Tig, Tag, Tiggy
Laurie and Winifred Bauer

Question 1a asked for terms for the basic chase-and-touch game played in many school playgrounds. The question was worded like this:

1a At your school, do children play a game with many players where one player has to run and try to touch another player while all the other players try to run away and not get touched?

The answers were many and varied, and included quite a lot of names of games which are variants on this basic game. In all, 91 different names were given, although many were given only once. We disregarded those reported only once, and disregarded those we knew to be more complex variants (e.g. *bullrush,* which we asked about separately). There were three common names for the basic game: *tig, tag*, and *tiggy*. Sometimes more specific variants included one of these names, e.g. *ball tag, pole tiggy*. Where these were reported, they were recorded as instances of the basic term, but a comment giving the more specific form was entered in the database. Other terms besides *tig, tag* and *tiggy* which remained after this process of simplification of the data were: *mad (chase), chasey*. There are just two instances of *chasey*, in widely separated parts of the country, and just three of *mad (chase)*, two in Wellington, and one in Otago. Clearly we lose nothing of significance by disregarding these also. The term *tug* was recorded just once, and could possibly be a mis-recording of *tig.* However, it occurred in the Auckland area, where *tig* would be unexpected. *Tig-tag* was also recorded once, in Hawkes Bay, where again, *tig* would be unexpected. These terms are not included in the analysis. The analysis is thus based on the three terms *tig, tag* and *tiggy*.

These terms divide the country into three regions. In the north of the North Island, as far south as the volcanic plateau, but not including Hawkes Bay or Taranaki, the dominant term is *tiggy*, although there is a significant record of *tag* scattered through this region as well. (However, nowhere in this Northern region is *tag* recorded as the only form: where it occurs, *tiggy* was also reported.) From Taranaki and Hawkes Bay south as far as the Waitaki River, and including some of central Otago, *tag* is recorded to the exclusion of other terms (although two schools in Wellington also recorded *tiggy*). In Southland and south Otago, and parts of central Otago, *tig* is the dominant form, although here again, *tag* is often known alongside *tig*, and in one school in this region, *tag* was the only term reported. (One school in this area reported all three terms, quite unexpectedly.) (Several of the atypical schools were included in the school visits programme, and questions were asked at that time (two years later) about the name of this game. The Northern Region school which originally reported *tig* showed no sign of using this term two years later. One of the two Wellington schools reporting *tiggy* was visited, and this term was not recognised by any of those children interviewed. The Southern region school which reported only *tag* in the initial survey reported only *tig* at the time of the visit, raising the possibility that the original children surveyed also said *tig*, but a teacher expecting *tag* misheard their response. The school which reported all three in the original survey did not report the northern form *tiggy* at the time of the visit, and it was clear that *tig* was the dominant form there, as expected, rather than *tag.* A school on the northern boundary of the southern area, which in the initial survey reported only *tag* was

found at the time of the visit to have *tag* as the dominant term, but there was a minority usage of *tig* there, which is again expected in a border area. In all the Northern Region schools visited, although *tag* was often known, it was clear that *tiggy* was the normal term. Thus the data from the visits suggests that the dialect divisions are even stronger than the original data showed.)
Statistically, in the data from all questions combined, Taranaki showed a stronger likeness to the Northern area, so the lack of reports of *tiggy* from Taranaki in this question is worthy of note.
The table showing the distribution of these forms across the Main Regions follows. In the Schools row, the figures show the raw number of schools in each region, and then the percentage of the total schools which that represents. (One school was indeterminate in terms of Main Region, so the percentages do not add to 100.) In the rows for each of the forms, the figures under No. are the raw number of schools in that region which reported that form. The figures in the % columns are the percentage of the total reports of that form which the raw number represents. Thus there were 57 reports of *tiggy* in all, and the 49 reports in the Northern Region represent 86% of the total reports of *tiggy*. If the terms were distributed evenly across the regions we would expect the figures in the percentage column to be close to the percentage figures in the Schools line. To the extent that they diverge, we have evidence of regionalisation.

	Northern		Central		Southern	
	No.	%	No.	%	No.	%
Schools	57	38	78	52	14	9
tiggy	49	86	7	12	1	2
tag	27	26	68	65	9	9
tig	1	7	0	0	13	93

The statistical analysis of the distribution of these forms in the three main regions confirmed this. If the information from the school visits is taken into account, 100% of the schools in the Southern Region reported *tig*, and none reported *tiggy*.

Statistical Analysis

Tiggy

The p-value for *tiggy* in the Northern Region compared with the Southern Region was 0.0001, i.e. highly significant. A p-value of 0.0001 for the Northern Region – Central Region contrast for *tiggy* was obtained through a contrast statement.
The statistics also revealed that *tiggy* correlates with low decile to a significant degree: the p-value was 0.0013. Because of the large number of low decile schools in the Northern Region, it was necessary to investigate whether the decile effect was a result of the Northern Region – low decile correlation, or whether decile is a significant factor in the distribution of *tiggy* in its own right. The statistical calculations of the contribution of the two factors of Main Region and Decile indicate that, while decile still has an effect on the distribution of *tiggy* when Main Region is taken into account, the effect is not significant, (p-value 0.0872) while the effect of Main Region when Decile is taken into account is much stronger (a p-value of 0.0001 for both the Northern – Southern contrast and the Northern – Central contrast).

Tiggy was also highly significantly more common in the North Island than the South Island (p-value 0.0000, derived from a non-zero figure). However, this is the result of the Northern Region location. If the relationship between Decile and Island is investigated, the statistics show that Island is highly significant when Decile is taken into account (p-value 0.0000 derived from a non-zero figure), but the p-value for Decile when Island is taken into account is only just significant (0.0302). This indicates that Island is also more important than Decile in accounting for the distribution of *tiggy*. The fact that Decile is still significant is no doubt due to the fact that the low decile schools are predominantly in the Northern Region section of the North Island, and thus Decile together with Island is a better predictor than Island alone.
Thus the statistical analysis confirmed that the most important factor in the distribution of *tiggy* is Northern Region, followed by North Island and then low decile.

Tag

The p-value comparing *tag* in the Northern and Central Regions was 0.0001, (confirming that there is highly significantly more *tag* in the Central Region) but the p-value comparing *tag* in the Central and Southern Regions was not quite significant, at 0.0590. This is because the majority of schools in the Southern Region reported *tag* as well as *tig.*
No other factors were significant for *tag.*

Tig

The p-value for *tig* in the Southern Region compared with the Northern Region was 0.0001, i.e. highly significant. There were no reports of *tig* in the Central Region, so the statistical program reported a large sampling error.
No other factors affect the distribution of *tig.*

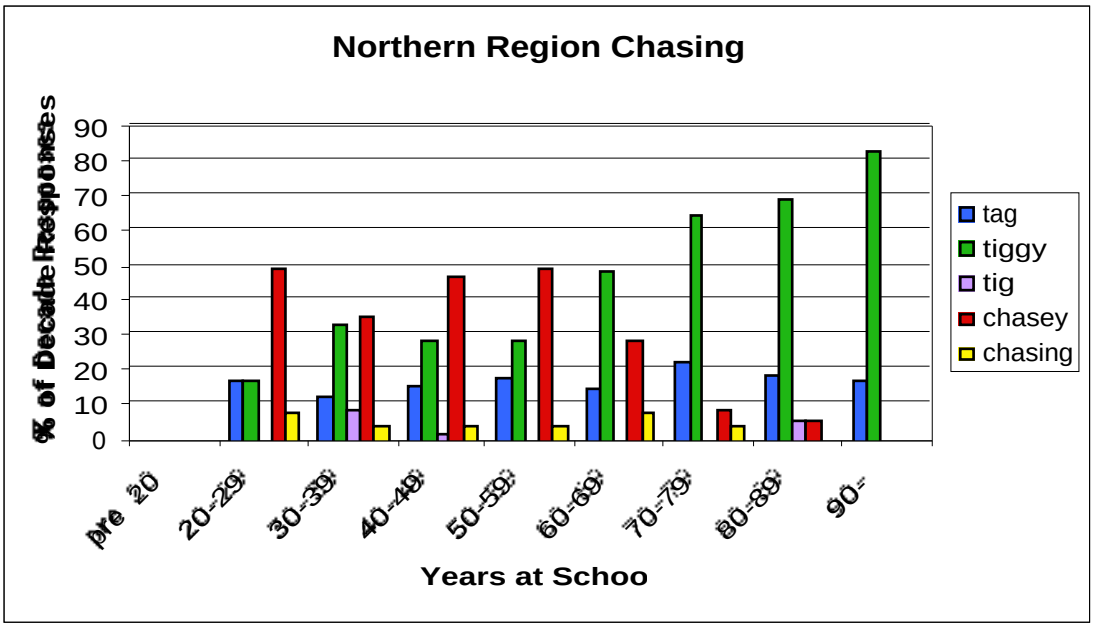
Conclusion

We thus conclude that these forms are all strongly regionalised into the three Main Regions.
No other factors were significant, since the effect of Island for *tiggy* is explained by the distribution into Main Regions.

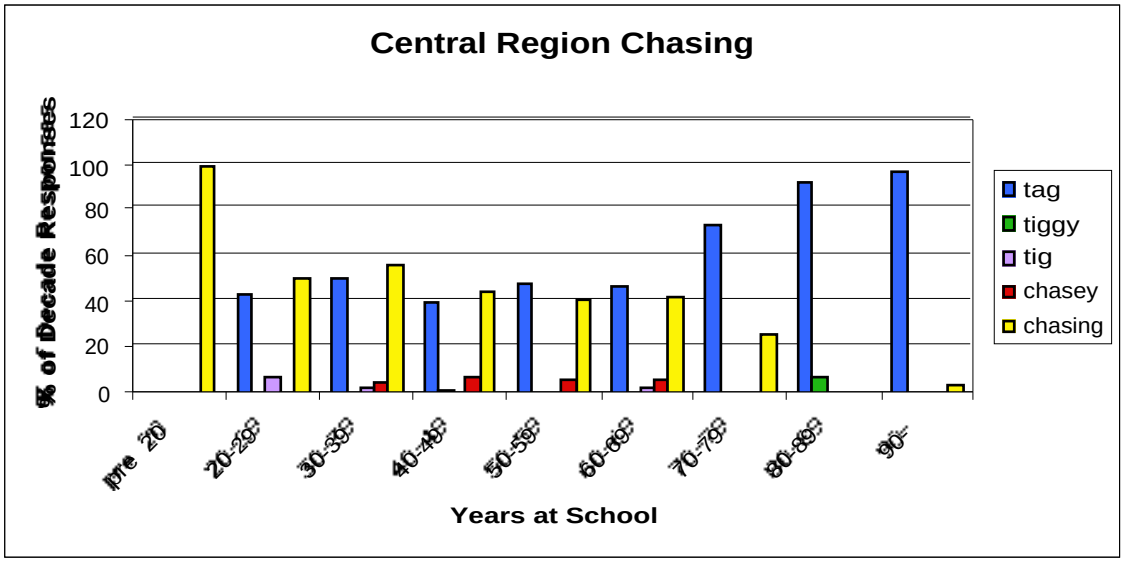
What we know about these terms elsewhere in the world and earlier in NZ

The OED defines *tag* as "a children's game in which one chases the rest, and anyone who is caught then becomes the pursuer", and gives a citation from 1738. The origin is uncertain, but is perhaps a variant of TIG. *Tig* is defined as "a children's game, in which one of the players – usually designated *tig* or *it* – pursues the others until he overtakes and touches or 'tigs' one, who in his turn becomes 'tig': the same as TAG." (It is also compared to *tick*, which is defined similarly.) The earliest citation for *tig* is 1816. The 2nd Edition contains nothing new, but *The New OED* says that *tig* is chiefly British. None of these have any record of *tiggy*.
The Opies in *The Lore and Language of Schoolchildren* do not discuss these games per se, but in discussing truce terms, mention them. The terms *chase* and *tig* are used in these mentions. They also mention a game called *Tiggy Touch Colour.*
The Compact Scottish National Dictionary records *tig* as the name of this chasing game, with a very similar definition. It does not record *tag* or *tiggy*. That *tig* is the norm in Scotland is perhaps confirmed by *Chambers Dictionary,* which defines *tag* as "the children's game of tig". *Tig* is defined as "a game in which someone who is "it" chases the others, the person he or she touches then becoming "it"". We

know (several personal communications) that the game was called *tig* in several places in Scotland in the 1940's. Chambers does not record *tiggy*.
Websters 3rd New International Dictionary records two "chiefly Scottish" uses of *tig* which are perhaps relevant: "TIG[1]: to poke or pat one in a playful manner; …TIG[2]: 1. a noticeable but not violent touch …; 2. the game of tag." It is clear that Webster's regards *tag* as the US norm, but notes that its origin is not known. It does not record *tiggy*. The original Webster defines *tag*, and lists *tig*, referring the reader to the entry for *tag*.
Confirming that only *tag* is in use in the US, the *Random House Dictionary* does not have entries for either *tig* or *tiggy*, but does include *tag*. This is also true for the *Canadian Oxford Dictionary*, suggesting that North America is unified in this.
Closer to home, the *Australian National Dictionary* does not list any of these, suggesting that none of them are seen as special to Australia. The *Macquarie Dictionary*, 3rd Edition, has an entry for *tag* which refers the reader to *tig* and to *chasings*. When you look up *tig*, you are referred to *tag*. *Tiggy* is only there in the name of the game *Tiggy Touchwood*, where the reader is also referred to *chasings*. At *chasings*, we find "(also *chasey*): a children's game in which one player chases the others till he or she touches one of them, who then becomes the pursuer." From this, it would appear that *chasings* is the norm in Australia. The *Macquarie Concise Dictionary* has an almost exact copy of that as the definition of *tag*, but does not have an entry for either *tig* or *tiggy*. This suggests that *tag* is found in Australia alongside *chasings*.
The *Dictionary of South African English on Historical Principles* does not list any of these terms, suggesting that they are not seen as unique to South Africa.
In the Orsman *New Zealand Dictionary*, there is an entry for *tiggy*, but not for the other two terms. The origin is given as British dialect *Tiggy Touch Wood*, and it is defined as "a children's game of tig". The earliest citation is 1953. This suggests that Orsman believes that the use of *tiggy* as the name for the basic game is a New Zealand innovation. (His definition of the game calls the chaser "he", no longer the current term in NZ.)
Sutton-Smith, in his survey of children's games from the late 1800's to the 1950's writes (Sutton-Smith, 1981, 51) "the game of Tig (known as "Tag" in the United States) is always remembered," and he also cites the game "Twilight Tig" in an extract from an 1890 Dunedin source. He notes in the modern (ie 1950's) era, the following names (op. cit. 275): Seat Tag, Tiki Tiki Touchwood, Tree Tag, Witch's Tag, Bush Taggy, Shadow Tag, Donkey Tag, Stone Tag, and an Otago name for Tip the Finger, "Somebody must Tig". We were fortunate to receive a considerable body of historical data on the name for this game in NZ from readers of the Listener, in response to an article about this research. This revealed the following picture (ignoring low frequency names).

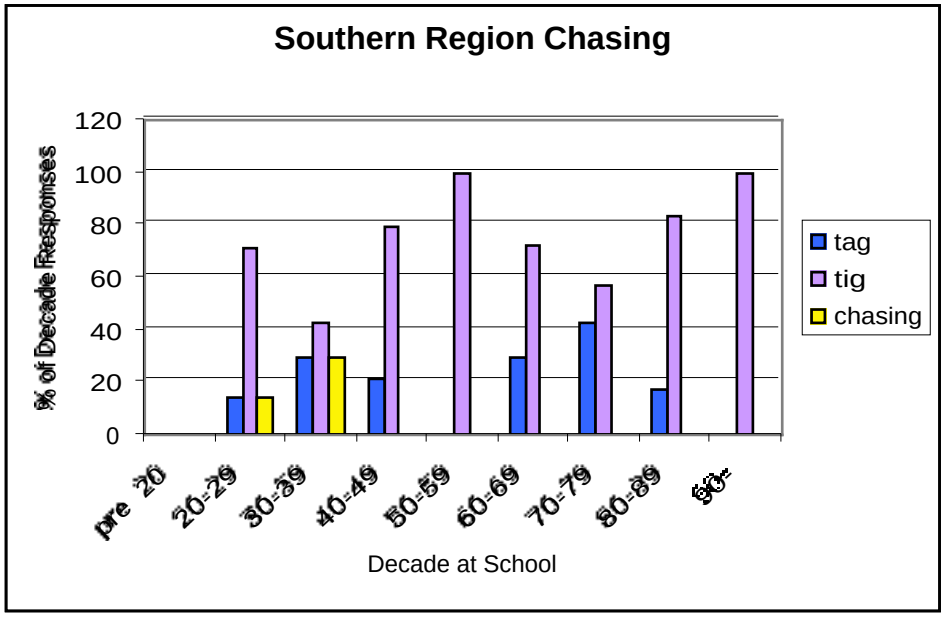


In the Northern Region, *tiggy* has been present since the early decades of last century, although at that time, *Tiggy (tiggy) touchwood* was at least as common. *Tag* was also used by a few respondents in these early decades. From the 1920's the term *chasey* was used in the Northern Region, and was the most common term for the game until the 1960's, when *tiggy* became more frequent, and gradually displaced *chasey*. No other terms are significant in the Northern Region.
Compare this with the picture for the Central Region:



In the Central Region, *tag* and *chasing* (not *chasey*) were present from the earliest decades of last century. In the first half of the 1900's, the terms were roughly

equal in popularity, but after the 1960's *tag* became more frequent, and gradually displaced *chasing*. No other terms are significant in the Central Region.
In the Southern Region, *tig* and *tag* were present from the earliest decades of last century. *Tig*, however, has always been the dominant form.



A few instances of *chasing* were reported by Southern Region respondents at about the same time as the *chase* terms were first reported in the other regions, but this did not ever gain popularity in the Southern Region.
These regional profiles raise as many questions as they answer: given that all the available sources indicate that *tig* would have been used in Britain at the time when the early settlers came to NZ, where did *tag* come from? Where did the *chase*-forms come from? If from Australia, why? Why did the Northern and Central Regions have different *chase*-forms? Why did the *chase*-forms in those regions give way to the *tig/tag* forms at the same time? These are tantalising questions, and no obvious answers present themselves. What the data does suggest very strongly, however, is that these three regions have been distinct for most of their European history, although there is no evidence to suggest that their settlers would have brought different terms with them in relation to the chasing game, at any rate.
However, the OED entries suggest the possibility that *tag* was an earlier name for *tig* in Britain, and probably the standard name at the period when British settlers went to America in significant numbers. If this is true, it would explain why the North American name is *tag*. It also suggests the possibility that *tag* remained in Britain as a minority name for *tig*, and may have been brought to NZ in that way. Personal enquiries amongst colleagues of Irish origin suggest that, in particular, *tag* may have been used alongside *tig* in Ireland, and thus it may have been Irish settlers who brought *tag* to NZ.
Personal enquiries amongst Maori contacts revealed that most Maori speakers called the game *tiki*, which would be expected as the borrowed form of *tig* or

tiggy, but not *tag*. However, most of those who provided this information grew up in the Northern Region (of our study), i.e. within the *tiggy* area. This suggests that the name of the game when it was borrowed into Maori was a *tig*-form.
The history of these names is thus not clear. However the fact that they have always been strongly regionalised appears fairly clear, and the fact that they are currently strongly regionalised cannot be disputed.

A Footnote on the associated verbs

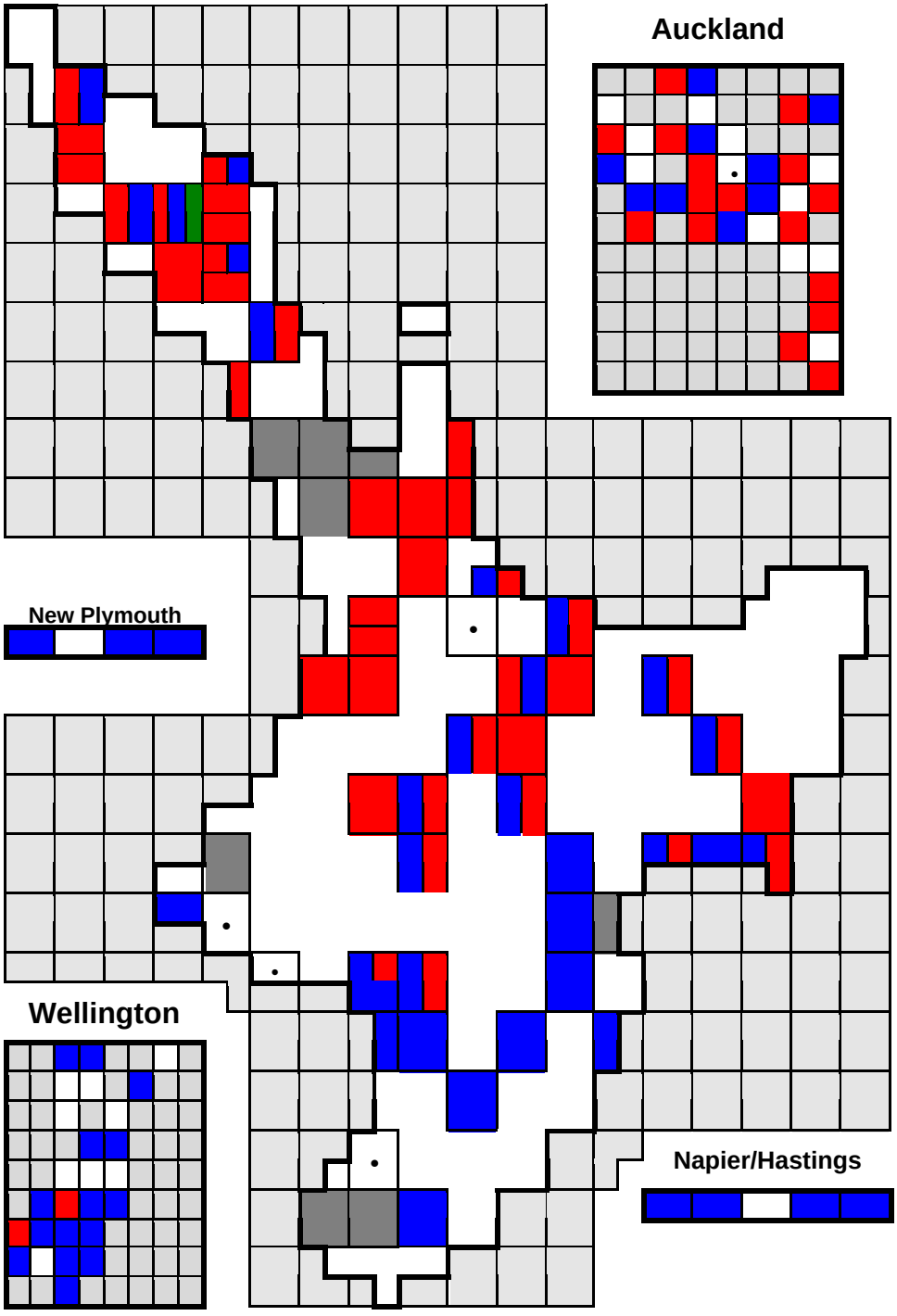
Since there was some evidence from the responses on the chasing game that different verbs were in use for the action of touching someone, during the school visits, we made an attempt to find out what was in use.
We asked the following question:

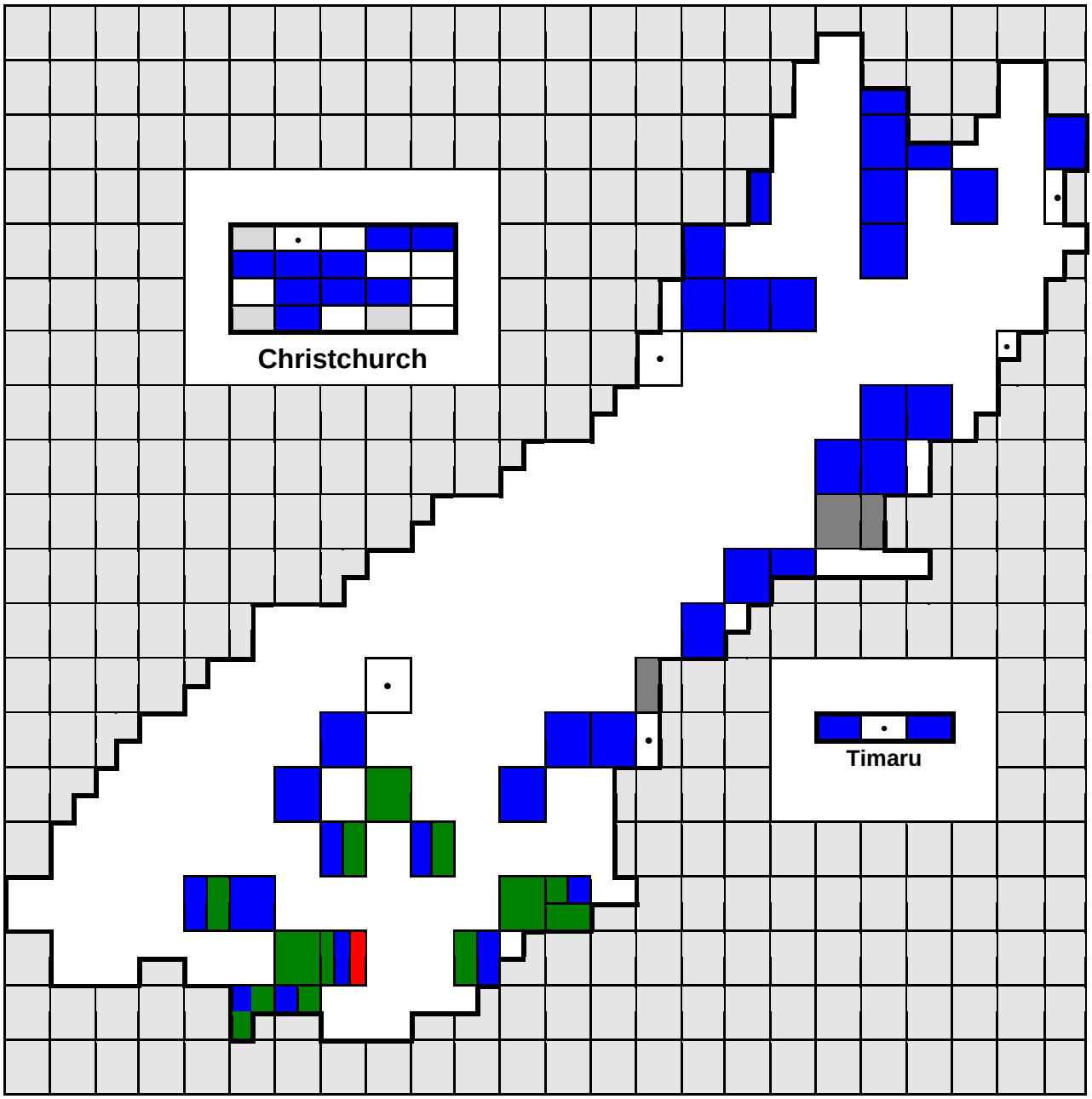
> What words would you put in the spaces in these sentences about playing tiggy / tag / tig:
> a Chris was in / it, but he t_____ Pat, and now Pat is in / it.
> b I only got t_____ once during that game, because I'm a fast runner.

The two sentences in a and b were intended to find out whether there were differences between past tenses and past participles, but in the interviews, it became clear that in most cases, there was no difference, and the children thought they were being asked the same question twice. After the first few schools, no attempt was made to distinguish.
The most common response was *tagged*: in 25 of the 32 schools asked (in one, the question was omitted by mistake), *tagged* was supplied. However, there was only one school in the Central and Southern Regions which did not report this, and most of the non-reports came from the Northern Region.
In the Northern Region, *tug* was the most common response, and this was also reported in the Southern Region. It appears that this is the form that goes with roots with *tig*- (i.e. with *tig* or *tiggy*). Altogether, there were 13 reports of *tug*, with just one from the Central Region, from a school on the southern border where we know *Tig* was in use, though not the norm.
Got was a common response (the initial *t*- of the written versions above was not supplied in the interview situation). It was more common in the South Island than the North. There were 12 reports of *got*, 8 of them from the South Island.
Tigged was reported by just 5 schools, and came both from the Northern (*tiggy*) Region and the Southern (*tig*) Region. Not surprisingly, there were no reports of this from the Central Region.
There were 3 responses of *tag*, all from the Northern Region, and one of *tugged*, also from the North.
It thus appears that the associated verbs are also regionalised to some extent: particularly in the Northern Region, *tug* is preferred to *tagged*; the Central Region is remarkably consistent in using *tagged*, although in the South Island part of the Central Region, *got* is an alternative.

The statistical results and the relevant map follow.

Map for Q1(a): Tiggy, Tag, or Tig





Key

Note that the insets are not to scale, nor all on the same scale for practical reasons. Each box represents one school in both urban and rural areas.

Tiggy

Tig

See urban map insert

Tag

No relevant data

Q1a Statistics: Chasing

Chasing by Decile

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	tag	0.3950	0.3927	-0.3746	1.1646	1.0060	0.3144
item	tig	-2.1745	0.6714	-3.4903	-0.8587	-3.239	0.0012
item	tiggy	0.6846	0.3898	-0.0794	1.4485	1.7563	0.0790
decile*item	tag	0.0689	0.0628	-0.0543	0.1920	1.0964	0.2729
decile*item	tig	-0.0170	0.1077	-0.2282	0.1941	-.1579	0.8746
decile*item	tiggy	-0.2106	0.0656	-0.3392	-0.0819	-3.208	**0.0013**
scale	1.0006	.	.	.	.	.	

Chasing by Main Region

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.0000	0.0000	.	.	
item	tag	1	0.5878	0.5578	1.1105	0.2920
item	tig	1	2.5649	1.0377	6.1090	0.0134
item	tiggy	1	-2.5649	1.0377	6.1090	0.0134
item*region1	tag, 1	1	-0.6931	0.6176	1.2594	0.2618
item*region1	tag, 2	1	1.2190	0.6457	3.5640	0.0590
item*region1	tag, 3	0	0.0000	0.0000	.	.
item*region1	tig, 1	1	-6.5903	1.4473	20.7335	**0.0001**
item*region1	tig, 2	1	-28.9303	60132.5783	0.0000	0.9996
item*region1	tig, 3	0	0.0000	0.0000	.	.
item*region1	tiggy, 1	1	4.3773	1.1056	15.6758	**0.0001**
item*region1	tiggy, 2	1	0.2482	1.1108	0.0499	0.8232
item*region1	tiggy, 3	0	0.0000	0.0000	.	.
scale	0	1.0000	0.0000	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 -2 for tag	1	23.4470	**0.0001**	LR
1 -2 for tiggy	1	89.8704	**0.0001**	LR

Chasing by Sub-Region

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.0000	0.0000	.	.	
item	tag	1	0.5878	0.5578	1.1105	0.2920
item	tig	1	2.5649	1.0377	6.1090	0.0134
item	tiggy	1	-2.5649	1.0377	6.1090	0.0134
item*region2	tag, 1	1	-0.5878	0.9888	0.3533	0.5522
item*region2	tag, 2	1	-0.5878	0.9888	0.3533	0.5522
item*region2	tag, 3	1	-0.6931	0.7226	0.9200	0.3375
item*region2	tag, 4	1	-0.7419	0.6825	1.1816	0.2770
item*region2	tag, 5	1	1.8101	1.1841	2.3370	0.1263
item*region2	tag, 6	1	1.7148	0.9280	3.4148	0.0646
item*region2	tag, 7	1	0.6650	0.9767	0.4635	0.4960
item*region2	tag, 8	1	1.0217	1.2293	0.6907	0.4059
item*region2	tag, 9	1	2.2454	1.1704	3.6804	0.0551
item*region2	tag, 10	1	-0.1823	0.8531	0.0457	0.8308
item*region2	tag, 11	0	0.0000	0.0000	.	.
item*region2	tig, 1	1	-4.1744	1.5089	7.6531	**0.0057**
item*region2	tig, 2	1	-28.9303	216811.094	0.0000	0.9999
item*region2	tig, 3	1	-28.9303	121837.317	0.0000	0.9998
item*region2	tig, 4	1	-28.9303	104152.681	0.0000	0.9998
item*region2	tig, 5	1	-28.9303	153308.595	0.0000	0.9998
item*region2	tig, 6	1	-28.9303	113225.901	0.0000	0.9998
item*region2	tig, 7	1	-28.9303	177025.517	0.0000	0.9999
item*region2	tig, 8	1	-28.9303	216811.094	0.0000	0.9999
item*region2	tig, 9	1	-28.9303	125175.944	0.0000	0.9998
item*region2	tig, 10	1	-28.9303	167941.152	0.0000	0.9999
item*region2	tig, 11	0	0.0000	0.0000	.	.
item*region2	tiggy, 1	1	28.9303	216810.819	0.0000	0.9999
item*region2	tiggy, 2	1	28.9303	216810.819	0.0000	0.9999
item*region2	tiggy, 3	1	5.4553	1.4603	13.9558	**0.0002**
item*region2	tiggy, 4	1	3.5635	1.1280	9.9798	**0.0016**
item*region2	tiggy, 5	1	1.4663	1.2334	1.4133	0.2345
item*region2	tiggy, 6	1	1.0609	1.1758	0.8141	0.3669
item*region2	tiggy, 7	1	-23.8004	177025.517	0.0000	0.9999
item*region2	tiggy, 8	1	-23.8004	216811.094	0.0000	0.9999
item*region2	tiggy, 9	1	-23.8004	125175.944	0.0000	0.9998
item*region2	tiggy, 10	1	-23.8004	167941.152	0.0000	0.9999
item*region2	tiggy, 11	0	0.0000	0.0000	.	.
scale	0	1.0000	0.0000	.	.	

The program would not produce Contrast Statements for Region 2, not even contrasting 4, 5.

Chasing by Island

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	tag	1.2192	0.3157	0.6005	1.8380	3.8623	0.0001
item	tig	-1.2192	0.3157	-1.8380	-0.6005	-3.862	0.0001
item	tiggy	-4.0254	1.0089	-6.0027	-2.0480	-3.990	0.0001
item*island	tag, 1	-0.6681	0.3821	-1.4170	0.0809	-1.748	0.0804
item*island	tag, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tig, 1	-3.3025	1.0538	-5.3680	-1.2371	-3.134	**0.0017**
item*island	tig, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tiggy, 1	4.4398	1.0309	2.4193	6.4603	4.3067	**0.0000**
item*island	tiggy, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

Chasing by Catholic

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.0000	0.0000	.	.	
item	tag	1	1.9459	0.7559	6.6265	0.0100
item	tig	1	-24.3653	0.2922	6951.8196	0.0001
item	tiggy	1	-1.0986	0.5774	3.6208	0.0571
item*catholic	tag, 1	1	-1.2298	0.7785	2.4954	0.1142
item*catholic	tag, 2	0	0.0000	0.0000	.	.
item*catholic	tig, 1	0	22.1596	0.0000	.	.
item*catholic	tig, 2	0	0.0000	0.0000	.	.
item*catholic	tiggy, 1	1	0.6804	0.6043	1.2676	0.2602
item*catholic	tiggy 2	0	0.0000	0.0000	.	.
scale	0	1.0000	0.0000	.	.	

Chasing by Urban/Rural

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	tag	0.9045	0.2875	0.3410	1.4679	3.1464	0.0017
item	tig	-2.6210	0.5179	-3.6360	-1.6060	-5.061	0.0000
item	tiggy	-0.5931	0.2719	-1.1260	-0.0601	-2.181	0.0292
item*urb_rur	tag, 1	-0.2287	0.3670	-0.9479	0.4905	-.6232	0.5331
item*urb_rur	tag, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tig, 1	0.5929	0.6175	-0.6174	1.8032	0.9601	0.3370
item*urb_rur	tig, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tiggy, 1	0.2646	0.3489	-0.4192	0.9483	0.7583	0.4483
item*urb_rur	tiggy, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

Chasing by Decile and Island, Model 2

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	tag	0.9277	0.4980	-0.0482	1.9037	1.8631	0.0624
item	tig	-0.1329	0.8279	-1.7555	1.4897	-.1605	0.8725
item	tiggy	-3.0560	1.1037	-5.2192	-0.8927	-2.769	0.0056
item*island	tag, 1	-0.6154	0.3850	-1.3699	0.1391	-1.599	0.1099
item*island	tag, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tig, 1	-3.5895	0.9891	-5.5281	-1.6509	-3.629	**0.0003**
item*island	tig, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tiggy, 1	4.3313	1.0292	2.3142	6.3485	4.2086	**0.0000**
item*island	tiggy, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
decile*item	tag	0.0452	0.0635	-0.0793	0.1696	0.7114	0.4768
decile*item	tig	-0.1734	0.1333	-0.4346	0.0878	-1.301	0.1932
decile*item	tiggy	-0.1590	0.0733	-0.3027	-0.0152	-2.168	**0.0302**
scale	0.9445	.	.	.	.	.	

Chasing by Decile and Main Region

Analysis of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.000	0.0000	.	.	
item	tag	1	0.7356	0.6994	1.1062	0.2929
item	tig	1	3.0513	2.0105	2.3034	0.1291
item	tiggy	1	-1.6713	1.1447	2.1317	0.1443
item*region1	tag, 1	1	-0.7162	0.6217	1.3271	0.2493
item*region1	tag, 2	1	1.2364	0.6481	3.6394	0.0564
item*region1	tag, 3	0	0.0000	0.0000	.	.
item*region1	tig, 1	1	-6.7042	1.5432	18.8744	**0.0001**
item*region1	tig, 2	1	-28.9170	59977.9230	0.0000	0.9996
item*region1	tig, 3	0	0.0000	0.0000	.	.
item*region1	tiggy, 1	1	4.4045	1.1215	15.4250	**0.0001**
item*region1	tiggy, 2	1	0.3759	1.1231	0.1120	0.7379
item*region1	tiggy, 3	0	0.0000	0.0000	.	.
decile*item	tag	1	-0.0254	0.0721	0.1242	0.7245
decile*item	tig	1	-0.0804	0.2726	0.0869	0.7682
decile*item	tiggy	1	-0.1718	0.1005	2.9259	0.0872
scale	0	1.000	0.0000	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 -2 for tag	1	22.7149	**0.0001**	LR
1 2- for tiggy	1	80.2853	**0.0001**	LR

Northern Region Only by Decile

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.0000	0.0000	.	.	
item	tag	1	0.1150	0.5515	0.0435	0.8348
item	tig	1	20.7086	1.0954	357.3717	0.0001
item	tiggy	1	2.1876	0.8387	6.8029 0.0091	
decile*item	tag	1	-0.0449	0.0988	0.2071	0.6491
decile*item	tig	0	-22.3180	0.0000	.	.
decile*item	tiggy	1	-0.0735	0.1409	0.2720	0.6020
scale	0	1.0000	0.0000	.	.	

North Island Only by Decile

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.0000	0.0000	.	.	
item	tag	1	0.1320	0.4448	0.0881	0.7666
item	tig	1	19.6865	1.0607	344.4969	0.0001
item	tiggy	1	1.2523	0.4761	6.9170	0.0085
decile*item	tag	1	0.0804	0.0759	1.1236	0.2891
decile*item	tig	0	-21.7660	0.0000	.	.
decile*item	tiggy	1	-0.1544	0.0764	4.0808	**0.0434**
scale	0	1.0000	0.0000	.	.	

Tiggy in Main Regions

		Northern	Central	Southern	Total
Don’t say tiggy	number	8	71	13	92
	%	8.60	76.34	1.08	
Say tiggy	number	49	7	1	57
	%	32.67	4.67	0.67	38.00

Tag in Main Regions

		Northern	Central	Southern	Total
Don’t say tag	number	30	11	5	47
	%	20.00	7.33	3.33	31.33
Say tag	number	27	67	9	103
	%	18.00	44.67	6.00	68.67

Tig in Main Regions

		Northern	Central	Southern	Total
Don’t say tig	number	56	78	1	136
	%	37.33	52.00	0.67	90.67
Say tig	number	1	0	13	14
	%	0.67	0.00	8.67	9.33

	Northern		Central		Southern	
	No.	%	No.	%	No.	%
Schools	57	38	78	52	14	9
tiggy	49	86	7	12	1	2
tag	27	26	67	65	9	9
tig	1	7	0	0	13	93

