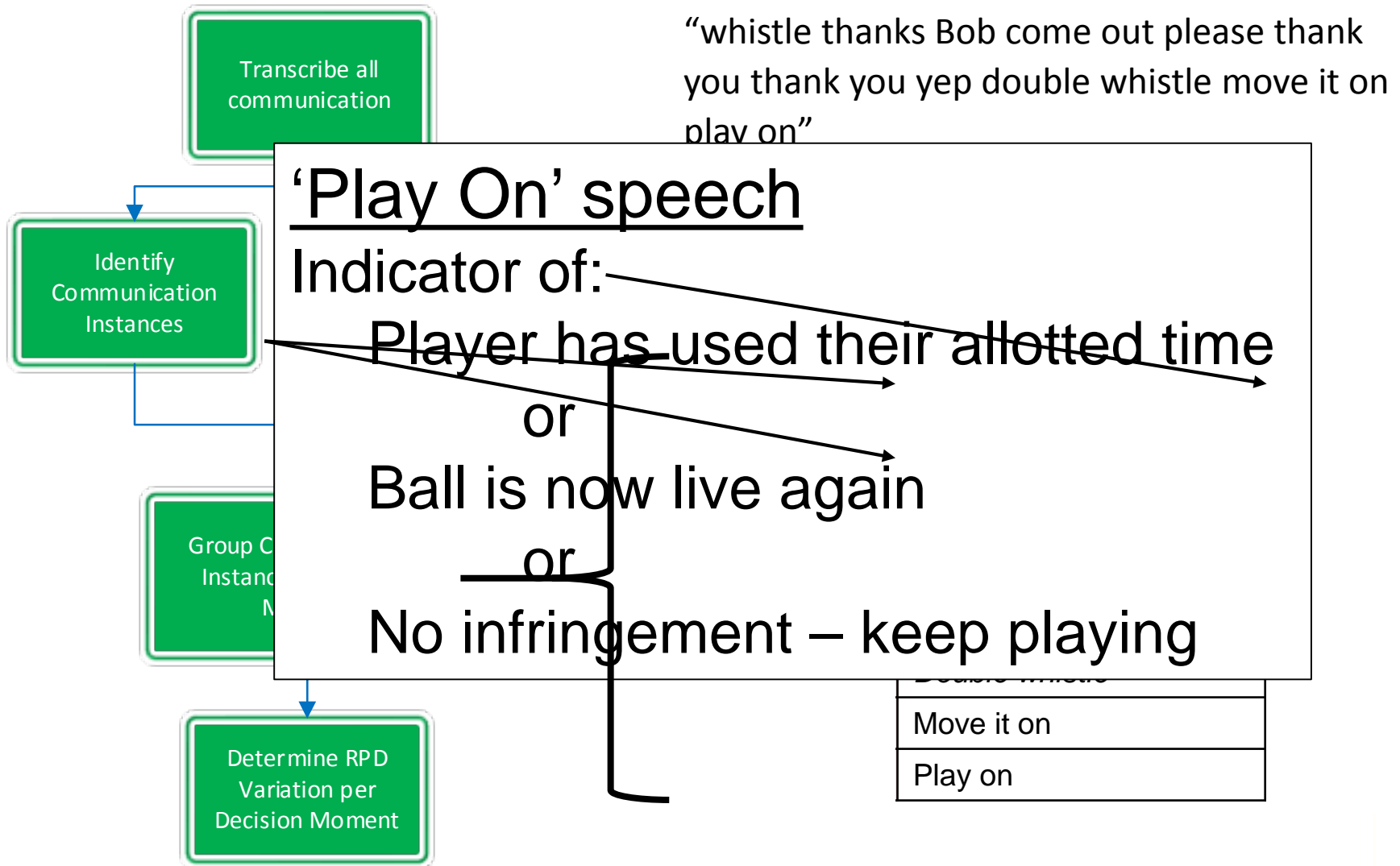
Score Decisions – Goal, Point and Return to play Kick-In

- **Recognition Primed Decision Making (RPD)** (Klein et al., 1993)
 - Three Variations
 - Simple Match (V1);
 - Diagnose (V2);
 - Evaluate (V3).
- **Sport is an emerging field for RPD** (Kermarrec and Bossard, 2014)
 - Multiple different sports and game situations
 - Simple match dominates. (approx. 80%)

Does Simple Match also dominate for Officials in Sport?

- Data Collection
 - 3 AFL Games – 2014 Premiership Season
 - Commentary removed
 - Match communication system recorded umpire communications
- Participants
 - 8 male AFL Field Umpires
 - 928 games combined experience
 - μ - 116 gmes; σ -77.8 games





Variation 2 – Diagnose - Ball Up

Diagnose possible outcomes ('play on' instances) before deciding to intervene and reset play (*whistle* then 'mine')

Ump.	Zone	Speech	Decision
3	MZ	play on	HTB
3	MZ	play on	HTB
3	MZ	<i>whistle</i>	Ball Up
3	MZ	mine	
3	MZ	no prior	
3	MZ	thanks guys thanks [player]	
3	MZ	clear out behind	

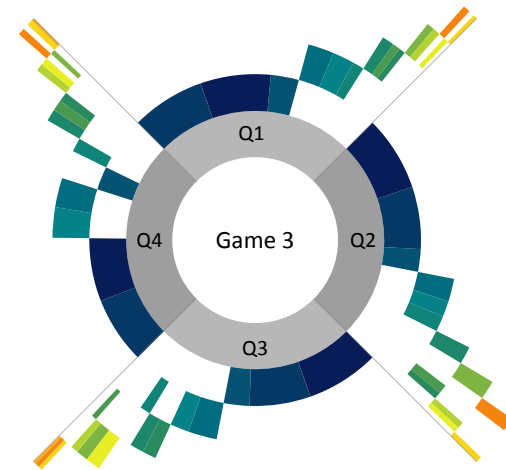
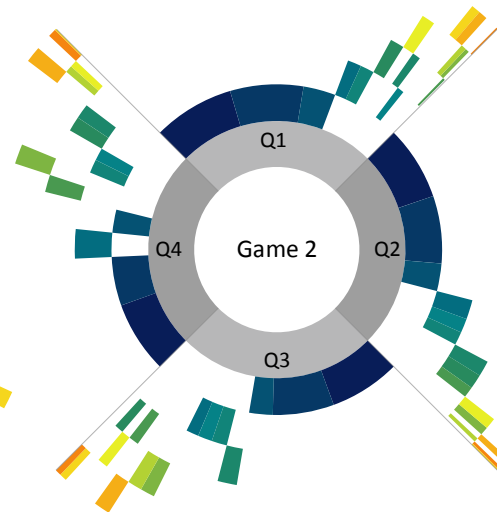
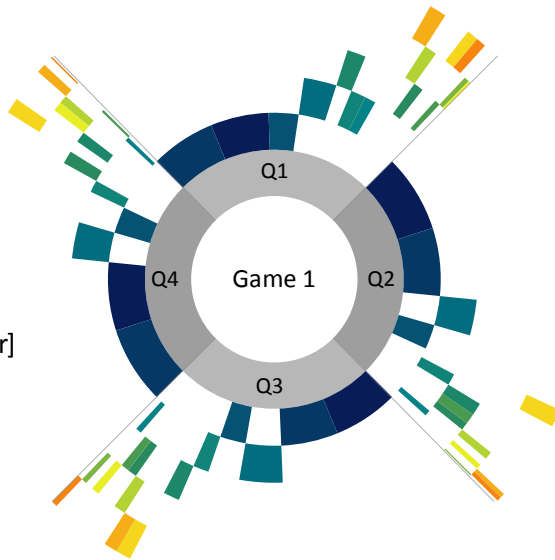
Results - Communication Instances

15 Most Frequent Communications Instances

6025
960
64

Communication Instances (mean – 2008/game)
Unique instances
Instances repeated 10 or more times

- Whistle
- Play on
- You
- Me
- Thank you
- Yep
- All clear
- Double whistle
- Thanks [player]
- Goal restart
- Move it on
- Good [umpire]
- [umpire]
- Backing back
- Marks here



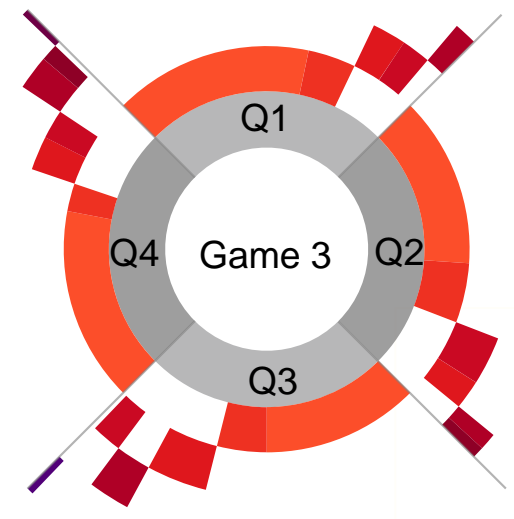
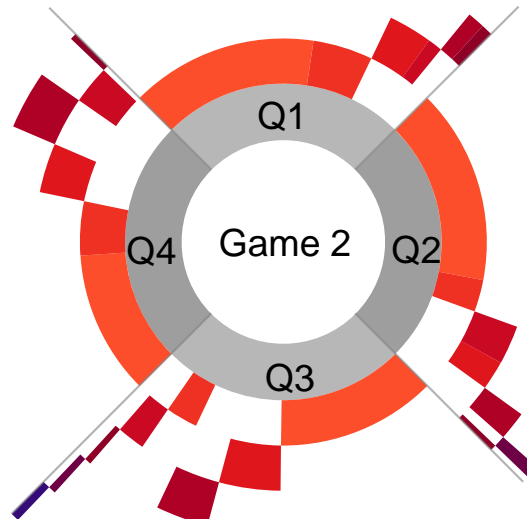
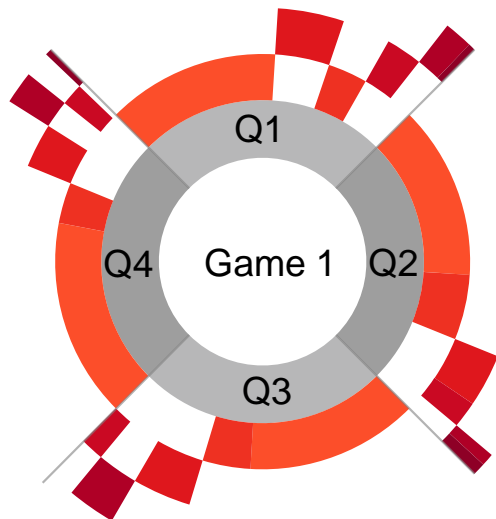
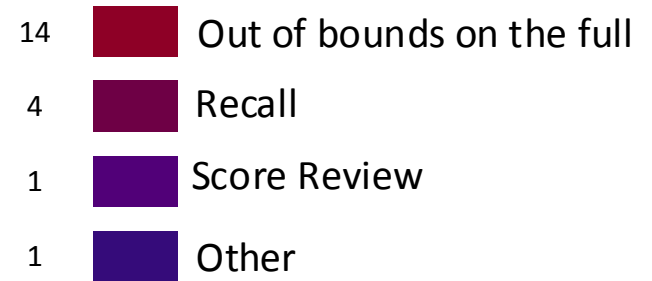
Decision Moments

887 Decision Moments
(mean – 295/game)




Raw Count

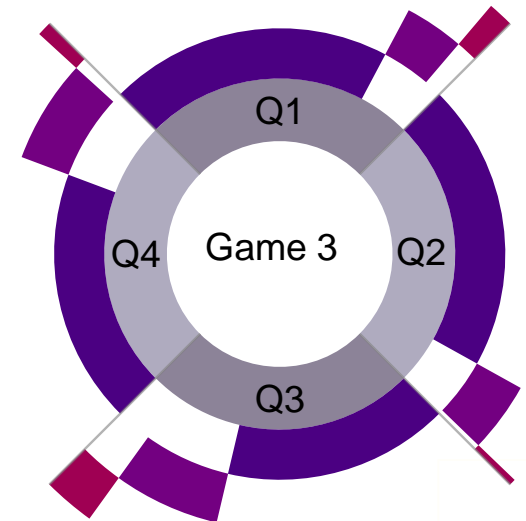
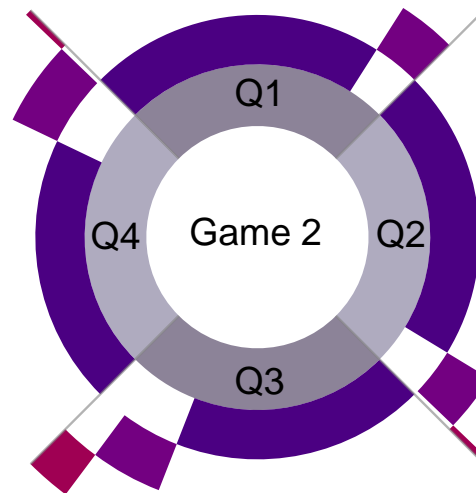
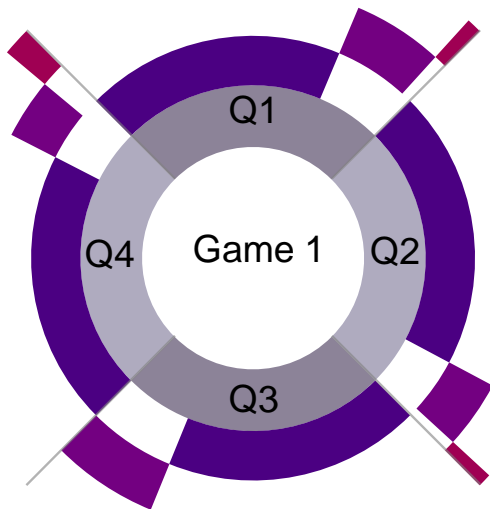


Raw Count



RPD Variations

- 78.2 %  Variation 1 – Simple Match
- 18.3 %  Variation 2 – Diagnose
- 3.5 %  Variation 3 – Evaluate



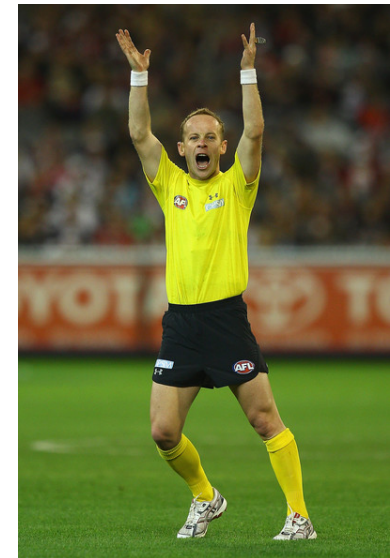
Discussion

Verbal Articulation of Decisions



Use
Play On as
indication of
non-decision

Use of Whistle



Conclusions

- RPD of Officials similar to RPD in players
- Verbalisation of decisions as RPD indicator
- Real time communication in NDM research
- Low risk, high benefits of sport and OiS for NDM research

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