



*ARC Centre of Excellence
in Policing and Security*

Social change and violence: Regional and remote transformations

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What is the rural crisis?

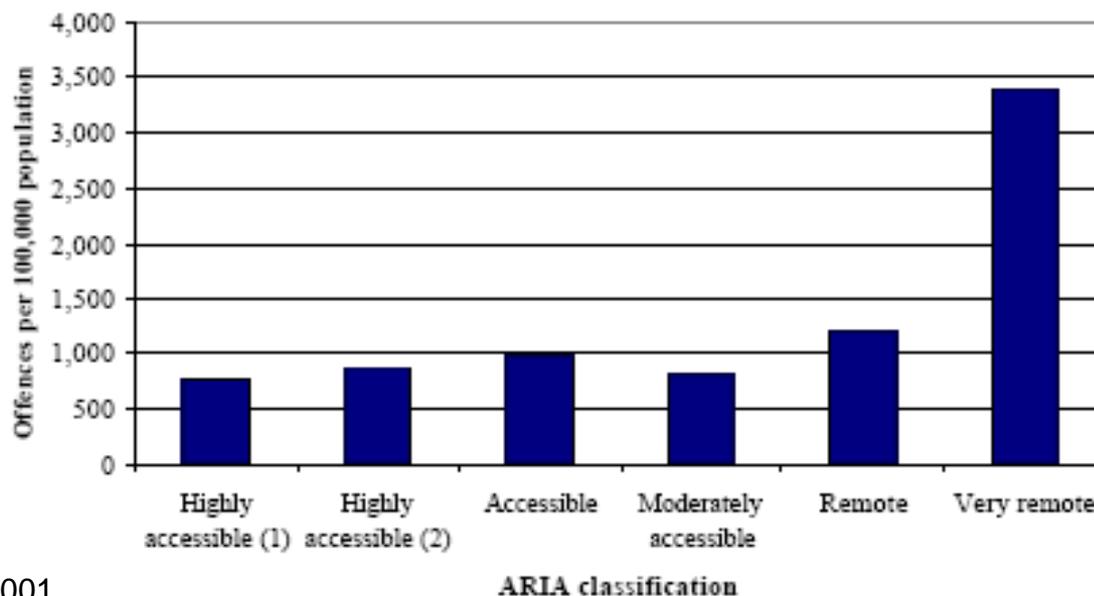
- Population decline
- Age restructuring
- Economic vulnerability to environmental extremes
- Centralising impact of globalisation



Violence in rural areas

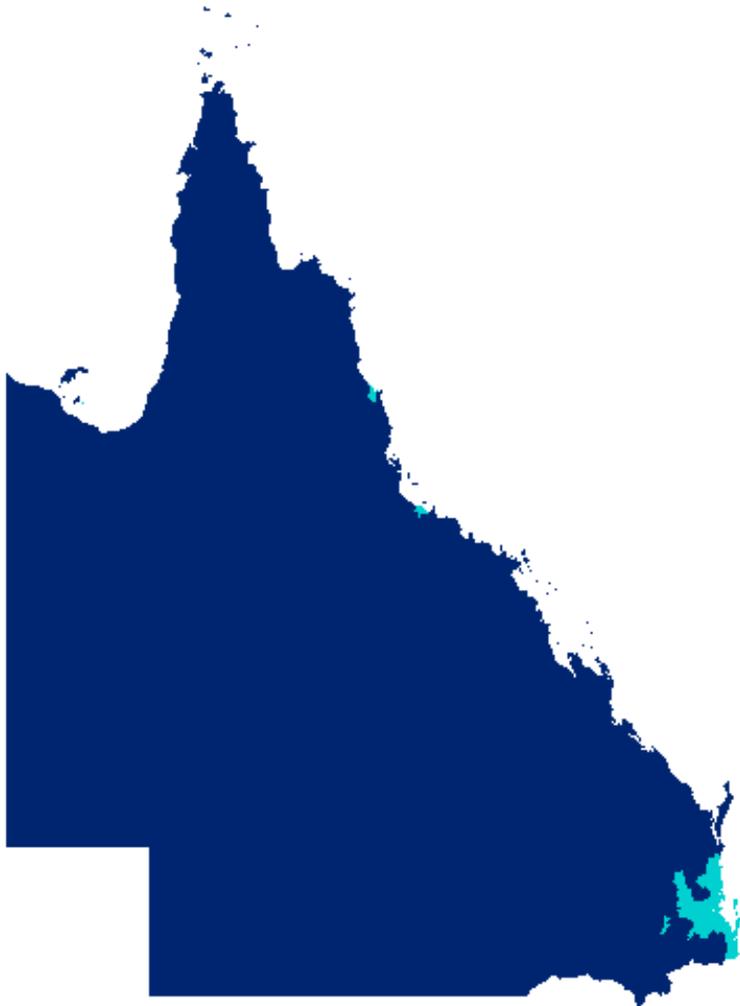
- Rural violent crime rates higher than urban rates
- 'Very remote' parts of Queensland are the most violent

Rates of offences against the person per 100,000 population by ARIA classification, Queensland, 2000–01



Source: OESR, 2001

Research site: Queensland



- Non-metropolitan Queensland
- Excludes:
 - ❖ South-east Queensland (Brisbane and adjacent coastal centres)
 - ❖ Toowoomba
 - ❖ Townsville
 - ❖ Cairns





Research questions

- Is social and economic disruption related to fluctuation in violent crime in non-metropolitan Queensland?
- Are some types of violence more susceptible to social and economic disruption than others?
- How can an exploration of 'extremes' contribute to understanding this process?



Research design

- Secondary data analysis
 - ❖ Queensland Police Service
 - ❖ Australian Bureau of Statistics (ABS)
 - ❖ Queensland Centre for Population Research
 - ❖ National Key Centre for Social Applications of Geographic Information Systems (GISCA)
- SLA unit of analysis ($N=124$)
- Uses data from two time periods; 1996 and 2001



Measuring 'change'

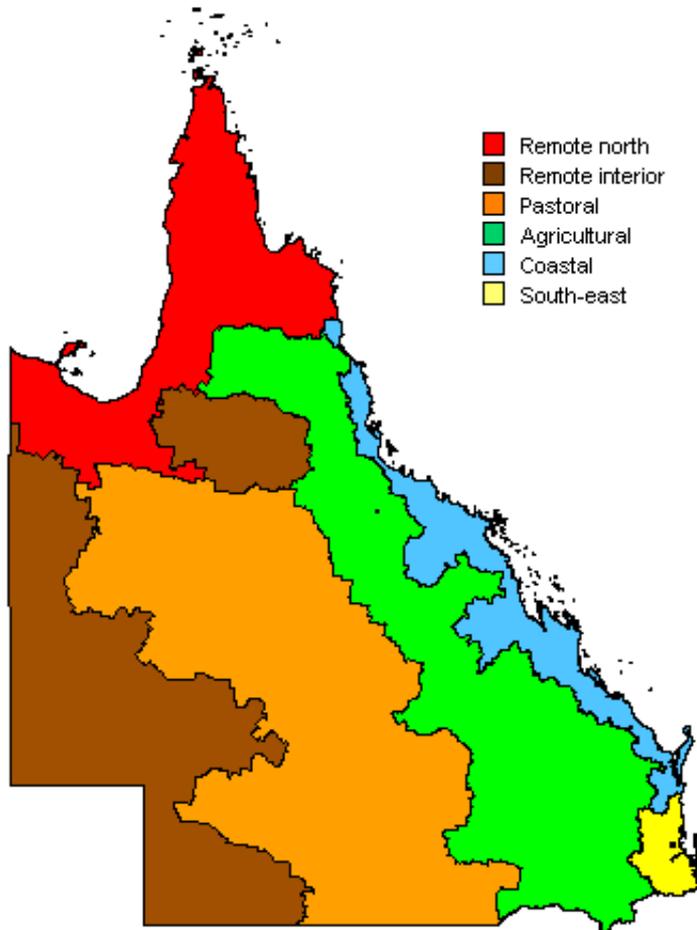
- Residual change scores
 - ❖ Predict the time 2 score from the time 1 score
 - ❖ Calculate the difference between the *predicted* time 2 score, and the *actual* time 2 score
- Avoid making inferences about systemic change by using measures reflecting stasis



Variables

- Explanatory variables:
 - Ethnic heterogeneity
 - Familial and residential instability
 - Primary industry workforce quotients
 - Age profile
 - Population density
 - Gender balance
 - Indicators of economic status
 - Accessibility/remoteness index of Australia Plus (ARIA+)
 - Settlement zones
- Outcome variables:
 - Homicide-related offences
 - Serious assaults
 - Common assaults
 - Armed robbery
 - Unarmed robbery
 - Menacing person offences
 - Sexual offences
 - Total violent crime

Settlement zones



- ❖ Zonings based on:
 - economic structures and dependencies
 - Age structure
 - Population density and movements
- ❖ Each zone has a unique ‘sensitivity to differential demographic and related socioeconomic trends’ (Holmes, Charles-Edwards & Bell, 2005, p.16)



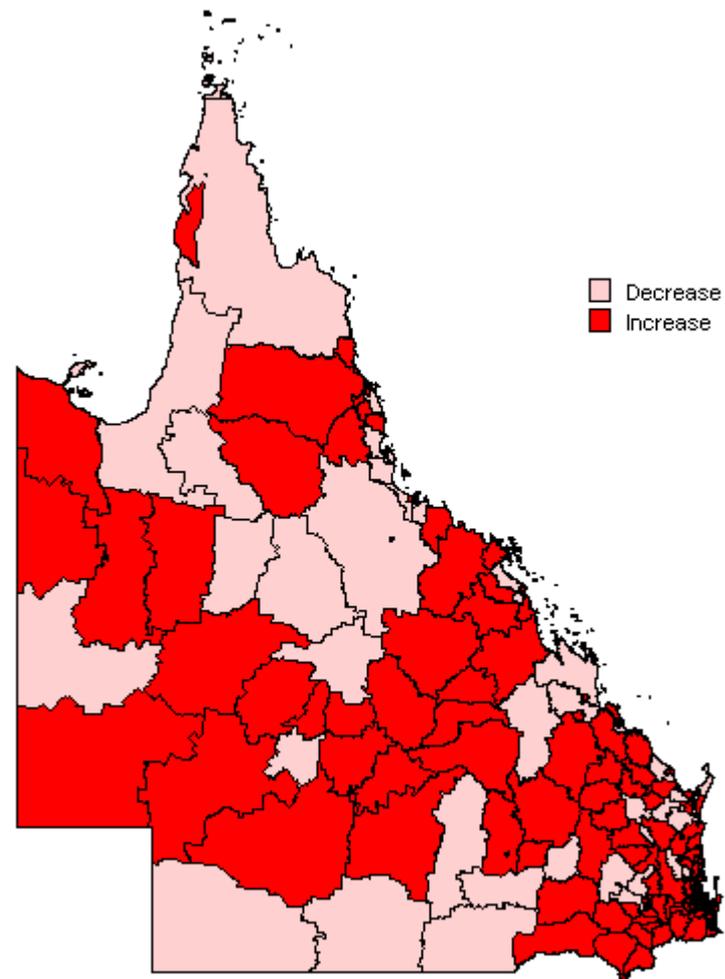
Results

- General trends
 - ❖ Violence across Queensland
 - ❖ Violence across settlement zones
- Multiple regressions
- Descriptive exploration of 'extremes'



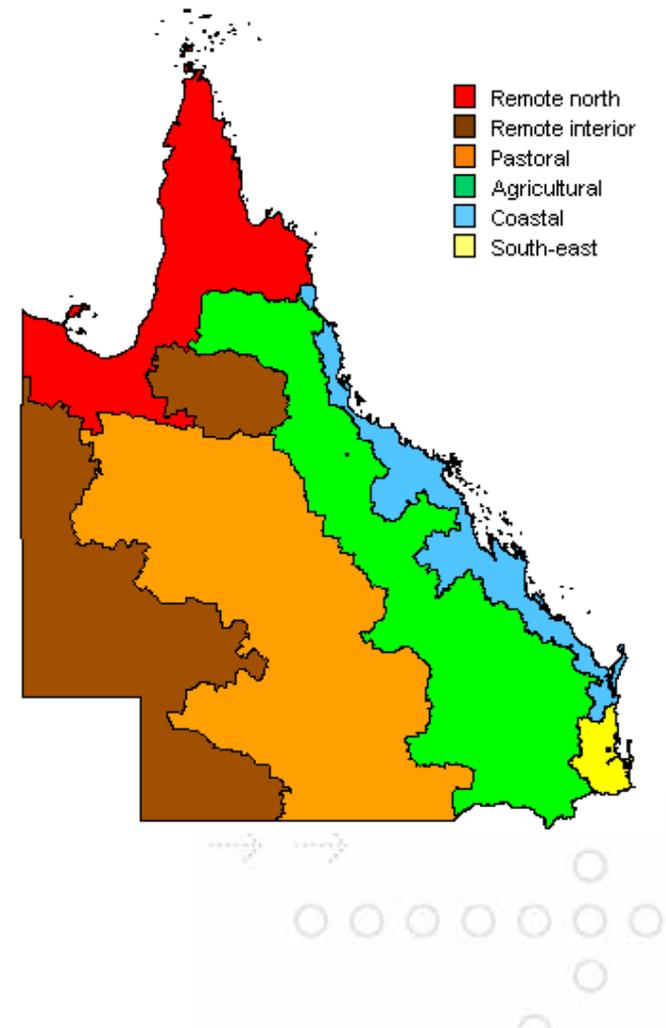
Violence across Queensland

- 67 per cent of SLAs across Queensland experienced a larger than predicted decrease in total violence from 1996-2001



Violence across settlement zones

- South-east Queensland
 - 75 per cent of SLAs showed decreases
- Coastal Queensland
 - 67 per cent of SLAs showed decreases
- Agricultural Queensland
 - 74 per cent of SLAs showed decreases
- Pastoral Queensland
 - 58 per cent of SLAs showed decreases
- Remote interior
 - 57 per cent of SLAs showed decreases
- Remote north
 - 40 per cent of SLAs showed decreases



Predicting change across the site

- Significant models
 - ❖ Total violent crime
 - ❖ Homicide-related offences
 - ❖ Serious assaults
 - ❖ Menacing person offences
 - ❖ Sexual offences
- Failed to reach significance
 - ❖ Common assaults
 - ❖ Unarmed robberies
 - ❖ Armed robberies



Total violent crime

	<i>b</i>	<i>SE b</i>	<i>β</i>	<i>sr</i> ²
Constant	0.18	0.26		
Homes owned	0.37	0.13	.37**	.06
Newcomers	-0.63	0.13	-.64**	.17
	<i>R</i> ²	.27		
	<i>F</i>	2.63**		

p*<.05 *p*<.01 ****p*<.001



Menacing person offences

	<i>b</i>	<i>SE B</i>	β	<i>sr</i> ²
Constant	0.18	0.26		
Homes owned	0.40	0.13	.40**	.05
Newcomers	-0.57	0.13	-.57***	.13
<i>R</i> ²	.26			
<i>F</i>	2.46**			

p*<.05 *p*<.01 ****p*<.001



Serious assaults

	<i>b</i>	<i>SE b</i>	β	<i>sr</i> ²
Constant	0.01	0.24		
Homes owned	0.44	0.12	.44***	.08
Pop density	-0.25	0.12	-.21*	.03
Newcomers	-0.66	0.12	-.66***	.19
Disadvantage	-0.37	0.17	-.37*	.03
	<i>R</i> ²	.35		
	<i>F</i>	3.88***		

p*<.05 *p*<.01 ****p*<.001



Homicide-related

	<i>b</i>	<i>SE b</i>	β	<i>sr</i> ²	<i>F</i>
Constant	0.38	0.25			
Settlement zone [†]					
South-east	-0.26	0.38	-.07	.00	
Agricultural	-0.40	0.22	-.20	.02	
Pastoral	0.02	0.47	.01	.00	5.03**
Remote interior	0.07	0.57	.02	.00	
Remote northern	2.50	0.63	.50	.10	
Indigenous	0.32	0.11	.33**	.05	
Newcomers	0.31	0.12	.31*	.04	
	<i>R</i> ²	.29			
	<i>F</i>	2.89**			

p*<.05 *p*<.01 ****p*<.001

[†] Reference category is 'coastal zone'



Sexual offences

	<i>b</i>	<i>SE B</i>	β	<i>sr</i> ²	<i>F</i>
Constant	.13	.26			
Settlement zone [†]					
South east	-0.47	0.39	-.12	.01	4.53*
Agricultural	-0.22	0.23	-.11	.01	
Pastoral	-0.13	0.49	-.05	.00	
Remote interior	-0.14	0.60	-.03	.00	
Remote northern	2.40	0.65	.48	.09	
Indigenous	0.24	0.12	.24	.03	
	<i>R</i> ²	.24			
	<i>F</i>	2.23**			

p*<.05 *p*<.01 ****p*<.001

[†] Reference category is 'coastal zone'

Predicting change in violence

- Contributors

- Ethnic heterogeneity
- Residential instability
- Population density
- Indicators of economic status
- Settlement zones

- No evidence for contribution

- Familial instability
- Primary industry workforce quotients
- Age profile
- Gender balance
- Accessibility/remoteness index of Australia Plus (ARIA+)





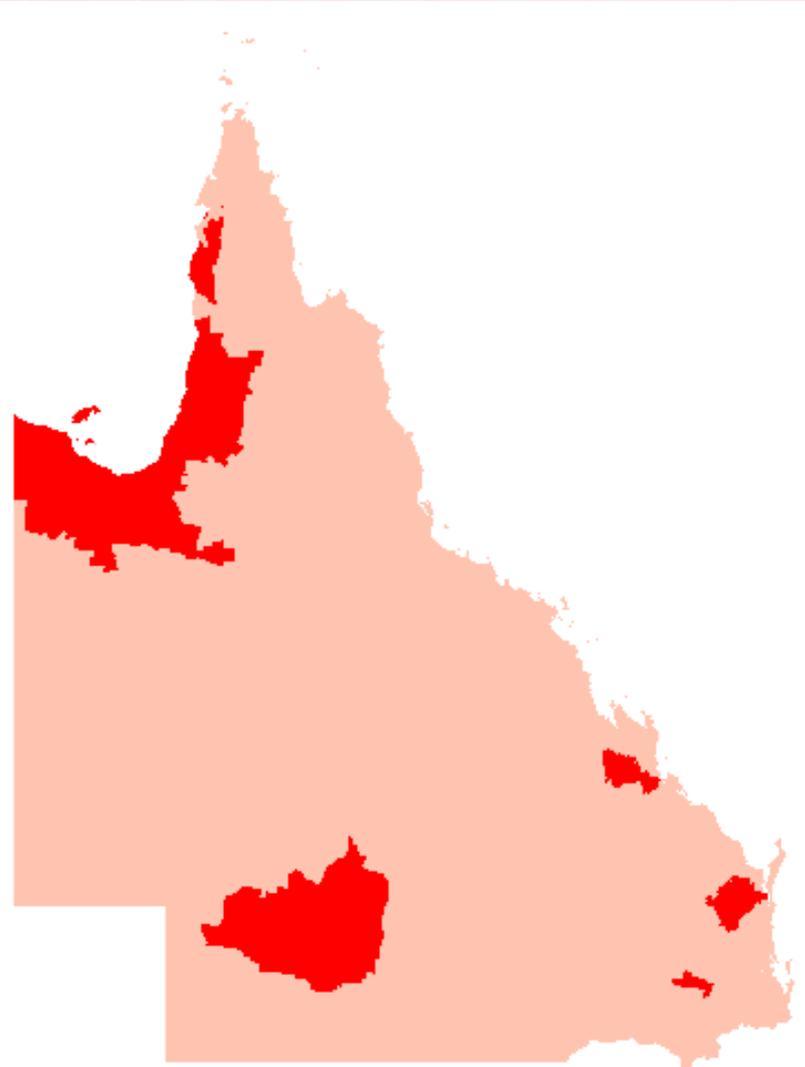
Research questions

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- **How can an exploration of ‘extremes’ contribute to understanding this process?**



'Extremes'

- 10 SLAs registered as 'extremes'
- 18 cases of extreme change
 - 14 cases were extreme increases (78 per cent)
 - 4 cases were extreme decreases (22 per cent)
- All settlement zones *except* the remote interior
- Evenly distributed between 'accessible' and 'very remote' categories of remoteness





Conclusions and implications

- Overall decline in violence across Queensland
- More extreme increases than there are extreme reductions in violence
- Crime specificity is important
- Change matters
- Further exploration is needed into understanding the extremes





Future thoughts

- How can this type of study be replicated on a national scale to better gauge the national experience of violence and social change?
 - How can this type of study be replicated on a local scale to understand micro-social process (e.g. Mt Isa's lead scandal)
 - How can these findings feed into understanding of community resilience?
 - Theory generalisability question for the focal shift from urban to rural
 - What can we learn from social **organisation** and some types of violence (sexual offences, domestic violence, stock-related offences)?
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