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SPECIAL EDITION: Capturing the Diversity Dividend? Diversity Matters in Aotearoa/New Zealand

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Editors' Note

his special issue of the New Zealand Population Review engages with the notion of migration-led diversity, the ways in which it matters and comes to matter in 21st century Aotearoa New Zealand. Globally, the year 2019 has seen the continued reinvigoration of right-wing populism, which reverberated locally in the callous White supremacist shooting of members of the Muslim community in Christchurch on 15 March 2019. In the immediate aftermath of the massacre, 'New Zealanders' rushed to express their disbelief and anger at this murderous manifestation of racial hatred, describing it as an aberration that did not square with New Zealand values of tolerance and openness to diversity. However, in the debates that followed, the divergent perspectives and experiences of communities of colour soon surfaced. Alongside routine experiences of racism, from everyday micro-aggressions to systemic discrimination, these also included, for instance, the experience that Muslim communities had been scrutinised as potential terrorist threats while White males had escaped the same racial profiling (Al-Assad, 2019; Rahman, 2019). Drawing attention to the longstanding history and persistence of racism in this country routinely causes White discomfort and defensiveness (Kaho, 2019), which highlights a desire for harmony and cohesion that comes at the expense of acknowledging how racism as well as the persistence of settler-colonial structures shape people's life worlds differentially.

The discursive repertoires enabled by the racial settler colonial order of Aotearoa New Zealand and our position within this system frame our thinking about migration, diversity and difference: what diversity should look like, where and how it can be expressed, what its place and role in the 'host society' is, and how it should be 'managed'. One contemporary strand of this framing is the tendency to make a business case for diversity. As accelerated international mobility has led to greater population diversity in many countries, including Aotearoa New Zealand, the notion of a 'diversity dividend' has been gaining traction. By now deeply entrenched in policy, business and also academic discourses, this rhetoric forms the basis for efforts to 'realise', 'capture', 'maximise' or even 'reap' the dividends, benefits

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or advantages of diversity. This suggests a strategic approach to both framing and managing diversity, which, at first glance, appears to entail a commitment to diversity; that is, to the representation and inclusion of 'diverse' people and to equality. While this pro-diversity approach looks ostensibly positive, it is important to deconstruct its motivations, practices and implications. We argue that this paradigm is problematic in a number of ways. To summarise these only briefly. Firstly, the benefits of diversity are almost exclusively framed in economic terms and reduced to economic indicators such as GDP and GDP per capita. For businesses, globalising cities, and host societies more broadly, diversity has become a tool to boost productivity, profits and prosperity (for example, Page, 2007; Wood & Landry 2008). However, the causal relations between diversity and economic growth are unclear. Secondly, such dividend framing structures migration policies, privileging those migrants who are deemed to be particularly 'valuable' (Collins, 2020) and therefore reproducing stratification and inequalities. This also creates expectations of migrants to contribute to society in ways that are not applied to residents without migrant background (Simon-Kumar, 2015). It is telling, for instance, that narratives of the contributions migrants and former refugees make are frequently drawn on to counter opposition to immigration. Furthermore, the economic imperative neglects both the complexities of population diversity and its effects in manifold social arenas. In this context, it is important to explore how institutional and state approaches to managing migration and diversity shape the narrative of a diversity dividend. Last but not least, diversity discourses arguably divert attention from analyses of racism and the reproduction of racialised advantage and disadvantage and, in the context of Aotearoa New Zealand, the focus on ethno-cultural diversity also obfuscates Indigeneity and the state's settler colonial structure as dimensions that are integral to understanding the racialisation of different groups.

The motivation for this special issue arose from our own entanglement with such discourses in an academic setting as part of the CaDDANZ research team. Short for *Capturing the Diversity Dividend of Aotearoa/New Zealand*, the CaDDANZ research programme encompasses a variety of quantitative and qualitative research projects that collectively set out to "identify how New Zealand can better prepare for, and respond to [...], demographic changes in order for the country to maximise the benefits

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associated with an increasingly diverse population" (CaDDANZ, n.d.). Cognisant of the programme's complicity in furthering discourses that serve to reproduce discourses and practices that effectively stratify populations, in this special issue, we propose that the very idea of a diversity dividend needs to be critically evaluated.

For this purpose, this special issue of the *New Zealand Population Review* brings together contributions by scholars who have extensively researched demographic change, the fluidity of cultural identities, the role of Māori in shaping approaches to immigration, and how population diversity manifests and matters in workplaces, institutions and neighbourhoods.

In the commentary that opens this special issue, **Francis Collins** delves deeper into the diversity dividend problematic. He critically illuminates the origins and dimensions of the diversity dividend as a pervasive contemporary political project. He specifically draws attention to the ways in which this ideology has been strategically deployed to "extract value" from ethnic diversity and how it manifests in the state-led stratification of migrants in New Zealand immigration policy. Collins concludes his critique of "the fraught logics" of the diversity dividend paradigm with a call for a transformative agenda that acknowledges the intersections of diversity and inequalities as well as the settler colonial structures embedded in Aotearoa New Zealand.

One step removed from problematising the diversity dividend per se, the first two papers make the case for a more complex understanding of diversity. Michael Cameron and Jacques Poot use census data to reveal how ethnic diversity has changed rapidly over time, and how it is expected to change in the future. While previous research has tended to obscure both regional variation and heterogeneity within broad ethnic categories, their use of the cohort change method allows them to project disaggregated ethnic populations, and to compare diversity across regions. Following on, Lars Brabyn, Natalie Jackson, Glen Stitchbury and Tristan McHardie argue that it is necessary to gain a more nuanced understanding of socio-demographic diversity and population change that takes account of the complex interplay of multiple structural factors including natural growth, ageing and migration as well as its distinct spatial patterns. Of specific interest to end users of such data, such as local and central government and public services, the New Zealand Atlas of Population Change (NZAPC) is discussed as an

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alternative tool to other available online maps. Featuring maps accompanied by researcher-informed narratives rather than simply data, this atlas allows end users of population and diversity data to derive greater benefit and a deeper understanding of diversity patterns.

Responding to population diversity has become core business for many organisations. This includes inward-facing diversity strategies (such as HR policies), which aim to manage representation within the workforce, and also outward facing strategies. While some organisations explicitly provide services to new migrants, for others, engagement with new migrants and ethnic communities is part of a wider remit. Geoff Stone and Robin Peace report on a programme of developmental evaluations that were undertaken with English Language Partners New Zealand and New Zealand Police in order to establish the capacity and capability of these institutions to respond to diversity. In its methodological focus, the article draws two main conclusions. For one, it emphasises the value of developmental evaluations for gaining an understanding of how organisations conceptualise diversity and the variety of factors that shape their responsiveness. Secondly, in reflecting on the work undertaken, the authors highlight the value of developmental evaluations for the organisations insofar as "a critical evaluative friend" can enable them to develop stronger responses to diversity.

One particular discourse that has run in parallel to that of maximising the benefits of diversity is that of mitigating the ostensible challenges of living with difference. Internationally and in Aotearoa New Zealand, the notion of social cohesion has been a central frame for discussions of how to 'manage' diversity. Primarily revolving around the ideas of shared values and integration, cohesion has mostly been conceptualised as situated at the level of the state. Robin Peace and Paul **Spoonley** revisit the New Zealand policy debates about the utility of social cohesion as a policy framework. Charting reasons for its limited uptake in the policy space as well as limitations of the concept, they offer a novel way of conceptualising cohesion, not as a property of diverse individuals but situated in the interpersonal relations that are enacted daily in quotidian contexts. They argue for a broader, more inclusive understanding of difference and for a shift from an abstract idea of cohesion to cohesive ties, as something that can be observed and potentially measured in everyday encounters between people. For these cohesive ties to form, there must be

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scope for interactions to occur. **Dave Maré's** contribution to this special issue focuses on Auckland, New Zealand's most diverse city, where well-documented ethnic segregation limits residents' opportunities to interact across ethnic groups. He measures diversity by both ethnicity and birthplace and looks at where people both live and work. This novel approach reveals that commuting to work raises people's exposure to diversity, particularly for those living in areas of low diversity.

Neighbourhood diversity is also the theme of **Jessica Terruhn's** contribution. Using the Auckland suburb of Northcote as a case study, she critically examines the role diversity plays in policy and planning documents that guide an ongoing large-scale housing development and revitalisation project in Northcote. She demonstrates that diversity dividend rhetoric is central to developer-led visions for the new neighbourhood and that ethnocultural and income diversity are selectively employed to justify state-led gentrification under the guise of housing mix. She concludes that the diversity rhetoric benefits those already privileged while risking the direct or indirect displacement of existing low-income residents.

The function served by diversity discourse in media representations of immigrants is then analysed by **Sandy Lee** and **Trudie Cain**. Their analysis of immigration-focused newspaper articles over a one-year period in the lead up to the 2017 general election shows that migrants were regularly framed negatively, as morally inferior. In addition, even proimmigration articles tended to focus on the economic benefits that could be accrued by migrants' presence in New Zealand and participation in the labour force. The authors argue that this diversity dividend framing denies the human needs and desires of migrants, and therefore contributes to the dehumanisation of migrants.

Taking the critique of diversity as diversion from racism and inequities and its overly narrow focus on ethnicity further, **Arama Rata** and **Faisal Al-Asaad** emphasise that the ideology of diversity conflates differences between peoples of colour in the settler colonial context of Aotearoa New Zealand. More specifically, its framing around inclusion and recognition of cultural difference obfuscates the particular political location of Indigeneity and cannot usefully address Indigenous sovereignty. Instead, it subsumes Indigeneity under the umbrella of ethnic difference and in doing so, the authors argue, inhibits relationships between Māori and tauiwi (settlers) of colour to the point of antagonising racialised minorities. The core

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concern of the article is how to allow relationships that are based on solidarity and united in opposition to White supremacy and settler colonialism to flourish. Drawing on interviews with Māori community leaders, the authors propose the Indigenous concept of whakawhanaungatanga as a framework for building relationships between Māori and tauiwi of colour. Subverting the dominant settler state approach to diversity, strategies of whakawhanaungatanga revolve around a conditional solidarity that is based on recognition of intersecting histories and experiences of "settler colonial racialisation and oppression" as well as potential alignment of anti-racism and sovereignty movements.

Jessica Terruhn Arama Rata (Guest Editors)

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Commentary: Questioning the Diversity Dividend, and then Moving On

FRANCIS L. COLLINS*

here has been a growing emphasis on the benefits of engaging diversity amongst government agencies, community organisations and businesses in Aotearoa New Zealand over the last three decades. This focus reflects the very substantial impacts of population diversification that has occurred via migration since the late 1980s (Spoonley & Bedford, 2012) as well as the arc of political and research rhetoric in other Western settler colonial states and its adaptation in Aotearoa New Zealand (Fleras, 2009). That it is beneficial to embrace the diversity of peoples and cultures who live in Aotearoa New Zealand would appear inarguable. The particular value that is placed on human difference, however, does create a political framing for understanding societal diversity that is given force in migration and diversity policies, as well as their articulation with economic structures and experiences of social inclusion and exclusion.

As Terruhn and Rata (2019) argue in framing this special issue, the diversity dividend has often been deployed as a technique for countering populist fears about population diversity and its purported challenges, and has been concerned primarily with economic indicators of value, placing a premium on productivity, profits and prosperity. This tendency is unsurprising given that the dominant meanings associated with the term dividend are economic, raising questions about what the political project of a diversity dividend seeks to achieve, the people it benefits, and the place of those who are framed as not generating profit.

In this commentary I reflect on these concerns in order to contribute to the critical evaluation of the diversity dividend, which is a key dimension of this special issue. I begin by drawing attention to the way in which the

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idea of a diversity dividend operates as a neoliberal technology that creates an imperative around the policies that governments and businesses might develop to respond to population diversity. Secondly, I reflect on how the diversity dividend has circulated through migration and diversity policies in Aotearoa New Zealand. Lastly, I argue that academic, policy and popular debates need to move beyond the relatively reductive focus on the diversity dividend. In its place, a critical and transformative agenda for studying and engaging population diversities needs to grapple with the structures of settler colonialism and the complex social positions generated through migration-led diversification.

Diversity dividend as neoliberal technology

The notion of a diversity dividend, or analogous terms such as 'diversity advantage' (Wood & Landry, 2008) or 'productive diversity' (Cope & Kalantzis, 1997), hinges on a conception of socio-cultural difference as a generator of economic benefits for countries, regions, cities or firms. These terms first started being used in the 1990s by politicians, academics and consultants making claims about the economic importance of ethnic diversity and migration in particular, although references to diversity dividends also sometimes incorporate an emphasis on gender and other social differences. Initially these terms emphasised programmatic claims about the need to reconstruct societal or institutional norms in order to address ethnic heterogeneity, particularly in terms of making a business case for promoting diversity. Speaking at the launch of Multicultural Australia: The Way Forward in Melbourne in 1997, for example, then Australian Prime Minister John Howard asserted the need to explore "the ways in which we can reap what some have described as the diversity dividend" that comes about via immigration, settler history and geographical positioning (Howard, 1997). In a like manner, political leaders in Aotearoa New Zealand in the 1990s placed significant emphasis on the economic and strategic value of building diverse populations, particularly in the context of a geo-economic pivot towards Asia (Larner, 1998). Migrant populations, in particular, were viewed as conduits to economic growth, a human resource available for extraction that reflected the wider neoliberalisation of society and the economy that was underway at that time (Kelsey, 1995).

One way to understand the diversity dividend, then, is to conceive it as a mobile technology that supports neoliberalisation, an attempt "to respond strategically to population and space for optimal gains in profit" (Ong, 2007, p. 4). The concept has emerged through networks of academic, business and policy knowledge formation and circulation (Watson et al., 2009) that have normalised an argument that it is possible, ethical and to extract value from populations that are ethnically heterogeneous. Wood and Landry (2008) provide an apposite example in their programmatic policy text The Intercultural City: Planning for Diversity Advantage, which has been taken up extensively by urban governments, including Auckland (Collins & Friesen, 2011). Their argument is that "there are enormous untapped resources, which our societies can scarcely forgo, available from the creative power of heterogeneity and dissonance" (Wood & Landry, 2008, p. 11). In making a programmatic 'business case' for what they alternately call the diversity dividend and advantage, Wood and Landry highlight three 'advantages' of diversity: 1) that diverse teams of people bring new skills and aptitudes that can enhance business activity leading to new products, processes and innovations, 2) that the 'supplier diversity' of heterogenous employees or populations make it possible to access new markets at home and abroad, and 3) drawing on Florida (2002), that the competitiveness of cities, and by extension regions and nations, is influenced by their ability to be places characterised by openness, tolerance and diversity in order to "attract and hold wealth creaters" (p. 12). Their text places a considerable emphasis on creating environments where people of different backgrounds can interact to create new opportunities and build social connectiveness, although the emphasis is always on the business case and a 'hard nosed' consideration of the factors that make what they deem functional and good places.

This emphasis on dividend generation or extraction highlights a view that the principal value of individuals to society comes in their economic productivity. It is worth questioning the effects of this blunt economisation as well as the critical debates that are obfuscated in the process. Indeed, it is notable that in much of the literature on diversity advantages, benefits and dividends, little concern is given to the needs and aspirations of people, or even to fundamental rights-based debates around citizenship, inclusion and welbeing (Watson et al., 2009). Instead, as a technology for advancing forms of neoliberalisation, the diversity dividend

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frames individual human worth and worthiness in relation to skills, wealth, entrepreneurialism and a willingness to consume. The policies that follow such presciptions are also well known – a privileging of talent and skilled migration alongside increased regulation of labour and unauthorised migration (Boucher, 2008), investment in forms of economic development or urban regeneration designed to attract and retain wealth creators (Hall & Rath, 2007), and corporate diversity strategies that provide window dressing at the level of the boardroom but do not disrupt the inequities that intersect with workforce diversity (Marques, 2010). Put simply, an emphasis on advantages, benefits and dividends from diversity implies that people must be economically valuable to be included, recognised and celebrated.

The diversity dividend in Aotearoa New Zealand

In Aotearoa New Zealand, the emphasis on the diversity dividend and analogous terms that highlight the economic benefits of diversity has been particularly pronounced in relation to migration discourses and policies. Indeed, key changes to policy in the late 1980s and early 1990s were anchored around a shift from an emphasis on recruiting migrants by nationality towards a focus on meeting the needs of the New Zealand economy. The Burke report on immigration (1986), for example, emphasised the need for immigration to shift towards "the selection of new settlers principally on the strength of their potential personal contribution to the future well-being of New Zealand" (p. 10). While the notion of "personal contribution" can vary, subsequent policy interventions in the late 1980s and early 1990s, especially the introduction of a points system for migrant selection, have emphasised the need to evaluate and manage migrants based on potential economic contribution over other factors (Spoonley & Bedford, 2012). Over the three decades since these changes, the economic emphasis in immigration selection has continued to intensify. Initially this trend was apparent with changes such as English language tests, requirements for job experience and two-stage residence applications progressively sharpening the focus on "the economic benefits and costs of both flows of settlers as well as flows of people on temporary work and study visas and permits" (Bedford, 2004, p. 58). In the last two decades, there has also been a marked shift towards the management of populations of temporary students and workers who are being increasingly delinked from long-term residence rights, and

characterised by increasing stratification within categories of migrants (Collins, 2020).

The political rationalities that underpin claims about the diversity dividend are also apparent in other arenas in Aotearoa New Zealand. Many large corporations now place a significant emphasis on diversity messaging and the development of diversity policies in relation to a range of social differences but particularly focus on creating "a work environment that values and respects different cultures" (Diversity Works New Zealand, 2019). Similarly, organisations such as the Superdiversity Institute advance a range of tools that aim to "enable Government, business and NGOs to maximise the benefits of the 'diversity dividend' arising from New Zealand's transition to a superdiverse society" (Superdiversity Institute, 2019). The circulation and normalisation of this emphasis on diversity appears to offer an attractive antidote to assertions of Pākehā-dominated New Zealandness in the workplace. The emphasis on diversity management, however, "can be a means of evading hard choices about equality and justice at work" (Wrench, 2005, p. 73) because it offers a convincing impression of inclusion while providing few tools for addressing entrenched inequalities. In Aotearoa New Zealand, substantial inequities in employment levels and incomes, particularly for Māori and Pacific peoples but also other non-European populations (Perry, 2013), suggest that corporate diversity policies have little impact on addressing systemic racism, discrimination and the ongoing effects of colonialism. As Simon-Kumar (2020) notes, the positive connotations that make up the official face of diversity can be drawn apart from the quotidian reality of a 'preferred multicultualism' where legal status, occupation and economic capital shape the coal face of inclusion.

Researchers who address migration and diversity are also part of this sphere of activity, with the potential to play roles as supportive agents of diversity dividend discourses and practices of stratification or to provide a critical knowledge foundation for alternative futures. The Capturing the Diversity Dividend of Aotearoa/New Zealand (CaDDANZ) programme of research that the papers in this special issue are drawn from is one such example. The initial impetus for the project rests on identifying ways to "maximise the benefits associated with an increasingly diverse population" in Aotearoa New Zealand (CaDDANZ, 2019). While it would be wrong to suggest that research within this and similar programmes only supports the advancement of neoliberal political rationalities, this is a feature that cannot

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be ignored. Indeed, as researchers we have to reflect on the ways in which the knowledge produced in CaDDANZ and related projects advances particular kinds of ideas about migration, ethnicity and society and the purposes to which such knowledge is put. Does our knowledge only replicate or validate government and corporate claims that the focus needs to be on 'high priority' migrants, that the value of migration should be determined by 'success' in economic outcomes, or that migrants should be treated differently depending on who they are? Or does the knowledge generated in our research serve as a platform for critical conversations about the broader values of migration and diversity in Aotearoa, about the rights of people beyond economic productivity, and the significance of thinking about population futures in a context of ongoing settler colonialism and migration-led diversification?

Settler colonialism and migration-led diversification and stratification

A critical and transformative account of population diversity must address the complex realities of contemporary society, their embeddedness in historical processes, and the persistent intersections between ethnic differences and socio-economic inequality. The problem with much of the international and domestic literature on diversity advantages, benefits and dividends is that it presumes a business case can be made for population diversity without paying attention to structural conditions. If only people, businesses and governments knew that diversity makes money then they would not be racist, societal structures would reconfigure in more inclusivecum-productive ways, and a great symphony of opportunity would emerge in intercultural encounters. The reality is that population diversity is bundled up with complex and entrenched inequalities; the knowledge foundations of society, including those that privilege economic gain, persistently devalue difference; and social and technological infrastructures that militate against socially just and inclusive approaches to population diversity are pervasive.

In Aotearoa New Zealand, it is absolutely necessary that questions of population diversity are examined in a way that recognises that settler colonialism is an ongoing characteristic of institutional and daily life. Settler colonialism involves the ongoing transformation of places and peoples into a

racially stratified order based on claims about superiority (Veracini, 2013). It manifests in two ways that are particularly pertinent to thinking through the diversity dividend: 1) the erasure or indeed elimination of Indigenous peoples as significant to national life (Wolfe, 2006), and 2) the construction of Whiteness as "the unseen, normative category against which differently racialized groups are ordered and valued" (Bonds & Inwood, 2016, p. 717). As Kukutai and Rata (2017) have eloquently demonstrated, Māori have been consistently excluded from debates about migration and diversity in Aotearoa New Zealand, with the implication that such border matters are not the concern of Indigenous peoples. Concurrently, the purported benefits of population diversity that come through non-White migration are assessed in terms of their benefaction to a society that remains overwhelmingly dominated economically by Pākehā. Read in this way, the diversity dividend is quite apparently a mechanism for advancing settler colonialism's political projects. A transformative approach to population diversity does not come in revising those mechanisms but rather in generating models that start from outside of settler colonial logics, such as Rata and Al-Asaad's (2019) account of whakawhanaungatanga as an avenue to relationship building between Indigenous peoples and settlers of colour.

There is also a need to take greater account of the multifaceted dimensions of migration-led diversification. Typically, accounts of population change since the 1980s in Aotearoa New Zealand have told a story of ethnic change, the growth in populations from or with links to Asia and the Pacific in particular, and the construction of a multicultural fabric for the 21st century (Spoonley & Bedford, 2012). What is less highlighted in such accounts, however, is the way in which the experience of migration to Aotearoa New Zealand has been cut through with inequality - not only historically through race-based policies but also in the contemporary effects of migration policy, employment, discrimination, electoral politics, urban inequality and other socio-economic differences (Simon-Kumar, Collins, & Friesen, 2020). Of particular significance is the growing number of people living in Aotearoa New Zealand on temporary status. In 2018, approximately 270,000 people were living long-term in Aotearoa New Zealand on temporary status (up from 140,000 in 2008), around 5.6% of the population. The growing population living in Aotearoa New Zealand with work and study visas matters because people on temporary status are subject to what Meissner (2018) calls "legal status diversity", which

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manifests in different formal or meaningful rights in the labour market, access to social resources and the ability to remain with family. In the last few years, the stratified treatment of migrants has shifted to assessments of income as a measure of value wherein the government "prioritises higher-paid and higher-skilled migrants" while "ensuring that migrants with no pathway to residence do not become well-settled in New Zealand" (Immigration New Zealand, 2017). What is apparent, however, is that these ostensibly economic measures intersect with nationality and gender (Collins, 2020), inflecting ethnic population diversity with other social differences that shape the social status, rights and future prospects of people in ways that are not equitable. Claims about the diversity dividend hinge on an acceptance of these inequalities and, as such, cannot actually offer avenues for enhancing socio-economic equality and more-inclusive societal formations.

As researchers, our task is to apprehend these societal structures and systems, to make clear the manner in which they sustain inequities in relation to population diversity, and seek partnerships with communities who aspire for different futures. The papers presented in this special issue do some of that work: questioning how institutions can alter their capacity to actually address diversity (Stone & Peace, 2019); highlighting the importance of everyday engagements with difference (Peace & Spoonley, 2019) and identifying the sites within which such encounters might take place (Maré & Poot, 2019); developing tools for visualising population diversity (Brabyn, Jackson, Stitchbury, & McHardie, 2019); and tracking trends in ethnic diversity over time (Cameron & Poot, 2019). Some also raise critical questions about the fraught logics I have discussed here: questioning the dehumanising messaging around immigrants in the news media (Lee & Cain, 2019); unpacking the use of diversity to sell urban developments (Terruhn, 2019); and exploring alternative approaches to relationship building beyond the limits of settler colonialism (Rata & Al-Asaad, 2019). Notwithstanding its framing around the notion of the diversity dividend, these papers demonstrate that the CaDDANZ research programme has also generated debate that has potential for advancing alternative visions for understanding population diversity for an inclusive society. The challenge now is to tackle the histories and systems that maintain racism and inequality in the face of 21st-century population diversity.

Note

Derived from the 'Population' data (https://mbienz.shinyapps.io/migration_data_explorer/) available on the Migration Data Explorer run by the Ministry of Business, Innovation and Employment and the usually resident population count from the 2018 Census.

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Towards Superdiverse Aotearoa: Dimensions of Past and Future Ethnic Diversity in New Zealand and its Regions

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Abstract

We use census data for New Zealand, nationally since 1945 and regionally since 1996, to quantify ethnic diversity trends using summary measures. Additionally, we generate national and subnational ethnic population projections by means of a cohort change method that permits a higher level of disaggregation than Stats NZ's official projections. On average, we find that diversity will be growing faster in less-diverse regions. However, when we divide regions into non-overlapping high-, medium- and low-diversity groups, we find that these groups persist over time, but with notable changes in diversity ranking projected to occur within the medium-diversity group. Future research on growing diversity could usefully focus on those regions.

Keywords: superdiversity; ethnic diversity; population projections

otearoa New Zealand is an incredibly diverse country in terms of ethnicity of the population. In the 2013 Census (the latest census for which data were available at the time of writing), Statistics New Zealand recorded over 80 ethnic groups that each had at least 1000 members, in a total population of around 4.2 million (Statistics New Zealand, 2014a). Increasing diversity has a long history. After initial contact with Europeans, Aotearoa New Zealand remained 98% Māori until the Treaty of Waitangi was signed in 1840, after which diversity resulted –

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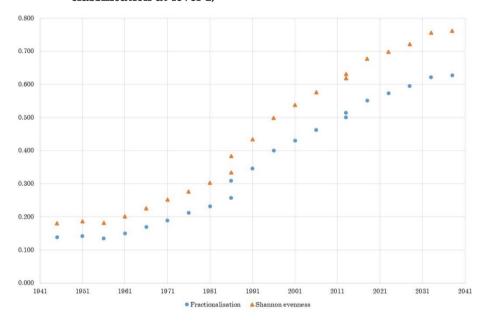
in a mathematical sense – during the remainder of the 19th century. This was a result of Māori population decline due to disease and war, combined with large migratory flows from Britain and high fertility among the settlers (Pool, forthcoming). From the early 20th century, migration from Britain continued and, since the 1950s, has combined with successive waves from mainland Europe, the Pacific, and more recently from Asia. Even though those calling themselves 'New Zealand European' remain more than half of the population, Aotearoa New Zealand can be credibly labelled a 'superdiverse' country, certainly in terms of the metropolitan areas (Spoonley, 2014).

To illustrate the growth in ethnic diversity since the latter half of the 20th century, Figure 1 displays the trends in two summary indices of diversity at the national level since 1945, using census data from 1945 to 2013 and official projections of ethnicity for 2013 to 2038. The first index is the fractionalisation index, which measures the chance that two randomly selected individuals do not have the same ethnicity. The second index is the Shannon evenness index, which originates from information theory. Further details on both measures will be given later in the paper. Even though the measurement of ethnicity has varied radically over the decades, starting with being race- and ancestry-based, to prioritised assignment of ethnicity, to total responses, these measures at the macro level are quite robust to definitional changes, with one exception – until 1986, each individual in the census was assigned only one ethnic identifier, even if they reported multiple ethnic affiliations. From 1986 onwards, ethnicity has been tabulated on the basis of total responses; i.e. counting those people who reported more than one ethnicity multiple times. To illustrate the difference, Figure 1 displays measures for 1986 based on both definitions. Allowing for multiple responses of course increases the chance that two randomly selected individuals have at least one ethnicity not in common, resulting in a step-change increase in measured diversity in 1986. The recording of multiple responses, therefore, led to an upward shift in the diversity measures.

Figure 1 has been constructed in terms of having five ethnic groups defined: (1) Māori, (2) Pacific, (3) Asian, (4) Middle Eastern, Latin American, or African, and (5) European and ethnicities other than those aforementioned. Figure 1 clearly shows the dramatic increase in ethnic diversity over the seven decades since World War II. The chance of two

randomly selected individuals having different ethnicities was only 15 per cent in the 1950s but increased to more than 50 per cent by 2013. Only once did diversity appear to decline in an inter-censal period: between 1951 and 1956. This is due to a large wave of migration from the Netherlands to New Zealand at that time, encouraged by the governments of both countries (van der Pas & Poot, 2011).

Figure 1: Ethnic diversity of the New Zealand population, 1945–2013 (historical) and 2018–2038 (projected, based on ethnic classification at level 1)



Note: The fractionalization index is defined in Equation (1); the Shannon evenness index is defined in Equation (3). From 1986 onwards, ethnicity is tabulated on the basis of total responses. For 1986, the smaller index values are those calculated by means of tabulation of prioritised ethnicity. For 2013, the figure shows index values based on actual census data and index values based on the base population for the population projections (the latter yield slightly higher diversity).

The Dutch immigrants boosted the numbers of those assigned to the European ethnicity, and thereby reduced the growth in ethnic diversity. Figure 1 also displays future diversity growth derived from 2017 national ethnic population projections with a base year of 2013. Due to using a slightly different resident population base than the census population, diversity in the projections starts off slightly higher than in the census.

Figure 1 shows that diversity is projected to continue to increase in the future, with some levelling off by the 2030s.

A diverse population comes with both opportunities and challenges. The CaDDANZ (Capturing the Diversity Dividend of Aotearoa/New Zealand) research programme has the underlying premise that there is a diversity dividend to be identified and measured (see caddanz.org.nz). However, investigating the existence and extent of any such diversity dividend is beyond the scope of this paper. Instead, we focus on a much simpler question: How has ethnic diversity in Aotearoa New Zealand changed over time, and how is it projected to change in the future? In investigating this question, we seek not only to understand the ethnic diversity for Aotearoa New Zealand in aggregate, but also ethnic diversity in each of its sixteen regions.

Understanding our country's past and projected future experience of diversity at both the national and regional levels is important for a number of reasons. Looking at the past allows us to recognise how rapidly (or otherwise) diversity has increased in Aotearoa New Zealand overall, and in each region. Some regions have clearly experienced a rapid increase in diversity, while others have thus far remained relatively unaffected. Understanding the changing diversity of Aotearoa New Zealand's regions may help to contextualise other socio-economic trends. Moreover, recognising that not all places have seen the same changes in ethnic diversity may also help us to contextualise differences in the responses of different regions to diversity.

Looking to the future is equally, if not more, important. Many public services are targeted at particular ethnic groups (Callister, 2007), so recognising the population trajectory (in terms of size, age distribution and spatial distribution) is important for planning future public services. Investments in health, education and community services infrastructure in part depend on understanding future ethnic diversity. Moreover, the private sector and non-government organisations also need to understand the potential future demand for their services, and this in turn depends in part on future ethnic diversity.

However, measuring past and future diversity comes with a number of challenges and, as we explain below, projecting future ethnic populations requires a number of additional assumptions that render traditional methods of population projection largely infeasible. In this paper, we present a mostly descriptive analysis of past and future trends in ethnic diversity for Aotearoa New Zealand and its regions. We focus on the inter-regional comparisons and trends over time, as this will be of most use in interpreting past and projected future socio-economic trends. A more thorough explanation of the underlying models will be available in a future paper by the same authors.

Over the last decade, there has also been growing interest internationally in projecting ethnic populations at subnational levels. In the United Kingdom, much of the research has been conducted by a group at Leeds University (see, for example, Rees et al. (2012), or Frey (2015) for the USA). A brief literature review is provided in Lomax, Wohland, Rees, and Norman (2019). In most cases, ethnic projections are based on applying ethnic-group-specific assumptions regarding fertility, mortality, migration and inter-ethnic mobility to a conventional cohort-components projection model. However, this is only feasible at a relatively low level of spatial and ethnic disaggregation.

Our paper makes several contributions to the New Zealand literature. First, we extend the extant literature measuring diversity (and residential sorting) in Aotearoa New Zealand by considering all of New Zealand's regions. Previous studies have, for the most part, considered Auckland as a case study. Second, we consider ethnicity at a more disaggregated level than extant studies, which have usually considered only broad ethnic groups (specifically European/Pākehā, Māori, Pacific, Asian). Third, we look at both past and future diversity, while most previous studies have exclusively focused on past diversity. Finally, we use a different method for ethnic population projections than is used in Stats NZ's official population projections.

Measurement of diversity in Aotearoa New Zealand

There are many ways to measure the (ethnic) diversity of the population in a geographical setting. These can be broadly grouped into two types (see Nijkamp and Poot, 2015) that measure either: (1) how diverse the population is *in* particular areas (allowing for comparing diversity values across areas), or (2) how the spatial distribution of groups varies *across* areas – also referred to as segregation or sorting. In this paper, we focus on the former approach, but most of the New Zealand literature has been concerned with

the latter. The two approaches are of course not independent: when individuals are strongly sorted across areas in terms of their ethnicity, i.e. when segregation is high, the diversity of any specific area is likely to be relatively low. Consequently, we need to consider how individuals belonging to different ethnic groups are allocated both within and across geographical areas.

In New Zealand, several studies have investigated ethnic diversity using one (or more) measures of residential sorting. These studies are heavily dependent on research from two research teams, centred firstly on the University of Bristol and Macquarie University, and secondly on Motu Economic and Public Policy Research. From the former research team, Johnston, Poulsen, and Forrest (2002) used data from the 1996 Census of Population and Dwellings, and their preferred measure of sorting was the proportion of the population of each ethnic group compared with a variety of threshold values. They found substantial concentration of Pacific Island and Māori populations, with the majority of Pacific Peoples and one third of Māori in Auckland living in a meshblock where the majority of the population were Pacific Peoples. In contrast, Asians were not concentrated, while Europeans were concentrated in areas where they dominated. Johnston et al.'s (2002) analysis considered fairly disaggregated groups (24 ethnic groups), but only considered the Auckland urban area, and at only one point in time.

Johnston, Poulsen, and Forrest (2005) then extended this analysis over time and over different urban areas, using census data from 1991 and 2001, and with a specific focus on Māori. They found that the higher the proportion of Māori in the population, the more segregated those Māori were into separate residential areas. The degree of sorting of Māori was less in Auckland (and Wellington) than in other regions, due to the co-location of Māori with Pacific Peoples. Johnston, Poulsen, and Forrest (2008) instead focused on the Asian and Pacific ethnic groups, again using threshold-based measures of sorting, limited to the Auckland region but including all four censuses from 1991 to 2006. They demonstrated a pattern of 'dispersed concentration', with different Asian and Pacific ethnic subgroups concentrated in different neighbourhoods of Auckland. They also noted that Asian subgroups share geographic areas with Europeans to a much greater extent than do Māori or Pacific Peoples. Johnston, Poulsen, and Forrest (2011) used Moran's I and Getis and Ord's G* on census data from 1991 to

2006 to investigate the clustering of ethnic groups in the Auckland region. They found that Europeans were most likely to cluster in areas where they were a majority, and in contrast, in areas where Asian groups clustered, Asians were not the dominant ethnic groups. Pacific Peoples and Māori lay between these two extremes.

From the second research team, Maré, Coleman, and Pinkerton (2011) used data for the Auckland region from the 2006 Census and confirmed the existence of substantial clustering of ethnic groups (European/Pākehā, Māori, Pacific, Asian), as well as clustering by country of birth. Maré and Coleman (2011) extended the analysis by investigating data from the 1996, 2001 and 2006 Censuses, and confirmed a similar level of clustering in each census. Maré, Pinkerton, Poot, and Coleman (2012) used data on the 2006 Census, again limited to the Auckland region, and applied a battery of different measures of residential sorting. They found that ethnicity-based sorting is stronger than sorting by other variables (including birth country, income, age and education), and that the Māori and Pacific ethnic groups tend to co-locate while other groups tend to locate in different areas, Maré, Pinkerton, and Poot (2016) followed birth cohorts from different countries across censuses from 1996 to 2006 who resided in Auckland and found that their residential location became less clustered over time. They concluded that "persistent concentration of immigrant groups within Auckland is nevertheless the outcome of a dynamic process of ongoing adjustment" (Maré et al., 2016, p. 392).

More recently, additional research has been conducted at the University of Waikato. Mondal, Cameron, and Poot (2019) used data from the Auckland region from 1991 to 2013, and more disaggregated (n=18) ethnic groups than much of the earlier research. They confirmed that many of the results from earlier research apply when more disaggregated groups are considered, including the primacy of residential sorting by ethnicity in comparison with other variables (specifically income, age, education and occupation). They also found that smaller ethnic groups, such as the African, Latin American/Hispanic, Tokelauan and 'Other Pacific Island' groups, were consistently the most residentially sorted, while the least residentially sorted ethnic groups were consistently the New Zealand European, Other European, and New Zealand Māori groups. Looking over time, the Chinese ethnic group became more segregated from 1991 to 2006 (with little change since then), while the Indian ethnic group became more segregated

throughout the period since 1991. Overall, they found that evenness of ethnic distribution in Auckland (i.e. how evenly distributed ethnic groups are compared with their overall proportions of the population) has been increasing over time generally. This accords with an anecdotal perception of increasing diversity of the Auckland population, both in total and across different neighbourhoods and suburbs.

To summarise, the research on the diversity of the New Zealand population has focused extensively on the Auckland region. Much less research has been devoted to understanding diversity (or residential sorting) in areas outside Auckland. Moreover, much of the research has been limited by considering highly-aggregated ethnic groups. This potentially hides important heterogeneity in the residential sorting of smaller component subgroups. For instance, understanding the residential sorting of the Pacific ethnic group probably tells us little about the sorting of the Fijian, Samoan or Tokelau ethnic groups. Indeed, Mondal et al. (2019) showed that sorting of subgroups within broad ethnic groups is increasingly becoming the dominant feature of ethnic residential sorting. For example, over time in Auckland, there have been fewer suburbs that are generic Pacific Island communities, with Samoan, Tongan and other Pacific ethnic subgroups increasingly located separately from each other.

Data, methods and population projections model

The measurement of ethnic diversity is not straightforward. There are several issues that must be considered. The first and biggest issue is how to classify and count individuals. This issue arises because ethnicity is not a characteristic that allows people to be easily separated into mutually exclusive categories. Since each person can affiliate with more than one ethnicity (and in the New Zealand Census, up to six ethnicities can be recorded for each person),³ in order to create mutually exclusive categories for analysis, assumptions about how the categorisation is to be conducted are required.

To illustrate this challenge, consider the New Zealand Standard Classification of Ethnicity, as presented in Table 1. Table 1 shows the classification at two levels. Level 1 categorises ethnic affiliation into six groups: (1) European, (2) Māori, (3) Pacific, (4) Asian, (5) Middle Eastern, Latin American, or African, and (6) Other. Level 3 of the classification

consists of 37 ethnicities, each of which is a subgroup of one of the Level 1 ethnicities (except for Māori, which is a unique category at both Level 1 and Level 3 of the classification).

If each person was affiliated to a single ethnicity, then categorisation would be trivial. However, because a person can affiliate to more than one ethnicity, at Level 1 there are 15 possible single or multiple-ethnicity combinations that involve just one or two ethnicities. This extends to 703 single or multiple-ethnicity combinations involving just one or two ethnicities at Level 3. If you consider the possibility of six ethnicities, then the number of potential single or multiple-ethnicity combinations at Level 3 increases to about 2.8 million. In reality, most combinations will have zero, or very few people, but even then, a means of managing this complexity is required.

One frequently adopted approach is to use prioritised ethnicity, which was the default approach in most research in New Zealand until relatively recently. This approach first assumes that any person who reports Māori as one of their ethnicities is Māori. Then, each person who is not Māori but reports Pacific as one of their ethnicities is allocated to the Pacific ethnic group. Then, each person who is not Māori or Pacific, but reports Asian as one of their ethnicities is allocated to the Asian ethnic group. Then, everyone else is allocated to a merged 'European or Other' category. This approach ensures that every person is allocated to one, and only one, category. An analogous approach can be used to develop prioritised ethnicity at Level 3, but with more steps involved. This appears to have been the approach in all the research cited in the previous section, with the exception of Mondal et al. (2019).

The key limitation with adopting a prioritised ethnicity approach for the purposes of measuring ethnic diversity or residential sorting is that it ignores a lot of diversity that arises from multiple-ethnic affiliation. That is, a person who identifies as both Māori and Fijian is considered only to be Māori, which necessarily underestimates the diversity of the population. The impact at the macro level was demonstrated by the difference in the diversity measures for 1986 in Figure 1, with prioritisation lowering diversity by 15–20%. This presents problems both cross-sectionally, as well as over time, if people change their ethnic affiliations, adopting new ethnicities and dropping previous ethnicities.

Table 1: NZ Standard Classification of Ethnicity, Level 1 and Level 3

Level 1 Classification	Level 3 Classification
1 European	100 European nfd
·	111 New Zealand European
	121 British and Irish
	122 Dutch
	123 Greek
	124 Polish
	125 South Slav
	126 Italian
	127 German
	128 Australian
	129 Other European
2 Māori	211 Māori
3 Pacific Peoples	300 Pacific Peoples nfd
	311 Samoan
	321 Cook Islands Maori
	331 Tongan
	341 Niuean
	351 Tokelauan
	361 Fijian
	371 Other Pacific Peoples
4 Asian	400 Asian nfd
	410 Southeast Asian nfd
	411 Filipino
	412 Cambodian
	413 Vietnamese
	414 Other Southeast Asian
	421 Chinese
	431 Indian
	441 Sri Lankan
	442 Japanese
	443 Korean
	444 Other Asian
5 Middle Eastern/Latin	511 Middle Eastern
American/African	521 Latin American
	531 African
6 Other Ethnicity	611 Other Ethnicity
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Note: nfd = not further defined.

An alternative approach is to base the measurement of diversity not on *individuals*, but on *reported ethnicities*. By this approach, each reported ethnicity counts once within the measure of diversity (or residential sorting). Individuals who report multiple ethnic affiliations would therefore appear more than once within the calculation. However, this ensures that multiple-ethnic affiliation, and changes in multiple-ethnic affiliation over time, are captured within the measures of diversity and residential sorting. This is the approach that was adopted by Mondal et al. (2019).

The second and related issue for the measurement of ethnic diversity is what level of disaggregation to use. As noted in the literature review above, many New Zealand studies have used Level 1 of the Standard Classification of Ethnicities, including Maré et al. (2011) and related studies. Johnston et al. (2002) appear to have used Level 3 of the classification (or something closely related to it), while their subsequent studies have used either that classification or a more aggregated version of it. Mondal et al. (2019) used Level 2 of the classification, which is a mid-way point between the two classifications noted in Table 1 above. The problem with using highly aggregated broad ethnic groups as a classification is that this masks potentially important heterogeneity. Moreover, it ignores any ethnic diversity that arises when an individual affiliates to more than one ethnicity, where two or more of their reported ethnicities are captured within the same broader ethnic group. For instance, a person who affiliates with Fijian and Samoan would only be recorded in the Pacific group if the Level 1 classification is used.

To avoid ignoring potentially important ethnic heterogeneity, we adopt Level 3 of the Standard Classification of Ethnicities, as reported in Table 1 above. We acknowledge that some aggregation of substantively heterogeneous ethnic groups remains at that level of the classification (e.g. African, or Latin American, as single ethnic groups). However, we believe that this strikes an appropriate balance between capturing the heterogeneity across the population and ensuring that there are adequate cell sizes to be included in the analysis.

The third issue is which measure of diversity to adopt. A commonly used measure in the literature is the *fractionalisation index* (e.g. Alesina, Devleeschauwer, Easterly, Kurlat, & Wacziarg, 2003). As noted in the introduction, this index measures the probability that two randomly selected individuals do not have the same ethnicity. Let P_{ga} refer to the

population of group g in area a and $P_{\bullet a}$ to the population of area a. Mathematically, the fractionalisation index is then calculated as:

$$F_a = 1 - \sum_{g=1}^{G} \left(\frac{P_{ga}}{P_{\bullet a}}\right)^2 \tag{1}$$

A theoretically attractive measure is the *Shannon diversity index* from information theory (see Nijkamp & Poot, 2015). The Shannon diversity index S_a of area a is given by:

$$S_a = -\sum_{g=1}^{G} \left(\frac{P_{ga}}{P_{ea}}\right) ln\left(\frac{P_{ga}}{P_{ea}}\right)$$
 (2)

This measure is also referred to as the Shannon-Wiener, Shannon-Weaver or *entropy index*. The index varies between zero (when there is only one ethnicity present) and a maximum of $\ln(G)$ when all G ethnicities have an equal number of members. In order to easily compare populations that have coarse (small G) or fine (large G) classifications, the literature recommends the use of the Shannon evenness index, which divides G by $\ln(G)$. This is the approach we adopt here. The *Shannon evenness index* for area G is given by:

$$SE_a = -\frac{\left(\sum_{g=1}^G \left(\frac{P_{ga}}{P_{\bullet a}}\right) ln\left(\frac{P_{ga}}{P_{\bullet a}}\right)\right)}{ln(G)}$$
(3)

In our specific application, G is equal to the five groups we use at Level 1 of the ethnicity classification, or the 37 ethnic groups we use at Level 3 (see Table 1). The fractionalisation index does not correct for the effect of varying the number of groups. However, Figure 1 shows that at the Level 1 ethnic classification, the upward trends in the fractionalisation and Shannon evenness indexes are very similar, although slightly diverging in the projections. We report our historical measures of ethnic diversity for each of New Zealand's sixteen regions, and for New Zealand as a whole, for each census from 1996 to 2013. This is based on census data for the aggregate number of people reporting each of the 37 Level 3 ethnicities in each region in each census.

In terms of projected future ethnic populations, the official Stats NZ national and subnational ethnic population projections are produced by means of a stochastic Bayesian cohort component method (e.g. Stats NZ, 2017). However, the data requirements of the method necessarily limit the

size of ethnic groups that can be projected. Stats NZ currently produces projections only for all Level 1 ethnic groups, and for the three largest Level 2 ethnic groups (Chinese, Indian and Samoan).

In this paper, we adopt an alternative population projections method, the *Hamilton-Perry method* (Hamilton & Perry, 1962), which can be applied to feasibly produce population projections for much smaller population groups. This method has recently been revived as a means of projecting small *area* populations and has been used in several applications recently in the USA (e.g. Baker, Swanson, Tayman, & Tedrow, 2017). For example, Swanson, Schlottmann and Schmidt (2010) use the method to produce population projections for 356 census tracts in Clark County, Nevada (total population approximately 1.4 million) for a 20-year projection horizon. They demonstrate that the method produces plausible results for small populations (see also Swanson & Tayman, 2017). We instead apply the method to project small *ethnic group* populations.

The Hamilton-Perry method, which is based on cohort change ratios, is deceptively simple. Essentially, using two census data sets five years apart, a cohort change ratio (CCR) is calculated for each five-year age-sex cohort. Each five-year age-sex cohort can then be projected forward based on this ratio. The exception is the age cohort 0-4 years, which is instead projected based on the child-woman ratio (CWR), using the number of women aged 20-44 years. To illustrate, say that the population of a particular male group aged 5-9 years in the 1996 Census was 650, and the population of the corresponding male group in the 2001 Census, now aged 10-14 years, was 700. The CCR for the 10-14-year age group is 700/650 =1.077. If the population of the male group aged 5-9 years in the 2001 Census was 620, then the projection for the population in that group aged 10-14 years in 2006 is 620*1.077 = 668. Similarly, if the number of women aged 20-44 in the 1996 Census was 2500, and the number of girls aged 0-4 in the 2001 Census was 500, then the CWR for girls is 500/2500 = 0.2. Thus, if the number of women aged 20-44 in the 2001 Census was 3000, the number of girls aged 0-4 in 2006 is then projected to be 3000*0.2 = 600.

In our case, we calculated CCRs for each five-year age-sex group for each of the 37 Level 3 ethnic groups, both nationally and individually for each region. CCRs were calculated for the most recent two inter-censal periods (2001–2006 and 2006–2013), and an average of the two was used for the projections model. Taking an average of the last two inter-censal periods

not only smooths the estimated CCRs, thereby removing some of the noise from the estimates, but also takes account of New Zealand's roughly tenyear international migration cycle, as described by Poot (2010). Similarly, we calculated CWRs for the same two inter-censal periods and averaged them for the projections model.

Despite the smoothing obtained by averaging across two inter-censal periods, some CCRs and CWRs remain implausibly high, or low. Therefore, following Swanson et al. (2010), we constrained the five-year CCRs to be between 0.9 and 1.25 and the five-year CWRs to be between 0.16 and 0.3. These constraints are necessary in order to avoid implausibly large changes in projected inter-censal populations, which could not be reasonably justified by underlying patterns in fertility, mortality and migration.

A concern could be raised about the *seven* year inter-censal period being used for calculating the CCRs and CWRs for the most recent period (2006–2013). However, somewhat surprisingly, this does not pose an issue. Because the ratio is taken between two five-year age cohorts, it actually matters little that the ratio is taken seven years apart. While the individuals who are included in each cohort in these two successive census years will not be exactly the same, the assumption that the cohort of individuals included in the calculation at each census be the exact same cohort is not necessary for the Hamilton-Perry model to generate reasonable projections.⁶

We then used the smoothed and constrained CCRs and CWRs to project the population forward in five-year steps, using the 2013 Census usually resident population (CURP) as a base population. We projected all 37 Level 3 ethnic populations at the national level using the method described above, as well as all Level 3 ethnic populations at the regional level where the 2013 population of that ethnic group exceeded 150 members. This limits the extent to which our results are biased by small populations. For regional ethnic groups with fewer than 150 members, we assumed that they grow at the same rate as the national population of that ethnic group. We did not constrain the projected regional populations to sum to the projected national population of the same ethnicity. In the context of projecting summary diversity measures, this is not problematic.

We used the CURP as the base population as opposed to the estimated usually resident population (EURP), as there are no official EURPs produced for Level 3 ethnic groups nationally or subnationally – such population estimates are only produced by Stats NZ for the Level 1

ethnic groups. Given that the main difference between CURPs and EURPs relates to net census undercount, our projections will necessarily underestimate the population of each ethnic group. However, they can be interpreted as a projection of future CURPs, which are based on responses to the census ethnicity questionnaire. The proportional changes in the size of the population will be unbiased to the extent that future net census undercount, by age and ethnic group, is similar to net census undercount in the censuses between 2001 and 2013 that were used to estimate our CCRs and CWRs. Similarly, the projected diversity measure will also be unbiased in that case.

Finally, we classified the regions into three groups – low diversity, medium diversity and high diversity – based on their past and future trajectories in terms of ethnic composition. As shown below, the three groups are distinct and the groupings are unambiguous, in the sense that regions in a lower-diversity group are not currently, and are never projected to be, more diverse than those in a higher-diversity group.

Ethnic diversity in New Zealand and its regions, 1996–2013

Table 2 presents the total ethnic responses by Level 3 ethnic group (as percentages of the total number of persons who stated at least one ethnicity) for New Zealand as a whole for each census from 1996 to 2013, along with the resulting Shannon evenness index. The largest ethnic group throughout this period is the New Zealand European group, although its dominance is decreasing; it represented over 72 per cent of recorded ethnic responses in 1996, but little more than 60 per cent in 2013. Māori are the second largest group, although the percentage of respondents who reported to be Māori has also decreased, from 15.1 per cent in 1996 to 13.2 per cent in 2013. In contrast, many other ethnic groups have increased substantially in size and proportion. For instance, Chinese increased from 2.4 per cent in 1996 to 3.8 per cent in 2013, Indian increased from 1.2 per cent to 3.4 per cent, and Filipino increased from 0.2 per cent to 0.9 per cent.

The Shannon evenness index does not show a clear trend, falling from 1996 to 2001, before increasing between 2001 and 2006, and then falling again between 2006 and 2013. This has resulted from large changes in the wording of the ethnicity question and the guidance provided for answers to this question in successive censuses. Several of the European

groups decreased substantially between 1996 (when they were separate options available to be selected on the census form) and 2001 (when they were not). One notable example is the case of the Dutch population (see van der Pas and Poot, 2011), where the percentage dropped from 1.37 per cent in 1996 to 0.77 per cent in 2001. However, the most dramatic decline was that of the British and Irish, from 11.74 per cent in 1996 to 2.16 per cent in 2001. The unusual shifts before and after 2006 largely arise from the behaviour of the 'Other Ethnicity' group. This group includes the 'New Zealander' category, which attracted a large number of responses in the 2006 Census, but fewer before or since. Table 2 does not contradict the 1996–2013 increase in the Shannon evenness index shown in Figure 1. It can be shown that if the Level 3 European ethnicity groups and 'Other Ethnicity' group are amalgamated, the evenness index shows a steady increase from 0.290, to 0.333 in 2001, 0.367 in 2006 and 0.406 in 2013. However, because we focus on projecting all Level 3 ethnic groups, we continue to work with all 37 ethnic groups in the remainder of the paper. We return to this point in the concluding section, as it creates a potential issue for the projection of the 'Other Ethnicity' population group.

Table 3 summarises the calculated Shannon evenness index, by region and for New Zealand as a whole, for each census from 1996 to 2013. The index values for 2013, nationally and by region, are also illustrated in Figure 2. As noted in the previous section and listing regions in descending order of diversity, we separate the regions into a high-diversity group (Auckland, Wellington, Waikato), a medium-diversity group (Bay of Plenty, Northland, Hawke's Bay, Manawatu-Wanganui, Gisborne, Canterbury, Otago, Nelson), and a low-diversity group (Taranaki, Marlborough, Southland, West Coast, Tasman). As at the national level, the Shannon evenness index values have bounced around for the regions. However, the general trend has been of increasing diversity, and the relative rankings of the regions have remained fairly consistent. The regions in the highdiversity group have been the three most-diverse regions since 2001 (Waikato was ranked fifth in 1996). The regions in the low-diversity group have been the five least diverse regions in every census, with one exception (Taranaki was ranked 11th in 2001). Note that only Auckland and Wellington have a diversity level consistently above the national average in all censuses from 1996 to 2013.

Table 2: Ethnic diversity (Level 3 total responses) in NZ, 1996–2013 (%)

Ethnic Group	1996	2001	2006	2013
European nfd	0.07	0.60	0.50	0.58
New Zealand European	61.46	68.11	55.02	60.17
Other European nfd	0.88	0.01	0.00	0.00
British and Irish	10.02	1.96	2.33	2.33
Dutch	1.17	0.69	0.66	0.63
Greek	0.09	0.06	0.05	0.05
Polish	0.09	0.05	0.05	0.05
South Slav	0.22	0.15	0.13	0.12
Italian	0.12	0.07	0.07	0.08
German	0.33	0.23	0.25	0.28
Australian	1.32	0.52	0.61	0.50
Other European	1.23	1.23	1.57	1.79
Māori	12.88	13.29	13.06	13.21
Pacific Peoples nfd	0.01	0.02	0.02	0.02
Samoan	2.50	2.90	3.03	3.18
Cook Islands Maori	1.16	1.33	1.34	1.36
Tongan	0.77	1.03	1.17	1.33
Niuean	0.45	0.51	0.52	0.53
Tokelauan	0.12	0.16	0.16	0.16
Fijian	0.19	0.18	0.23	0.32
Other Pacific Peoples	0.12	0.17	0.19	0.24
Asian nfd	0.05	0.10	0.05	0.10
Southeast Asian nfd	0.00	0.01	0.01	0.03
Filipino	0.20	0.28	0.39	0.89
Cambodian	0.11	0.13	0.16	0.19
Vietnamese	0.07	0.09	0.11	0.15
Other Southeast Asian	0.23	0.27	0.35	0.47
Chinese	2.00	2.65	3.41	3.78
Indian	1.04	1.57	2.42	3.42
Sri Lankan	0.12	0.18	0.19	0.25
Japanese	0.18	0.25	0.28	0.31
Korean	0.31	0.48	0.71	0.67
Other Asian	0.06	0.09	0.20	0.28
Middle Eastern	0.23	0.35	0.40	0.45
Latin American	0.06	0.08	0.15	0.29
African	0.09	0.18	0.25	0.30
Other Ethnicity	0.03	0.02	9.96	1.50
Shannon evenness index	0.424	0.380	0.492	0.470

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Note: The percentages refer to the number of census respondents who stated an ethnicity in the listed ethnic group as a percentage of the total number of census respondents who stated at least one ethnicity. The Shannon evenness index is based on the distribution of total responses.

Table 3: Shannon evenness index (Level 3 ethnicities), nationally and regionally, 1996-2013

Region	1996	2001	2006	2013
National	0.424	0.380	0.492	0.470
High-diversity regions				
Auckland	0.538	0.515	0.612	0.602
Wellington	0.458	0.400	0.499	0.476
Waikato	0.371	0.320	0.423	0.398
Medium-diversity region	ns			
Bay of Plenty	0.373	0.310	0.408	0.376
Northland	0.378	0.308	0.396	0.364
Hawke's Bay	0.346	0.293	0.395	0.357
Manawatu-Wanganui	0.342	0.281	0.387	0.357
Gisborne	0.357	0.307	0.379	0.351
Canterbury	0.308	0.245	0.381	0.340
Otago	0.292	0.222	0.355	0.321
Nelson	0.313	0.235	0.361	0.318
Low-diversity regions				
Taranaki	0.291	0.222	0.339	0.299
Marlborough	0.268	0.196	0.339	0.296
Southland	0.256	0.190	0.313	0.271
West Coast	0.246	0.175	0.307	0.257
Tasman	0.270	0.184	0.313	0.255

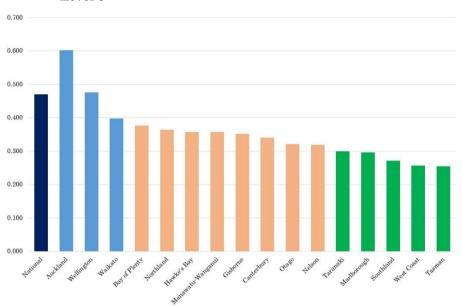


Figure 2: Shannon evenness index, 2013, based on ethnic classification at Level 3

Projected ethnic diversity in New Zealand and its regions, 2013–2038

Table 4 summarises the calculated Shannon evenness index, by region and for New Zealand as a whole, projected in five-year steps from 2013 to 2038. These projections, along with the historical index values presented in Table 3 in the previous section, are also illustrated in Figure 3 (nationally), while Figures 4–6 show the corresponding projected and historical index values for the high-diversity, medium-diversity, and low-diversity groups of regions, respectively. The trend both nationally, and in every region, is increased diversity over time. The Shannon evenness index nationally is projected to increase from 0.470 in 2013 to 0.624 in 2038 (and for comparison, as shown in Table 3, it was as low as 0.380 in 2001).

The relative rankings of the three groups of regions (high diversity, medium diversity, low diversity) remains stable, with none of the regions in a lower-diversity group overtaking any region in a higher-diversity group. However, the relative rankings *within* the medium-diversity group of regions are projected to change substantially. Within that group, the Shannon evenness index grows most quickly for the Canterbury, Otago and

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Manawatu-Wanganui regions, and slower for the Gisborne and Bay of Plenty regions. In contrast, the relative rankings within the high-diversity and low-diversity groups are projected to remain stable over time.

Finally, we consider whether there is a projected &convergence in the level of diversity between the regions over the period from 2013 to 2038. B-convergence is a term that was introduced in the literature on economic growth to describe the phenomenon in which the growth rate of income is inversely related to the level of income (see, for example, Rev & Montouri, 1999). If there is θ -convergence, poor places grow faster than rich places and may eventually 'catch up'. In the present context and considering diversity instead of income, will the level of diversity of the medium- and low-diversity regions eventually 'catch up' with the level of diversity in the high-diversity regions? In relative terms, the low-diversity group is growing the fastest, with an average projected increase in their Shannon evenness index of 35.5 per cent over the period from 2013 to 2038. This compares with a 32.3 per cent increase for the medium-diversity group, and a 25.2 per cent increase for the high-diversity group. The correlation between projected percentage growth in diversity over the period and initial diversity is -0.496, again highlighting that the least-diverse regions will have the greatest percentage growth in diversity over the period to 2038. This suggests a high degree of projected β -convergence over time.

Table 4: Projected Shannon evenness index (Level 3 ethnicities), nationally and regionally, 2013–2038

Region	2013	2018	2023	2028	2033	2038		
National	0.470	0.503	0.535	0.565	0.595	0.624		
High-diversity region	ons							
Auckland	0.602	0.629	0.654	0.676	0.695	0.712		
Wellington	0.476	0.504	0.532	0.557	0.582	0.607		
Waikato	0.398	0.422	0.444	0.467	0.490	0.515		
Medium-diversity regions								
Bay of Plenty	0.376	0.395	0.413	0.432	0.451	0.472		
Northland	0.364	0.378	0.392	0.405	0.420	0.439		
Hawke's Bay	0.357	0.374	0.391	0.407	0.424	0.443		
Manawatu- Wanganui	0.357	0.385	0.412	0.438	0.465	0.493		
Gisborne	0.351	0.364	0.376	0.388	0.401	0.416		
Canterbury	0.340	0.372	0.404	0.435	0.467	0.501		
Otago	0.321	0.353	0.384	0.415	0.446	0.478		
Nelson	0.318	0.341	0.363	0.385	0.407	0.433		
Low-diversity region	ns							
Taranaki	0.299	0.321	0.343	0.366	0.389	0.412		
Marlborough	0.296	0.315	0.335	0.354	0.375	0.401		
Southland	0.271	0.293	0.314	0.337	0.360	0.385		
West Coast	0.257	0.274	0.291	0.308	0.327	0.349		
Tasman	0.255	0.267	0.278	0.290	0.302	0.320		

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Figure 3: Shannon evenness index, 1996–2013 (historical) and 2018–2038 (projected) at the national level, based on ethnic classification at Level 3

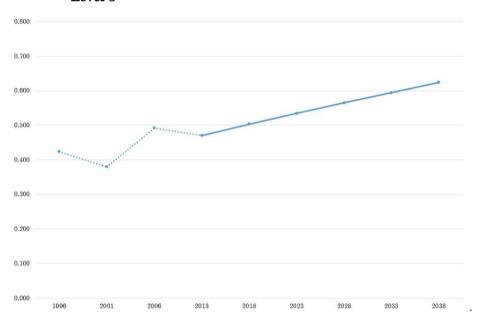
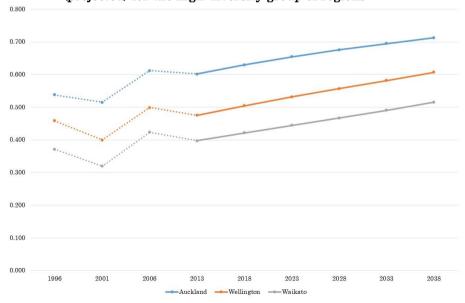


Figure 4: Shannon evenness index, 1996–2013 (historical) and 2018–2038 (projected) for the high-diversity group of regions



Note: The dashed lines are based on historical (census) data. The solid lines are based on projected data.

Figure 5: Shannon evenness index, 1996–2013 (historical) and 2018–2038 (projected) for the medium-diversity group of regions

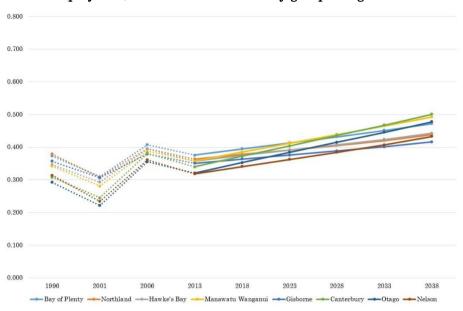
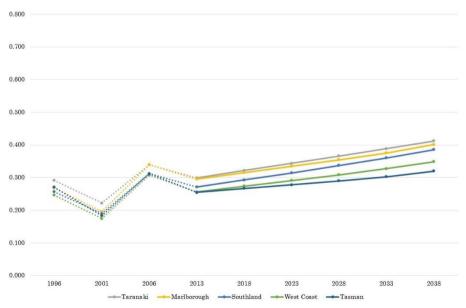


Figure 6: Shannon evenness index, 1996–2013 (historical) and 2018–2038 (projected) for the low-diversity group of regions



Note: The dashed lines are based on historical (census) data. The solid lines are based on projected data.

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Discussion and conclusion

New Zealand is an incredibly ethnically diverse country. However, that diversity is not uniform across all regions of the country. In this paper, we show that the most populous and fastest-growing regions (Auckland, Wellington and Waikato) are also the regions that have the highest ethnic diversity, both historically and projected into the future. Moreover, the smaller, more-peripheral, and slowest-growing regions (Taranaki, Marlborough, Southland, Tasman and West Coast) have the lowest ethnic diversity, both historically and projected into the future. However, *all* regions are projected to increase in diversity over time and there is projected convergence in diversity, in that regions that had relatively low diversity in 2013 are the regions that are projected to increase in diversity faster in relative terms.

The greatest differences in projected paths of diversity are within the medium-diversity regions. Within this group, there is projected to be a substantial change in ranking between the regions. In particular, the Canterbury, Otago and Manawatu-Wanganui regions are projected to increase in diversity more quickly than the other regions in that group. While our analysis is silent on the specific causes of these future changes in diversity (other than through the historical mechanisms mathematically reflected in cohort change ratios), we note that those three regions have features in common with the high-diversity regions (Auckland, Wellington and Waikato). For instance, those regions have a relatively youthful population, driven in part by the existence of university campuses. University campuses not only increase the youthfulness of the population, which may provide some resistance to population ageing, but they also attract a more ethnically diverse population, including cohorts of international students. Should this indeed be a driver of diversity, the Bay of Plenty region, with its new university campus in Tauranga, might be expected to experience a trajectory of growing diversity that is steeper than that anticipated in our projections (in Figure 5). The trend in diversity will also strongly depend on future levels of international migration. The cohort change ratio method implicitly assumes that those levels will not be very different from those of the last decade. This will affect particularly the regions with international airports, specifically Canterbury and Otago, along with Auckland and Wellington, given that recent international

arrivals often reside initially in their first city of arrival. Hence, changes in international migration will drive changes in diversity more directly and forcefully in those regions in a way that small, more-peripheral regions, cannot easily replicate.

Our research has several limitations. First, changes in the framing of the ethnicity question within the census present a problem, both for the calculation and interpretation of historical data on diversity, and for ethnic population projections that rely on these historical data, such as those used in this paper. This problem is clearly more relevant at greater levels of disaggregation of the ethnicity data, as is apparent in comparing the past trends in diversity between Level 1 (in Figure 1) and Level 3 (in Figure 3). The historical trend in the Level 3 data should therefore be interpreted in light of the overall trend in the Level 1 data, and over-interpretation of the inter-censal changes in the Level 3 data should be avoided, as we have done in this paper. In terms of the ethnic population projections, the problems are largely mitigated by averaging over the last two inter-censal periods, and thus any issues associated with the large increase in the 'New Zealander' category in the 2006 Census are smoothed out.

Second, our analysis is largely descriptive and, as noted above, does not reveal the causal mechanisms underlying the historical or projected future changes in diversity. Moreover, there are likely to be intersecting changes in diversity by age and ethnicity at the subnational level. These present fruitful areas for future research.

Despite these limitations, our paper presents a first attempt to summarise both historical and projected future trends in ethnic diversity for New Zealand, both nationally and regionally, and using data at a higher level of ethnic disaggregation than previous research and official population projections. Given the known limitations of commonly used population-projections methodology for projecting small population groups, the method we adopt has great potential for future applications, especially following the final release of data from the 2018 Census (and contingent on the quality of the reported ethnicity data that are released). Understanding the future ethnic diversity of New Zealand is important for planning and policy purposes. Adopting appropriate tools to increase this understanding is vital. Our results demonstrate the usefulness of the approach in filling this knowledge gap.

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Acknowledgements

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Notes

- Census respondents can state more than one ethnicity. Of the 2013 Census population of 4.2 million, 4.0 million stated their ethnicity and provided a total of 4.5 million stated responses at the five-digit level (the highest level of disaggregation). Multiple response varies considerably across ethnic groups. More than half of Māori identified with two or more major ethnic groups. In other major ethnic groups, the proportions of people identifying with two or more major ethnic groups were as follows: Pacific peoples (37.2 percent), Middle Eastern/Latin American/African (16.8 percent), European (13.3 percent), and Asian (9.9 percent) (Statistics New Zealand, 2014b).
- See, for example, Nijkamp and Poot (2015) for a review of these and other measures of diversity.
- 3 However, except for Māori, the majority of people do not do so yet. See also Endnote 1.
- To allow calculation of *D* even in the case of there being groups who have zero members at some point in time, we define:

$$0*\ln(1/0) = \lim_{q \to 0} [q(\ln(1/q))] = 0.$$

- 5 In ecology, this index is known as *Pielou's Evenness Index* (Pielou, 1966).
- We tested this extensively with both synthetic data and with New Zealand population data at the national level by single year-of-age. Essentially, the impact of international migration dominates all other causes of temporal volatility in CCRs (except for major changes in the ethnic classification for some groups, as discussed later). Taking the average CCRs and CWRs across two successive inter-censal periods removes much of the volatility.

Participation in the 2018 Census was lower than expected. Consequently, the 2018 Census data are being enhanced by administrative data to reduce the undercount to 1.4 percent. By comparison, the official census undercount in 2013 was 2.4 percent. Ethnicity is a 'priority 1' variable. While Stats NZ (2019) expects that the ethnicity data to be released are of high quality, an independent external review panel warns that data for Māori and Pacific groups may be of moderate quality. The prediction errors of 2018 ethnicity numbers generated by the cohort change ratio method will be analysed in a future paper.

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Visualising and Communicating Population Diversity through Web Maps

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Abstract

An online New Zealand Atlas of Population Change (NZAPC) is being developed (http://socialatlas.waikato.ac.nz/) to communicate the interaction and associated diversity resulting from three important components of population change: migration, natural change (births minus deaths), and population ageing. A comparative evaluation is made between five prominent international population web maps that utilise automated map server technology and the NZAPC, which uses static maps designed collaboratively by a demographer and a cartographer. This evaluation combined the needs of demography, cartographic communication and human-computer interaction, as well as consideration of software. Interactive online maps and graphics are a powerful medium for communicating population distribution and associated diversity, but care needs to be taken in the choice of data and their interpretation. The NZAPC differs from the other web map sites evaluated in that it is accompanied by supporting research and narrative. The design of the NZAPC has had extensive demographic and cartographic input so that users are provided with relevant and easy-to-understand maps and graphs. This is a different approach to mainstream population web mapping sites that provide access to large data sets and allow the user to dynamically construct their own maps. We argue that the provision of research-supported maps and graphs by experienced researchers has a rising place in online mapping. We provide examples from the NZAPC with a focus on assisting New Zealanders to better understand population change and thus prepare for, respond to and celebrate the increasingly diverse population of Aotearoa New Zealand.

Keywords: population web maps, cartography, static web maps, dynamic web maps

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he use of population maps on the World Wide Web (hereafter, 'population web maps') helps people to make sense of the avalanche of population data derived from population censuses. These web maps can harness text, audio, video, animation, graphics and user interaction with the intent of improving the communication and interpretation of geographic phenomena (Fu, 2018). This paper reviews and critiques existing high-profile population web maps and argues that there is also a place for alternative web maps that have less emphasis on harnessing the latest technological advancements and more on communicating a 'narrative-based' understanding of population change. Its focus is Aotearoa New Zealand.

There are two fundamental types of web maps: static maps and dynamic maps (Fu, 2018). Static maps are map images that have been created by cartographers and then saved as an image file that is made accessible through the web. Static maps were the original form of web maps and are similar to the hardcopy atlas style of cartography, which has been used for centuries. Since around the year 2000, web server technologies have enabled the development of dynamic maps, whereby the map readers are also the map producers (Fu, 2018). Users are able to query and analyse data and then assemble maps and other visualisations themselves, enhancing their understanding of the data and their geospatial relationships (Buchroithner & Gartner, 2013; Cartwright & Peterson, 2007). The dynamic web map is usually produced by 'out of the box' server software. These maps are primarily intended to be used for data exploration, from which the user draws their own conclusions. Consequently, dynamic web maps are a powerful means of providing information, and the number of interactive web maps is growing. Over the last couple of decades, we have seen mostly dynamic population web maps. This is because dynamic maps are generally easy to create and do not require the user to have expertise in cartography or the thematic area of the map (e.g. demography in the example of a population web maps). In this paper, we compare the dynamic population web-mapping approach with the static approach used in the online NZAPC, a website currently under development.

Existing research that evaluates web maps and applications has focused primarily on their usability and functionality (see, for example, Komarkova et al., 2007, 2010, 2011), and has developed very specific

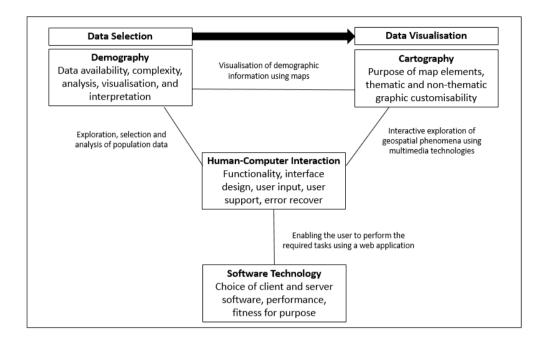
evaluation criteria, often regarding the inclusion or exclusion of specific computer functions. This research often overlooks the importance of the map graphics in terms of the quality of cartographic communication and the purpose of the web map (McHardie, 2016).

The assessment of population web maps is subjective, but key principles can be identified and discussed. McHardie (2016) used numerical scores to rank the performance of different web maps. Later, after review, it was realised that not only were scores unnecessary but that they were also too subjective. Instead, a more reasoned discussion is adopted in this paper based on established design principles and the expertise of the authors. Population web maps involve expertise in demography, cartography and web server software. Collectively, the authors of this paper have expertise in these key areas of knowledge. Drawing on McHardie (2016), we first discuss the design principles for web map creation. The characteristics of five major population web map sites are used to inform this discussion. Although the software technology delivering these population web maps is highly flexible and interactive, deficiencies are identified in the cartography and the absence of associated narrative. The New Zealand Atlas of Population Change (NZAPC) being developed by Jackson and Brabyn (2019) is then presented as an alternative method for visualising and communicating population diversity through web maps. Unless stated otherwise, all figures have been produced by the authors.

Population web map design principles

The design of population web map sites can be logically broken down into four considerations: the target audience (in this case, people interested in population change), cartography, human—computer interaction and server (software) technology (Fu, 2018). Design principles associated with these four components have been described by McHardie (2016) and are illustrated in Figure 1. Each of these design principles is a significant standalone subject, and this section only provides a brief overview of the principles in order to inform discussion later in this paper.

Figure 1: Population web map design principles, showing the relationships between disciplines of demography, cartography and human-computer interaction, underpinned by software technology



Population (and demographic) analysis has a range of needs, but ultimately it is to identify, interpret and project population trends and their implications, based on a range of drivers such as fertility, survival, ageing and migration. A key aspect of identifying population trends is understanding and modelling population diversity, including age, sex and ethnicity, and subnational patterns and trends. In many cases, web maps do not deliver the demographic complexity required by demographers, geographers or other users, and often their main requirement from a web map is the ability to download the underlying data, so they can analyse and interpret the data themselves (Lundquist et al., 2015). It is, therefore, encouraging that demographers and cartographers are working together so that population web maps can better serve the needs of users.

Cartography is concerned with the visualisation of spatial information using maps (Robinson et al., 1995). The underlying principle of cartography is communication (Kraak & Ormeling, 2011), and linked with this is data visualisation using symbols (mostly based on colour but also including shapes and size). Just like writing, effective cartography involves

the use of established conventions (e.g. water is symbolised using blue) so that communication is efficient (Robinson et al., 1995). Quality cartography involves going through many map iterations and interactions with end users (Kraak & Ormeling, 2011). In the case of population maps, ideally there is a workflow interaction between demographers and cartographers. Demographers select and prepare the data and cartographers spatially visualise these data.

Human-computer interaction is about the interface between people (users) and computers (Dix et al., 2004; Taylor & Lauriault, 2007), and is mainly concerned with system functionality (Komarkova et al., 2007), user-interface design (Travis, 2016), user input, and user support and recovery (Nielsen, 1995). Human-computer interaction defines the interface by which computers enable the users to explore, select and analyse demographic and other data. In the case of population web maps, human-computer interaction is underpinned by the software technology powering the web applications. The computer interface to the user is crucial. Functions need to be easily seen and intuitive, and users need instant feedback on how the computer is responding.

Software technology includes both the client-side software and server-side technology. A good web map will work effectively for all the main web browsers being used by the public. Web maps that utilise server-side technology provide a customised response to user (client) requests, thereby creating a dynamic map on the fly (Fitzgerald et al., 2011). The alternative to a dynamic map is the static map, which is a map image that has been previously developed. With static maps, the server is simply delivering a pre-generated image, although it may feel uniquely generated via selecting key variables from drop-down boxes.

Characteristics of existing population web servers

Most developed countries use web maps to enable the public to view population census data. Five significant population web map systems were reviewed for this research, with the aim of identifying the characteristics of the information presented and the effectiveness of these sites in communicating population information. These sites are evaluated in the following subsections using the four design principles identified in the previous section and Figure 1. The five sites are illustrated in Figure 2 and are all regarded as significant for the country they are representing.

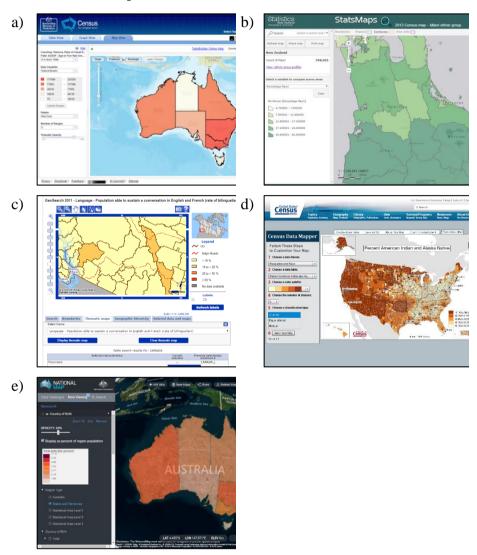
The needs of population and demographic analysis

The reviewed web maps display population census data typically based on numerical counts for different spatial unit scales. The spatial unit is typically an administration area, such as a county or region, or a small aggregation area, such as the meshblock in New Zealand. A count could be the number of people of a specified age group and/or ethnicity. These web map sites provide flexibility by enabling the user to select the spatial unit, the population theme (age, ethnicity, income, etc.) and the time period. Many are limited to displaying a single map for a given time, although some maps can be transitioned from one period to another. None of the population web maps reviewed disaggregates population change into its components, such as natural change and net migration. Only the Australian Bureau of Statistics' TableBuilder provided comprehensive statistics and allowed custom data to be exported into the maps. Government bureaus usually provide alternative sites for downloading census data rather than build this function into a web map.

Cartography

Most of the reviewed web maps provide the essential map components such as a legend, scale bar, north arrow and title. The choropleth map (predefined spatial units such as an administration area shaded with gradations of colour to represent quantity) is the dominant form of map. There are alternative map forms such as the use of points, 3-D and continuous surfaces, but these are not widely used. The choropleth map is often the only practical way to create maps automatically and dynamically for population data. Some web applications offer the ability to customise the output of the choropleths, particularly the colour palette, the number of classes and method of classification, but these options are reasonably limited.

Figure 2: Screenshots of the five evaluated web applications: a) Australian Bureau of Statistics, b) Statistics New Zealand's StatsMaps, c) Statistics Canada, d) United States Census Bureau, and e) the Australian Government's NationalMap



The major cartographic strength of the reviewed web maps is the interaction and dynamicity of the on-screen maps. Users can change the scale by zooming in and out, and often the spatial units change with the selected scale. Different regions can be easily navigated to, and in many

cases, additional information can be obtained in pop-up windows by clicking on different regions.

Cartographic communication is more than symbolising choropleth maps and enabling users to navigate to different regions and scales. The choice and appropriateness of the subject matter is critical. As in a written report, if the subject is not relevant, then the communication is immaterial. Cartographers go to considerable effort to ensure that the represented data is relevant. In the case of population maps, it is useful to work closely with demographers.

Human-computer interaction

In general, the reviewed web applications performed reasonably well in terms of usability. Each site has a clear purpose and is designed appropriately for that purpose. The web applications mimic real-world workflows and use familiar language and conventional controls and layouts, which make the sites intuitive and easy to learn. Repetitive tasks are automated or made easy to perform and the amount of user input required to perform a task is kept to a minimum. Inputs are typically well labelled and have default values if appropriate. The layout of the screens is usually well proportioned so that there is appropriate space for the map, menu and function icons. The reviewed applications were free from unnecessary features to avoid confusion and distraction. Feedback is provided so that the user knows that the computer is responding and how long it will take to receive the requested map. There is also user support such as user guides and context-sensitive support. Error messages and warnings are coherent and guide the user to solutions. There are undo and redo controls, and a user's work is recoverable in the event of a user or system error.

Software technology

All five reviewed web map sites utilised dynamic map technology that relies on both server-side and client-side software. This meant that maps were created on demand in the cloud and then served to the user. The advantages of dynamic maps are that an unlimited number of map themes and extents are available to the user. In addition, if the underlying data are updated, the maps being served through the internet will also be updated. Dynamic web maps generally use expensive software for serving the maps, although there

are open-source solutions. ESRI's Arc Internet Map Server (ArcIMS) is mostly used, while the Australian Government's NationalMap uses open-source software. Dynamic web maps also require a high level of IT expertise to develop the underlying programme, but increasingly there are 'out of the box' solutions such as ESRI's ArcIMS. When large data sets are being served and there are many clients, powerful server platforms are required. None of the reviewed web maps used a static map approach.

The need for web mapping to have a narrative

The main advantage of the dynamic web maps reviewed in the previous section is their high levels of flexibility and user interaction, so that the user can produce maps that suit their needs. The growth of dynamic population web maps during the last two decades parallels advances in web map technology, and many governments are seeing these web map tools as an efficient method for improving both policymaker and public access to population census data. These automated population web maps enable people not trained in cartography or demography to produce a wide range of population maps, especially for reporting purposes. These population web maps have been successful in improving access to population data, but what cannot be so readily provided is insight into what story the information is actually telling.

Population web mapping often requires the user to be able to select appropriate statistics to enable valid comparison between areas or subpopulations. As identified in the above review, population data available on web maps generally consist of population counts (by age, gender, ethnicity, income bands, etc), not more complex derived statistics. Derived statistics usually involve the selection and combination of numerators (the variable of interest) and denominators (the population 'at risk'). Often these data are not available from the same database, and can generate misleading analyses if inappropriately specified. As will be demonstrated in the following discussion of the online NZAPC, a deeper understanding of population change may, for example, be enhanced by knowing how natural change, migration and age interact. Ultimately, a more nuanced understanding engenders more accurate interpretation. It is not possible to interpret population change from population count data alone.

Cartography is about communicating effectively, and in many cases telling a story, or having a clear message. Cartographers prudently choose the data and deliberate carefully on the design of the map. Just like writing an essay, cartographers will produce many iterations until they are satisfied. Adding to the difficulty of cartography is knowing the subject area, such as demography. There is considerable advantage when experts in cartography and demography (or any other specialty area) work together.

Story maps (maps with a narrative) are becoming increasingly popular because they provide a context for the maps (for examples of story maps, see ESRI StoryMaps at http://storymaps.arcgis.com). Maps combined with narrative text, images and multimedia make it easier to tell and understand stories (Caquard & Cartwright, 2014). Story maps are used for illustrating fictional stories as well as presenting factual content. It is the latter that can be important for providing a narrative around the spatial aspects of population. Maps as a narrative become more than simply an expression of cartography – they can convey and educate about key concepts of population change, so that the users develop a deeper understanding.

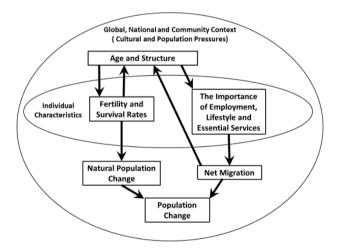
Cartographic design of maps involving accompanying narrative requires careful consideration of many different map elements, and there are many cartography textbooks that elaborate on this. As discussed previously, web maps typically default to simple colour shading of choropleth polygons, while carefully designed maps, using dedicated mapping software, can use a range of symbol types and even combine symbols to present more than one theme simultaneously (such as size and growth rate). Cartographers also create maps side by side to show two themes or variables at once, or a sequence over time. Many cartographic techniques can be used to increase the richness of the map and ultimately improve the communication. These techniques are illustrated below for the New Zealand Atlas of Population Change.

New Zealand Atlas of Population Change (NZAPC) – An alternative approach

The online NZAPC (http://socialatlas.waikato.ac.nz/) demonstrates an alternative approach to automated population web maps. The emphasis with the NZAPC is to use quality cartography combined with text to provide educational narrative. These narratives are further accompanied by

supporting research. In essence, the NZAPC is not just providing data and information on population change, but is 'talking' end users through it and 'teaching' them about it. As indicated above, one example is the interaction and associated population diversity resulting from the three main components of population change: migration, natural change (births minus deaths) and population ageing. This interaction is summarised by Figure 3, which is similar to a number of general population change diagrams (for example, see Myrdal in Hagget, 1983). Population change is simply the sum of natural change (births minus deaths) and net migration (internal and international combined) between census periods. Feeding into that change, demographically, are fertility and survival rates and their interactions with age structure. Age interacts with both natural population change and net migration but is often ignored or missing in population change diagrams.

Figure 3: Conceptual diagram showing the general determinates of population change



The maps shown in Figure 4 show how overall population change across 275 New Zealand urban places results from natural change and net migration (the maps are downloadable from the NZAPC). They have been chosen because they show some clear themes that are linked to the conceptual diagram in Figure 3:

- Natural change has been positive for most urban places across the period 1976–2013 and is relatively homogeneous across New Zealand.
- Net migration is much more variable and there are many towns that have experienced positive migration and many that have experienced negative migration.
- Together, the maps show that the spatial variation in total population change is primarily driven by net migration.

The cartography associated with these maps has qualities that cannot be easily replicated with dynamic cartography (i.e. maps generated 'on the fly' presented in the web maps that were reviewed). Firstly, the maps simultaneously convey two statistics: percentage change and absolute change (net number). Two different types of symbolisation are used: colour for percentage change and circle size for absolute change. The legend intervals used for these two statistics have been carefully chosen to represent the spread of the data, and the colours are those typically used for population data – red for positive growth and blue for negative (hot and cold colours, respectively). The use of symbols (in this case, colour) that people associate with different themes is an important principle of cartographic convention and improves the efficiency of map communication (Robinson et al., 1995; Jones, 1997). Automated web maps do not often select the best symbols and data classes for generating maps.

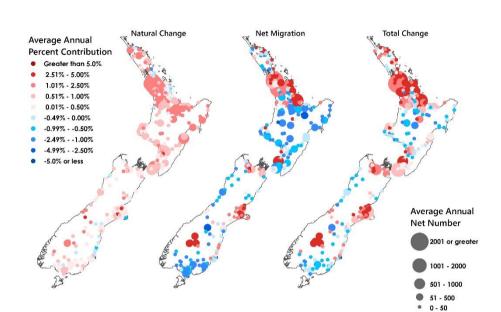


Figure 4: Comparison of natural change, net migration, and total change for New Zealand urban places between 1976 and 2013

The data to produce the natural change and net migration maps in Figure 4 are also not raw census data. The generation of these data involved a considerable amount of methodological conceptualisation, compilation and analysis, and was done as part of a much larger project (see Jackson and Brabyn, 2017 for more detail). Time-series components of change data at the urban place level (cities, towns and remote settlements) over the period shown are not available directly from the New Zealand population census data. These data needed to be statistically derived, and a description of the methodology is included on the website. The urban place level (n = 275) was chosen because many people can relate to an urban place, as it represents a recognised spatially clustered community of people. The population density of a given place is relatively homogenous compared with spatial units such as counties or district council areas that are typically used by automated web maps. Within many district council areas, there are both rural and urban areas; therefore, while the population density is actually heterogeneous, it is represented cartographically as homogeneous. This is an example of a well-known cartographic representation issue called the 'ecological fallacy' in which inferences are made for disaggregated data based on an aggregated form of the data. The use of urban places as the spatial unit reduces this well-known error.

Having identified that the spatial variation in net migration has been driving the spatial variation in total population over the past 37 years, the NZAPC continues the narrative by showing how net migration patterns vary by age. Figure 5 and Figure 6 show net migration by decade across the period 1976–2013 for the 15–24 and 65+ age groups, respectively. The main themes are that:

- The 15–24-year age group have completely different net migration patterns to the 65+ year age group.
- The 15–24-year age group are moving to the larger cities and tourist towns and the 65+ year age group are moving out of the large cities to small lifestyle towns
- The spatial patterns of net migration for both these age groups are relatively consistent over time, although the period 1996–2006 shows net migration loss for those aged 65+ years was more widespread than across other decades.

The narrations accompanying these maps embedded in the NZAPC cover many different topics to help the viewer/user understand how New Zealand's population has been changing. The narrations are not limited only to maps. There are also graphs for each urban place showing how natural change and net migration have interacted between 1976 and 2013 to produce total population change. Figure 7 shows these data for Tauranga. By enabling viewers to observe past trends, they are in a better position to understand how the population may change in the future. The narrations have reference to the demographic transition, which is an important consideration that helps viewers understand population change.

As shown earlier in Figure 4, the NZAPC maps show how natural change has been, and currently is, positive for most urban places. Demographers know that with an ageing population, New Zealand will follow what is already happening in countries such as Japan and much of Europe (for example, Matanle and Rausch (2011), among many others); that is, natural change will become increasingly negative as deaths come to outnumber births. The NZAPC has maps based on StatsNZ's projections to show this progression (see Figure 8); like other projection maps in the NZAPC, they are also provided with projection variants (high, medium and low assumptions).

Figure 5: Average annual net migration at 15–24 years (% of age group) by decade, 1976-2013

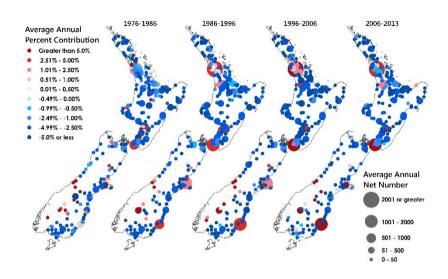
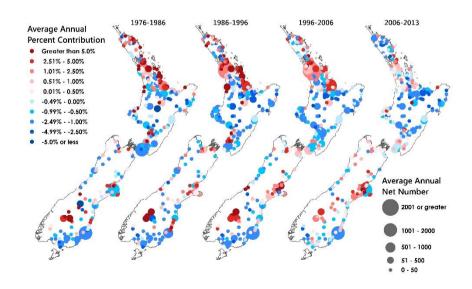


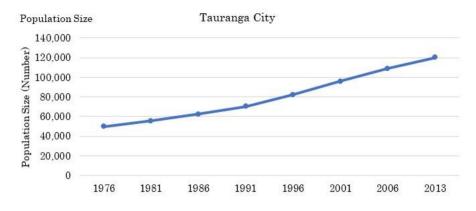
Figure 6: Average annual net migration at 65+ years (% of age group) by decade, 1976-2013



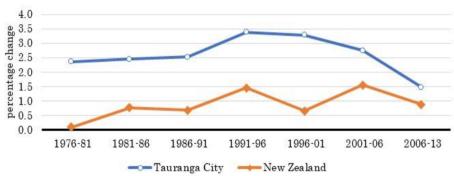
With the NZAPC, the maps were generated using cartography software (in this case, ArcMap 10.6) by the developer. Each map was produced and stored as an image file and is accessed like any other file-based html-coded website. One drawback to this approach is that each map has to be a priori produced by the developers, and when new data sets become available, such as with a new population census, the maps have to be reproduced or added to. A solution to this issue is to use scripts that automate both the data set-up and the development of maps and graphs. Maps and graphs created in the NZAPC were mostly developed using Python scripts (in this case, using the ArcPy library). A map produced in ArcMap can be saved as a map document, and this document can be used as a template and manipulated using Python. There are other Python libraries, such as Matplotlib, for automating graph production. The use of Python scripts to automate the production of maps and graphs means that the static map approach involves technical expertise, even if the website itself is simple.

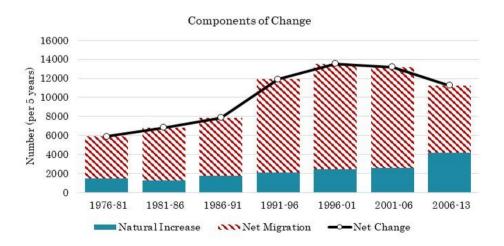
McHardie's (2016) review of dynamic population web maps did not calculate costs, but it is worth comparing dynamic and static population web map solutions with regards to the effort and expertise required. The NZAPC has involved a demographer, cartographer (with programming skills), and a web developer. These professional services are expensive because the process of developing the NZAPC has required ongoing iteration, analysis, and careful consideration and development of content. The development of dynamic map solutions similarly requires IT professional skills and time. The dynamic map technology generally involves 'out of the box' solutions, which makes set-up easier and quicker. However, the more complex server technology used for dynamic sites means that an IT specialist is required for regular monitoring and maintenance. There is also considerable cost associated with the internet map server software and the server hardware that hosts the site. Both types of websites require ongoing monitoring and maintenance, and this is typical of all websites.

Figure 7: Contribution of natural change and net migration to total change, Tauranga City, 1976–2013



Average Annual Growth Rate





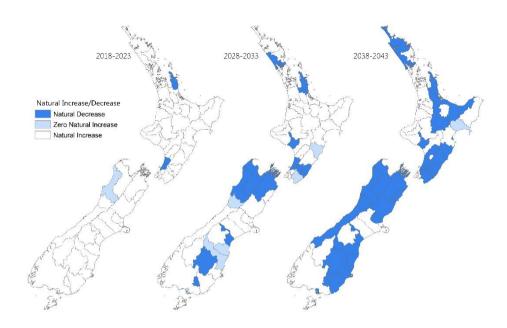


Figure 8: Projected natural increase/decrease by territorial authority area 2018–2043, medium variant

Conclusion

This paper has compared population web maps created using internet map server technology to produce on-demand dynamic maps with the NZAPC which uses static maps developed with the combined efforts of a demographer, cartographer and web developer. Both forms of web maps (dynamic and static) have their place although the dominant form is currently the automated dynamic web map. The dynamic web map serves the purpose of making census population data accessible to the public. However, the static web approach to population maps has several advantages over dynamic web maps primarily because the static map with accompanying narrative can guide the map reader through a better understanding of the information provided in the maps.

Compared with the current mainstream approaches that have been discussed in this paper, the NZAPC demonstrates an alternative form of mapping population data. The NZAPC involves careful consideration of the needs of both demographic and cartographic communication principles, and end usage. Using the NZAPC as an example, this paper has shown that there

is both art and science involved in producing maps of high cartographic quality, and that this cannot be easily automated by dynamic web maps. Through carefully selected themes, data, maps and graphs relating to New Zealand's population change, the NZAPC provides a series of narratives that lead the viewer on a journey to deeper understanding.

The NZAPC promotes the importance of having narrative accompany the maps in order to assist users to understand the story the data are telling. Understanding can be further enhanced by reading the accompanying methodological notes, which explain how the data, especially derived statistics, were created. Population change is no different in this regard to any other subject, but the provision of derived statistics such as components of change, rates and ratios on the NZAPC, rather than simple population counts, allows users to make more nuanced comparison between areas. The population census data being visualised by many automated population web maps is typically based on simple population counts, and although these can be accessed at a range of spatial scales, the resulting information is context-free.

The well-established notion that data lead to information which leads to knowledge which leads to wisdom was first specified in detail by Ackoff (1989). Consideration of this hierarchical process is becoming more important than ever, as the amount of data being produced is increasing exponentially, and tools and artificial intelligence are being used to make sense of these data. This hierarchical process is based on filtration, reduction and transformation, as well as increasing understanding of relations, patterns and principles. Making sense of population data often requires social and historical context, which cannot be so readily auto-manufactured. This is where accompanying narrative is useful. This paper supports a growing move towards online story maps (see Caquard and Cartwright, 2014) that are not meant purely for data exploration, but for conveying a more directed message. This is particularly important for helping people to understand changes in population diversity and to anticipate or predict demographic changes to their communities. It is our hope that the relations, patterns and principles conveyed by the NZAPC will contribute to developing this outcome for users.

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Mapping Service Provision that Responds to Diversity: Tools for Evaluating Institutional Capacity and Capability

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Abstract

The idea of a 'diversity dividend' frames much research in relation to the increasing ethnic diversity in Aotearoa New Zealand and has underpinned the work of the government-funded research programme CaDDANZ. It has been challenging, however, to understand the service provision landscape that is designed to support new migrants and facilitate their engagement in the economy. This paper considers whether developmental evaluation approaches entailing co-produced visual artefacts (or 'maps') may be helpful for organisations who want to know how their own business can maintain or improve their responsiveness to increasing social (particularly ethnic) diversity. Three projects, designed in the form of 'institutional evaluations', used coproduced visual artefacts (maps, diagrams, plans) to provide rich pictures of the complex patterns of institutional engagement with diversity. Each of the organisations evinced at least one novel representation of 'what we look like now' that was helpful to the institution for ongoing strategic management and to the researchers for both evaluating institutional capacity and capability and clarifying the value of visual artefacts as tools in this context. This paper explores the way these artefacts were constructed and what they revealed that had previously been unclear. The methodological conclusion taken from this series of studies is that working closely with an organisation in a 'critical evaluative friend' role is enhanced by the use of these kinds of visual artefacts, which in turn enables a stronger institutional response to diversity demands and expectations.

Keywords: Developmental evaluation, data visualisation, ethnic diversity, service delivery

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(CaDDANZ) is a New Zealand government-funded research programme aimed at determining, among other things, whether or not new migrants add to or subtract from the economic sum of national prosperity. This contentious question underpins more pervasive national anxieties about whether migration settings are at appropriate levels and whether or not diversity is something that has positive social impact (see, for example, Bedford, Bedford, Ho, & Lidgard, 2002; Grbic, 2010; Simon-Kumar, 2014; Spoonley, 2015). Alongside an interest in the economic value of new migrants, however, there is a range of government, business and not-for-profit organisations delivering services to residents based on various diversity criteria. For example, ethnicity, age and gender are the most commonly identified grounds for service eligibility: the Gold Card for superannuants, breast cancer screening for women, and English language classes for new migrants are all examples.

The initial motivation for deciding to undertake this evaluative work as part of the CaDDANZ project was to help us, as researchers, to think about the challenges that organisations might face in responding to the increasing ethnic diversity. A second motivation emerged as we began our fieldwork: the need to explore what tools might help organisations more strategically frame their own diversity-related work. Looking to the future, this will be important for organisational and policy development. We particularly wanted to more fully understand the ways using visual artefacts may act as dialogic tools to enhance collaboration and coproduction between academics and organisations, and within and between organisations. The work, across three institutions (see below), was evaluative in the sense that the purpose was to determine what was working well, what barriers each organisation faced, and where better policy and improved service delivery could be envisaged. Each evaluation considered the wider policy, legal/administrative and operational context that constrains and enables good settlement outcomes.

The work reported on in this paper relates to our engagement as external evaluators (see Conley-Tyler, 2005) with three different organisations: English Language Partners New Zealand (ELPNZ) – a key NGO provider of settlement services focused on delivering English language competency; the Māori, Pacific and Ethnic Services (MPES) division of New Zealand Police – a core government agency providing services to all New

Zealanders which is also focused on engagement and response to new settler communities and seeks to recruit diverse staff; and the Chinese New Settler Services Trust (CNSST), which operates a more entrepreneurial model of service provision focused on Asian new settlers (particularly Chinese) in Auckland. The three organisations were deliberately chosen for their different purposes, ways of operating and geographical reach. Each organisation faces different capacity and capability challenges in being responsive to increasing diversity, especially ethnic diversity. Material from two of the cases (ELPNZ and New Zealand Police) are reported here as the work with CNSST is incomplete at time of writing.

Developmental institutional evaluations

An exploratory methodology was developed for this work based loosely on principles of developmental evaluation. Developmental evaluation (Patton, 2011, 2012 CFCA, 2018) focuses on learning, adaptation or improvement rather than making a judgement about the value of a particular initiative or organisation. The primary role of the developmental evaluator in these three evaluations was to "infuse team discussions with evaluative questions, thinking and data, and to facilitate systematic data-based reflection and decision-making in the developmental process" (Patton, 2012, p. 296). The evaluator deliberately and explicitly became part of each of the teams, interrogating organisational change - in Owen's terms, working as "outsiders for insiders" (Owen, cited in Conley-Tyler, 2005, p. 5). Their role, as a trusted partner, was to orient the group to their purpose, observe what was unfolding (including collecting data), collaborate (and sometimes lead) in sense-making with the team (including data analysis), and intervening required. Interventions particularly entailed bringing new information and analysis (often in the form of data visualisations), encouraging reflexivity, facilitating workshops and asking questions. This is a time-intensive, relationship- and trust-based approach that requires the evaluator to have skills in rapport and trust building, authentic collaboration and data visualisation. But more particularly, it requires a reflexive and pragmatic approach informed by practical experience and broad (not necessarily deep) theoretical knowledge about how to piece together insights and options on the fly. It also requires the capacity for physical presence, ability to travel, and flexibility in terms of meeting times and durations. While these are exacting and demanding requirements best

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suited to independent contractors who have some degree of autonomy over their own time, they are designed on the principle of a 'service to' rather than an 'output from' approach and would not be replicable (or desirable) in all circumstances. The approach we adopted is neither a strictly academic research approach (there is no singular sociological, business or evaluation methodology deployed, nor is it entirely a practitioner approach exemplified in, say, Wadsworth's 2011, *Everyday evaluation on the run*) but is an eclectic, pragmatic portfolio of methods designed to "offer ideas pertinent to pending actions" (Cronbach et al., cited in Conley-Tyler, 2005, p. 6).

Our developmental institutional evaluations were individually designed around a case study methodology that aimed to deliver insights about how well the current operating environment of each institution met the government's commitment to facilitate good settlement outcomes (Immigration New Zealand, 2014). Collectively, the case studies captured and highlighted elements that get in the way of, or enable, settlement outcomes in the various institutional contexts. The *evaluand* – the thing under study – was, therefore, not a programme but an organisation in its operating context. Each evaluation sought to broadly investigate:

- those things that directly and indirectly (but importantly) affect the organisation's <u>capacity</u> to support good settlement outcomes, and relatedly
- 2. the most important systemic enablers and hindrances (capabilities) to good settlement outcomes for new settlers in the context of each organisation's work, and additionally
- 3. the meaning of 'diversity' and its implications in the context of each organisation.

Note that we make a consistent distinction in this paper between *capability* (necessary characteristics, knowledge, skills) versus *capacity* (sufficient capabilities that can be deployed at different levels of a system, interpersonal, institutional, sector — including strategies, resources, systems, processes and talent. While the distinction expressed in this way is idiosyncratic to our work, it has been put together from a range of sources such as Hendriks et al. (2013), Potter and Brough (2004), Michie, van Stralen, and West (2011), Sharp (2005) and Vincent (2008).

Context

The first context is that diversity can be a sensitive issue for organisations - especially in the current climate where government policy interest in ways of working more effectively with diverse groups are profiled (Office of Ethnic Affairs, 2012; State Services Commission, 2019). For government agencies and many businesses, diversity operates on at least two levels. The most easily accessible level is in human relations (HR), recruitment, hiring and promotion. The New Zealand business community's Champions for Change (2018) project illustrates this aspect well. Many New Zealand government agency HR policies identify diversity as a goal in terms of the employment profile the agency is hoping to develop. Sometimes this is an ethnic profile and other times it is across a range of superdiverse demographic indicators. This "includes, but is not limited to, ethnicity, culture, heritage, gender, age, religion, language skills, differing abilities, sexual orientation, gender identity, ideas and perspectives" (GCSB & NZSIS, n.d., p. 2). Few agencies, however, also turn their presentation of diversity policy outwards to describe how their service delivery functions intersect with people seeking services who might variously be travellers, refugees, residents or citizens. New Zealand Police is an exception to this as they have an outward-facing Working Together with Ethnic Communities strategy that was first developed in 2004 (New Zealand Police, 2004) and reprised but unpublished in 2017. In addition, there are two other specific strategies: The Turning of the Tide Strategy 2012/13-2017/18 (New Zealand Police, 2018a) and O Le Taeao Fou: Dawn of a New Day: Pasifika National Strategy (New Zealand Police, 2018b). ELPNZ likewise describes and discusses their services (to implicitly diverse users) as "delivering English language programmes and supporting former refugees and migrants to settle, participate and succeed in all aspects of life" (ELPNZ, 2018).

The second context is more contested and is concerned with the question of who controls the cultural narrative of ethnic diversity in Aotearoa New Zealand. When the first ethnically diverse Europeans arrived in the country – as whalers, sealers, traders, missionaries, and finally as settlers – Māori offered manaaki (respect, generosity, care, hospitality). Despite reports of unprovoked attacks, these were few. Every British, Dutch, French, Russian, German, Spanish, Portuguese and North American family who ended up staying in Aotearoa New Zealand as early, second-wave

settlers generally has access to family stories of connections to mana whenua Māori through survival, trade and/or marriage (O'Malley, 2014). Māori control little of that narrative now. More recent migrants from the Pacific could also argue a case for control of a migration narrative through invoking the "sea of islands" (Hau'ofa, 2008) that comprises Te Moana-nui-a-Kiwa – the Pacific Ocean. Māori constituted the first great migrations, and these continued through subsequent movements of peoples from Samoa, Tonga, Kūki 'Airani, Nuie, Tokelau and so on. New Zealand history, however, recounts other population stories, the strongest of which is the story of settler colonisation and the post-1840 cultural, linguistic and religious homogenisation of our national identity. The largest numbers of these new migrants arrived as English, Scottish, Welsh or Irish immigrants. They spoke English, and along with the odd enclave migration of other Europeans, they were Christian (despite the long-standing fault lines between Catholic, Protestant, and minority sects). The Chinese, arriving as invited miners, became traders and farmers at roughly the same time as expansionist Anglo-European settlement was underway. They were viewed as ethnically and religiously 'other'. Chinese migrants were not encouraged to belong to this rapid reconfiguration of demography; instead they were treated with greater hostility than Māori (Ip, 2003).

Most New Zealanders are aware of this overarching (hegemonic) story of early European settler migration, and the language and religious displacement that followed. To some degree, it is now rehearsed (in English) in school curricula, and by historians (King, 2003), geographers (Higgins, 2017), demographers (Pool, 1991) and other scholars (Kirkwood, Liu, & Weatherall, 2005), who have produced detailed and well-researched accounts of how the cultural, linguistic and religious overthrow of Māori took place (albeit from Pākehā perspectives). It is largely understood to be a demographic overthrow rather than the result of military conquest (although there were certainly elements of that). But how is this relevant to the institutional evaluations undertaken in this present context?

We believe that institutional responses to diversity have to be set against this history simply because institutions derive their conditions of possibility from the linguistic, cultural and religious values and beliefs of the governing class. Our diversity and migration policies are not predicated on even the 'three P' principles ostensibly derived from te Tiriti o Waitangi (the Treaty of Waitangi) – Partnership, Protection and Participation – nor

are they predicated on the language of tino rangatiratanga. Māori currently have no or little policy determination over migration or increasing ethnic diversity. Therefore, values such as manaakitanga, kotahitanga and whanaungatanga (loosely translatable as hospitality, getting along together, and family and relationships, respectively) that could well be useful constructs in the diversity space are not, and cannot yet be, the basis of policy conversations because they sit outside the conditions of possibility for a discussion of mātauranga Māori (see Smith, Maxwell, Puke, & Temara (2016), Mahuika (2009) for a discussion of the reclamation of te Ika a Maui as a touchstone for migration stories, and Harmsworth (n.d.) for a presentation of Māori values in an environmental policy context).

Among a range of insights we have been able to draw from the institutional evaluations, three seemingly intractable governance problems come to the fore. The latter two will be addressed more fully than the first in this paper. The first issue is that te Tiriti o Waitangi and the Treaty principles are highly relevant to the operation of government agencies in Aotearoa New Zealand (Te Puni Kōkiri, 2001). However, the way Treaty principles are operationalised in policy contexts is complicated and often inconsistent. Of significance to this research is the perverse ethnic policy categorisations of people in Aotearoa New Zealand. Māori, as first peoples and mana whenua, are ethnically categorised in the census as Māori alongside a standardised array of other ethnicities such as "New Zealand European, Māori, Samoan, Cook Islands Māori, Tongan, Niuean, Chinese, Indian, Other" (Statistics New Zealand, n.d., p. 4). Ethnicity in this context is defined as "a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship" (Statistics New Zealand, n.d, p. 1) and is selfidentified. In other government agencies, however, the concept of ethnic is reserved for non-Māori, non-Pacific, non-Anglo-European peoples. For the Department of Internal Affairs, for example: "Our mandated communities include migrants, refugees, long-term settlers, and those born in New Zealand who identify their ethnicity as: African, Asian, Continental European, Latin American, Middle Eastern" (Department of Internal Affairs, n.d.) and these categories are largely determined through country of origin. Immigration New Zealand (INZ) do not provide a definition of ethnicity on their website but tend to focus on country of origin of potential immigrants alongside other visa-influencing factors such as income and skills.

These definitional discrepancies make it difficult for a range of government departments to comprehensively see the full range of their potential service users and how different communities overlap and interact with each other. On the one hand, the service work of Immigration New Zealand is focused on migrants, but this may not include much or any service provision for the return migration of, for example, Māori whose families may have lived overseas for extended periods but who are, nevertheless, New Zealanders. New Zealand Police, on the other hand, clearly focus on differentiated user groups under the Māori, Pacific and Ethnic Services (MPES) umbrella but engage with each of these groups through different strategic instruments focused on Māori, or Pasifika, or 'other ethnics', respectively. Some operational overlap occurs within New Zealand Police as the prioritisation of Māori responsiveness (e.g. Turning of the Tide, 2018b) means the resources to oversee ethnically focused work are subsumed within the ambit of Māori responsiveness. Thus, for example, sergeants or inspectors in the regions, nominated as Māori responsiveness managers, oversee the work of ethnic liaison officers.

The second difficulty we observed is that service ecologies are fragmented and there is little central government oversight of the big picture of service delivery even within the quite narrow focus of, say, ethnic services. Supply and demand factors are generally not well understood. Notfor-profits compete amongst themselves for limited funding from multiple, siloed government agencies to deliver tightly specified services to newcomers. Each agency's perception of demand is focused on its particular mandate. Vote Social Development, for example, allocates funding to the delivery of benefits to refugees and new migrants (Treasury, 2019a), Vote Tertiary Education funds English language training (Treasury, 2019b), and the New Zealand Police Vote (Treasury, 2019c) does not allocate funding against specific population groups. Hence, the work of any one service organisation intersects with multiple funders and involves a constant juggling act, seeking to reconcile the conflicting expectations from local and central government agencies and those who need services.

Government procurement processes amplify the oversight problem. Contracts for service typically do not reflect the quantum or range of actual needs of newcomers. Furthermore, contract managers do not have the remit to assess or enhance local service systems. Finally, accountability reporting requirements and templates constrain or preclude community service

organisations detailing concerning issues, the levels of revealed need (versus the amount of service delivered), or relevant additionalities, such as the achievement of non-contracted but nonetheless important settlement-related outcomes for clients receiving contracted services.

Even though Immigration New Zealand created a Strategy Interagency Reference Group that "determines settlement funding priorities and provides advice to a group of senior government officials and then to ministers" (Immigration New Zealand, n.d.), and provides an extensive and wide-ranging list of settlement support services it oversees (ibid), the general impression of service incoherence persists among the service users and agencies we worked with.

The third challenge we identified is that institutional capacity-building, focused on effective responses to increasing demographic diversity, can be misplaced within organisational structures. In particular, there is often a disjunction between hiring and recruitment policies on the one hand and service delivery to external users on the other. In some cases, the agency may have a fairly homogeneous workforce responding to very diverse users or it may have an externally facing diversity remit that is siloed within one part of the agency with little capacity to influence what happens elsewhere within the agency.

It is within this contextual complexity that the three evaluations took place. In the next two sections we first discuss the interdisciplinary nature of the evaluations, provide a brief overview of methods and challenges and then provide a detailed description of four of the visual tools that were developed that enabled us and the organisation to see what was at stake more clearly.

Mediating models and theories

Evaluative approaches provide some licence for drawing on conceptual thinking across a number of fields. We characterise this practice as making explicit use of a range of what we call, following Tavory and Timmermans (2014), "mediating models and theories" to inform what is essentially praxisinformed research (Given, 2008; Robertson, 2000). The former concept refers to deliberately drawing from a range of complementary but disciplinarily discrete concepts and ideas in a conscious knowledge-framing approach—allowing the concepts rather than the discipline to inform our thinking.

Praxis, for us, references a participatory approach involving the organisations directly in ways that might enable "reflection and action upon the world in order to transform it" (Freire, 1970, p. 51)

Thus, in the work with ELPNZ, we used thirteen different concepts in particular, roughly assembled around ideas of abductive reasoning (Tavory & Timmermans, 2014), complexity thinking inherent in developmental evaluation (Patton, 2011) and qualitative additionality (Hind, 2010), use of mixed methods (Creswell, 2013), visual tools, design thinking (Brown, 2008), organisational learning (Argyris & Schön, 1978; Senge, 1990), reflective practice (Schön, 1983) and adaptive management (Holling, 1978).

This is a complex matrix. Theoretical stances, such as abduction, reflective practice, design thinking and adaptive management, are set within a range of different evaluative, organisational development and complexity thinking approaches. In addition, they are intersected by some of the key settlement constructs and concepts at one end and public service strategies at the other. For example, the New Zealand Refugee Resettlement Strategy (Immigration New Zealand, 2019), The New Zealand Migration Settlement and Integration Strategy (Immigration New Zealand, 2014) and the Auditor General's recommendations on supporting new migrants to settle and work (Office of the Auditor General, 2013) are all as relevant. In the later work with New Zealand Police, a similar range of concepts were used. Such an approach to mobilising conceptual knowledge pragmatically and often on the fly requires a lead evaluator with years of experience, including in frontline service roles, wide/cross-disciplinary reading habits, and flexible habits of thinking around 'What can be useful here?' Our models and concepts were often roughly drawn up in conversation amongst ourselves, with colleagues and with the stakeholder organisations. We used diversity as a sensitising concept or "background idea that informed the overall research problem" (Charmaz, 2003, p. 259).

These projects were collaborative and co-produced. The ethos and ethic of participatory research underpinned every aspect. To whatever degree possible, the engagement with the evaluation was designed to give value back to the organisation. While we keenly wanted research access to help to develop our understanding of the challenges in the diversity and settlement space, our sense of accountability and reciprocity prompted us to seek out insights of primary value to each of the organisations. This eclectic

but systematic way of working allowed for emergent and process thinking to develop as each of the projects progressed. It also made it possible for us to continue to think more carefully about the impact of wider social and political contexts that were influencing the work that ELPNZ and MPES-New Zealand Police was undertaking.

Methods

The particular methods employed in each case study varied depending on what data needed to be collected for specific purposes and are wide ranging. Across the three evaluations, we interviewed stakeholders as individuals and in groups, conducted surveys, visited workplaces for participant observation and face-to-face interviews, sat in on staff/committee meetings, developed presentations for the organisations' boards or senior managers followed by in-depth discussions about the findings and implications that generated more data, and held structured discussions around visual artefacts with key informants. In addition, a range of visualisation tools was used including Lucidchart®. The maps and diagrams constructed during the evaluative process were open to consequent iteration and redrawing as circumstances changed, new information came to light, or for specific audiences and purposes. In the spirit of developmental evaluation, ideally, mapping and sense-making conversations become the norm within an organisation and are then also used to assist in self-evaluation. The individual maps and diagrams are then just temporarily useful artefacts of this process and perhaps, in some cases, serving a longer-term purpose as a baseline assessment.

Table 1. Framework of mediating models used with ELPNZ

NZ public service	Migrant Settlement & Integration Strategy (INZ, 2014)
strategies	Refugee Settlement NZ Resettlement Strategy (INZ, 2019)
	Auditor General's recommendations (OAG, 2013, 2016)
Theoretical	Abduction (Tavory & Timmermans 2014; Schwandt, 2015)
stance	Reflective practice (Schön, 1983
	Design thinking (Brown, 2008)
	Adaptive management (Holling, 1978)
Evaluative	Developmental evaluation (Patton, 2011)
approaches	Personalizing evaluation (Kushner, 2000)
	Qualitative additionality (Hind, 2010)
	Theory of Evaluation influence (Henry & Mark, 2003)
Organisational	Organisational assessment (Universalia)
development approaches	Organisational learning (Argyris & Schön, 1978 Senge, 1990)
	Organisational development (Pope, 2013)
	Subsidiarity (Stame, 2003)
Complexity thinking approaches	Services and systems design (Mager, 2009
	Behaviour change at a systems level (Hendriks et al., 2013)
	Collective impact (FSG, n.d.(a))
	Co-design (Burkett, 2016)
	Actor/ecology mapping (FSG, n.d.(b)); Tassi, 2009)
	Alignment diagrams (Kalbach, 2016)
Settlement constructs/ concepts	Integration (Berry, 2015; Ager & Strang, 2008)
	Social cohesion (Peace et al., 2005)
	Social capital (Social Capital Research, n.d.; Roskruge & Poot, 2016)
	Homebuilding (Hage, 1997)
	Neighbourliness (Kusenbach (2006)
	Superdiversity (Vertovec, 2007)

Institutional evaluations usually conclude with a published working paper (the case study) that is consented to and shared with the organisation. In each case, however, additional outputs designed for in-house use were generated, including models, diagrams, video-clips and evaluation and monitoring tools. We have also presented emerging insights from each institutional evaluation to the annual Pathways Conferences 2017–2019, and in other fora such as presentations to the New Zealand Ministry of Business, Innovation and Employment (MBIE). A meta-evaluation designed

to summarise findings across the three institutional evaluations at the end of the CaDDANZ project will be shared with all contributing institutions.

Migration and settlement issues are political and politicised in Aotearoa New Zealand (Bedford, 2003; Simon-Kumar, 2015) and no evaluative or educative work in relation to service delivery can sidestep the sensitivities (Bogen & Marlowe, 2017). With reference to this wider political context, we begin our argument with a brief reminder of the determining theoretical challenge Aotearoa New Zealand faces in relation to cultural narratives of diversity and definitions of ethnicity. We then briefly demonstrate the *visual artefact* work we have undertaken in relation to two of the evaluative projects we have been involved with: one with English Language Partners New Zealand (ELPNZ) and the other with New Zealand Police. We conclude by outlining six elements that seem important for understanding what is possible for organisations seeking to be more responsive in the diversity space.

There is also no question that this work was methodologically and operationally challenging. The challenges fell into four categories: relationships, time, tools and outputs. In terms of relationships, the challenges arose when staff changed in the organisations and expectations and ways of working had to be re-justified and re-explained. This often led to project creep and significant time delays. With the time component, the challenges we encountered were the length of time required to develop relationships, how to find appropriate time to be inside the organizations and to build artefacts and records in a way that could then be validated through discussions with key (and busy) staff, and balancing conflicting time demands - both for the evaluators and the key individuals in the organisations. Each project took more than a year to uncover the core story and ongoing engagement has filtered across 3-4 years. Patience, persistence and generosity were the unlikely keys to managing both these challenges. In most cases, the central individuals demonstrated these attributes in ways that allowed the work to progress relatively smoothly. Finding and learning the visualisation capacity of different online tools relied on the lead evaluator who researched and wrangled different approaches and interfaces until the most appropriate tools were identified. Finally, the format of outputs was challenging. Documents, maps and diagrams that were useful as in-house touch points and working artefacts have proved difficult to incorporate in papers for publication or even presentations as they are rich

in detail and very personal to each organisation. A stepping back from the demands of academic publishing for these projects has been one response. While none of this noting of challenges goes far towards a close analysis of methodological limitations, it points to ways in which each of these projects entailed a flexible and adaptive approach and one in which the lead evaluator reflected on each challenge as it emerged and worked with the agencies to find a way forward.

Having discussed the context, approach and challenges, the paper turns to a more detailed discussion of some of the artefacts that were produced and how, in a dialogic context, they allowed us to see what had been less visible as constraints and opportunities in the service delivery space in relation to ethnic diversity. We discuss four representations that were helpful and then offer some concluding comments.

Visual artefacts

The institutional evaluations with ELPNZ and MPES-New Zealand Police both focused on three factors: the working partnerships between the organisations and their service users and stakeholders; organisational sense-making, or how the organisation understood itself in relation to its constituent parts; and the identification of barriers and enablers to implementing strategic aspirations. ELPNZ federated 22 regional organisations into a unitary structure in 2014 and was challenged by the range of approaches to diversity and settlement trends evident in different localities. New Zealand Police had a different challenge to make sense of, which was the scope of influence of MPES, comprising a small unit in national headquarters, and a dispersed team of liaison officers across police districts. In addition, there was ongoing reflection on the value and utility of the visual tools that were developed to enable dialogue between the researchers and the key collaborators within each organisation.

Starting with ELPNZ, it is useful to note that their services are not really ethnicity-based per se as they are designed for any newcomers who do not have English as a first language. Linguistic diversity rather than ethnic diversity is the main characterisation. (This contrasts with the work of the Chinese New Settler Services Trust (CNSST), our third case study, whose work is primarily focused on supporting Chinese and other South and East Asian migrants). The evaluator's role was to be a critical friend who engaged

the organisation on a regular basis over many months, talking directly with the CEO and senior leaders and travelling into the field to talk with staff and service users in the regions. Over time, a picture of the context in which ELPNZ was being funded, was connecting to other service agencies, and was responsive to government policy, was discerned and captured in text and working diagrams. Gaps and barriers to effective working also became apparent. These notes and observations provided the basis for developing one of the key visualisations: a map of the service ecology against the outcomes identified in the key strategy framework developed by INZ (Figure 1). According to Meroni and Sangiorgi:

...designers have adopted and adapted the concept of 'information ecology' by Nardi and O'Day (1999) to services, introducing the idea of 'service ecology'. An 'information ecology' is defined by Nardi as 'a system of people, practices, values and technologies in a particular local environment' (Nardi and O'Day 1999: 49); Live | work defines a 'service ecology' as a 'system of actors and the relationships between them that form a service' (www.livework.co.uk). (Meroni & Sangiorgi, 2011 p. 22)

The lead evaluator, with some visualisation skills and knowledge of service design concepts sought to "create and develop proposals for new kinds of value relation within a socio-material world" (Kimbell, 2011). Furthermore, this approach belongs in what Kimbell and others call "designing for service" where "designing for services rather than designing services recognizes that what is being designed is not an end result, but rather a platform for action with which diverse actors will engage over time" (Kimbell, 2011; see also Manzini, 2011).

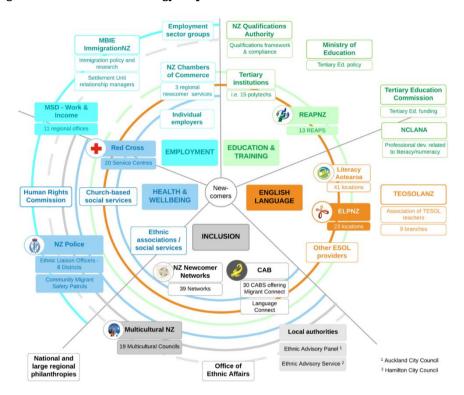


Figure 1: ELPNZ service ecology map

Source: Stone & Peace (2017, p. 27).

The INZ strategy framework identifies that new settlers should have access to and be able to enjoy support in English language, education and training, employment, health and well-being, and social inclusion. As the mapping developed and was iterated through the course of many conversations, the realisation emerged that while ELPNZ services had touchpoints in all five of the critical settlement areas, they were really only funded to deliver English language training. Across the ecology there was a general lack of coherence between multiple providers, multiple government agencies, multiple funders and multiple networks, and both new settlers and service delivery agencies could be forgiven for feeling a bit at sea. In Figure 1, the spokes in the wheel segment the five strategic areas identified by INZ. The orange sector represents the core place of English language and ELPNZ's place within that alongside other key language providers. The orange circular line indicates the trace of ELPNZ services across other strategic areas and its intersection with other service delivery agencies. One

of the unanticipated outcomes from ELPNZ's working engagement with the diagram — both to verify the interpretation and to understand its import — was the realisation of where their services interconnected with other agencies or could do so. Furthermore, it allowed ELPNZ to understand the extent to which their services extended beyond self-contained language instruction activities and to begin to think strategically; that is, how to position their service more holistically in terms of how they bid for funding and which other service providers they would support in bids rather than compete against.

Such mapping is endorsed as being useful in revealing "opportunities for new actors to join the ecology and new relationships among the actors. Ultimately, sustainable service ecologies depend on a balance where the actors involved exchange value in ways that are mutually beneficial over time" (Mager cited in Miettinen & Koivisto, 2009, p15). As Meroni and Sangiorgi (2011) suggest: "Understanding and mapping out service ecologies, including artefacts and practices that form them, becomes a way to identify unnoticed opportunities and/or resources to be able to reframe service configurations and interactions" (p. 22). ELPNZ has firmed up its working alliances with associated providers – supporting the funding bids of other organisations and sharing teaching resources it has developed.

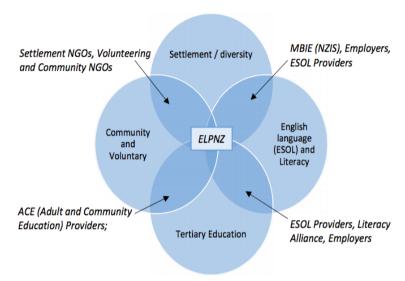
Figure 1 points to the potential of what Manzini (2011) describes as the operation of the "next economy", "systems based on interlinking services [that] interact to obtain a common result" (p. 2).

The service ecology also complements ELPNZ's own picture of itself as depicted in the matrix of overlapping spheres in a more straight-forward Venn-type diagram (Figure 2). The service ecology map (Figure 1) locates ELPNZ and all other relevant actors and functions in relation to settlement and integrations goals that INZ and ELPNZ share, whereas the ELPNZ diagram (Figure 2) emphasised its main areas of activity and key relationships.

With MPES, the evaluation trajectory was slightly different as the New Zealand Police expressed different needs. There was a need to provide some benchmarking for the new Ethnic Strategy and also to identify ways New Zealand Police are succeeding in addressing the challenges of new demographic diversity and where priority concerns lie. The MPES unit, based in the national Police headquarters, is a small part of a very large and

complex organisation that operates at a national level with some small reach through to the relatively autonomous police districts.

Figure 2: Sectors within which ELPNZ operates



Source: ELPNZ Chief Executive (pers. comm.).

New Zealand Police is divided into 12 districts, nine in the North Island and three in the South. A screen shot of the 2016 executive structure (Figure 3) reveals a complex picture of deputisation across core management functions with district commanders responsible to a deputy commissioner district operations and MPES to its own deputy chief executive. MPES was expanded to include ethnic services (under the aforementioned Department of Internal Affairs definition) but were primarily set up to work with Māori initially and then Pacific populations with a focus on both recruitment to Police and crime prevention amongst these communities.

The first evaluation challenge here — using the same critical friend approach as had been trialled with ELPNZ — was to develop an understanding of how MPES sat within the matrix of centres, departments, functions and forums that operate within New Zealand Police. The standard organisational chart of who reports to whom in New Zealand Police is represented in Figure 3, but this chart did little to clarify the internal working relationships or identify which bits of the organisation were

connected to the work of MPES or not. The second visualisation we consider in the paper, therefore, is the organisational ecomap (Figure 4) of MPES's sphere of influence which was co-created as a moment-in-time snapshot between the lead evaluator and the lead contact in MPES.

In Figure 4, MPES sits as one of the National Office (HQ) functions (indicated within pale blue rings) and is marked as a yellow circle. The key linkages from this HQ position are indicated with solid or dotted yellow lines. Dotted lines express a less-determined connection than the solid lines. Following these lines, it is possible to see points of connection to the Commissioner's Ethnic Focus Forum, cross-agency working relationships, community partnerships, multi-agency initiatives and ethnic advisors, and, at the district level, connection through to the Māori responsiveness managers.

New Zealand Police Executive
As at October 2016

Commissioner / Chief Executive
Officer

Deputy
Commissioner
Rational Operations
Desired Commissioner
Rational Operations

Assistant
Commissioner
District Commissioner
Rational Operations

Assistant
Commissioner
Richer Prevention

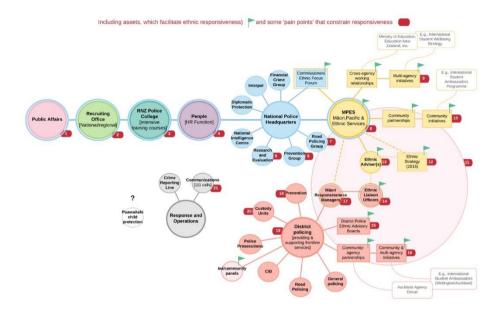
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Figure 3: New Zealand Police executive structure

Source: New Zealand Police (2014)

Figure 4: Organisational ecomap



This co-produced map was then used as the basis for face-to facediscussions with New Zealand Police partners to identify a range of 'assets' — things that worked to support the role of MPES — and the 'pain points' — barriers to more engaged intersection with a diversity agenda. As indicated on the map, there are numerous assets that are particularly important as facilitators of ethnic responsiveness. The representation also highlights the relative distance and disconnect between MPES and other elements of HQ-level services (such as HR, or the Police College) and the police districts. The green flags in the diagram represent assets in the diversity space within police and the red tags represent pain points or barriers. So, for example, the direct connection between MPES and the Commissioner's Ethnic Focus Forum indicates an open channel of communication. The very existence of the forum also has powerful symbolic value for ethnic communities and their representatives – it signifies that ethnic community concerns matter to the chief executive of New Zealand Police and, therefore, to the organisation at large. Other assets included, for example, specific groups and functions within police that already exist. These included Ethnic Services within MPES; an alternative resolutions pathway developed in conjunction with Justice and Iwi Panels (which was

expected to increasingly serve ethnic community members, providing a sympathetic restorative justice model); the establishment of specific roles within the organisation such as a national strategic ethnic advisor, as well as liaison officers; and the articulation of strategic direction (such as the New Zealand Police Ethnic Strategy 2005), which provide a mandate for organisation-wide changes such as recruitment targets and changes in dress protocols for serving staff (such as the Sikh staff wearing turbans).

Assets are generative and cumulative in that they are in place for a significant time and can produce ongoing benefits. Pain points are aspects of policing where ethnic responsiveness is underdeveloped or has stalled. These points were also recognised by staff as points of opportunity and staff were able to contribute options and suggestions for improvements, including identifying ways the organisational structure itself has been a significant barrier (the large circle in the diagram tagged as #11).

The organisational sparked ecomap other diagrammatic representations of MPES and New Zealand Police activities. One of these was a timeline indicating increased ethnic diversity and responsiveness on which the evaluator mapped significant milestones within Police such as the appointment of the first ethnic strategic advisor in 2003, the first Sikh woman graduate from the Police College in 2004, through to the first district ethnic manager appointed at inspector level in Auckland in 2018. While it is possible to rehearse this change narrative in text, a comprehensive sense of these achievements is more easily apparent in a diagram (see Figure 5). The visual data occupy a single page and can be presented in conversation and discussed as an 'artefact on the table' during planning or review activities. The timeline also enables a relationship to be drawn between significant external factors such as increased funding or the Canterbury earthquake and changes within Police. Because a timeline like this can also be a dynamic and active document, new events with consequences for policing, such as the Christchurch mosque massacres in 2019, can be added.

Overall, the findings from the work with MPES produced evidence of a strong story for New Zealand Police to tell about what is working well. It also highlighted the barriers that exist in large organisations that struggle to balance the agendas of multiple parts. It suggested new ways of working and led to a follow-up project to design some ways in which MPES could develop greater self-evaluation capacity, and it left some questions about the organisational arrangements needed to optimise the Ethnic Strategy.

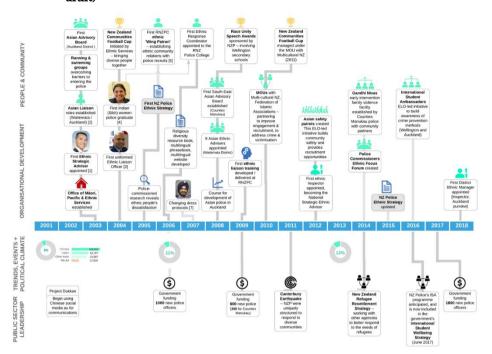


Figure 5: Timeline indicating increased ethnic diversity and responsiveness (early draft)

Opportunities for organisational action

In both these cases, the outputs from the developmental evaluations provided resources for each organisation that were of immediate use. For ELPNZ, where the central relationship had been with the CEO, the artefacts were useful as they were developed. They led to active discussions about what was emerging in terms of insights (such as the interconnections between ELPNZ and other service providers in the sector, illustrated in Figures 1 & 2) and led to behaviour changes such as increased outreach to others in the sector and increased collaboration and inter-agency support around funding bids. The final working paper was provided to the Board as a resource for strategic planning meetings and was reported to have been of value (CEO, pers. comm.). For New Zealand Police, the pathways to action were less direct, given the extent to which MPES is buried amidst a wide range of other priorities. The most direct response was the work subsequent to the developmental evaluation that produced a model for internal

evaluation capacity building and capability for increased baseline monitoring.

With each of the organisations, the evaluative process evinced at least one novel representation of 'what we look like now' that was helpful to the institution in terms of ongoing strategic management and to the researchers in terms of evaluating both institutional capacity and the value of visual artefacts as tools. Conscious, deliberate focus both on what matters for the organisation and what matters for the researcher, in terms of desired outcomes, produced more immediate value for the organisation. The artefacts produced were co-constructed: they were built by the evaluator over time through information gained during regular sessions with key staff and ongoing discussion; they were frequently altered and amended through close interrogation of the content; and the more final versions were used in discussion with other stakeholders within the organisation. The focus on producing material relevant 'on the day' for the organisation in terms of early drafts and working models meant that final published reports or papers were not the sole output. The negotiated critical friend role facilitated this kind of knowledge exchange. The discussions also allowed staff to see what was happening within their organisation from new angles: particularly, the diagrams often encouraged new understanding of constraints and where the limits of influence existed, and provided motivation to seek different pathways to change.

Conclusions

The first conclusion is that both the *process* and the *artefact production* helped to reveal information, relationships and connections that had previously been unclear or even invisible. The capacity of data visualisation to succinctly represent organisational complexity was reinforced through this work and suggests there may be greater value in evaluators and service designers working more collaboratively, and/or interdisciplinary work between design science and evaluation being more consciously pursued. The visual artefacts provided new and often more systematic ways to explain and promulgate organisational complexity.

Developing artefacts such as ecomaps and timelines seemed, in our work, to be useful ways of reinforcing the capability of organisations that are motivated to understand their own business in relation to their response

to diversity. We conclude that visual artefacts, as with statistical data, may be used successfully to benchmark change over time. An ecomap, which considers user-centric frames of reference and developed to illustrate a state of play at one point in time, may be replicated later to determine how interactions have changed. A timeline, similarly, can be used cumulatively to illustrate change over time. The timeline (Figure 5) was also a confronting tool in some ways as it enabled staff to see how little progress had been made in contexts where the general discourse within the organisation suggested that more innovation had occurred.

Working closely with an organisation in a critical evaluative friend role enables a stronger institutional response to diversity demands and expectations. The external funding for the CaDDANZ developmental evaluation permitted the evaluator to work with a relatively open brief in terms of approach and to decide, in conversation with the organisation, which kind of approach might be most suitable. Developmental evaluation assumes that process is as important as product, and in this case being able to devote time to building relationships and trust, explore innovation and have ongoing discussion about what was working produced reflective space for both the organisation staff and the evaluator. It also produced material that could be used for advocacy of the organisation's core business in unanticipated ways.

The second conclusion, beyond the immediate value of using new tools to enhance our understanding of diversity, is that this paper reflects our understanding that there is greater need for agencies and evaluators to more clearly acknowledge the impact of wider world views on service delivery capacity. The current political acceptance of relatively siloed funding lines for service delivery agencies is one example where service is hampered by 'the way we do things here'. Community-based service organisations like ELPNZ, for example, find their desire to deliver a holistic service to new migrants stretches beyond their English language training mandate funded by the Tertiary Education Commission, but, because English language training comes out of Vote Education, it is complicated for the agency to argue for funding to support other activities. The hierarchical structures within public service organisations also hamper a single unit within the organisation to foster organisation-wide understandings of diversity responsiveness.

Finally, looking at institutional responses to diversity in the round, we conclude that there are still wider issues that need reinvigorated debate. The first is that our work has also brought the awkward framing of ethnicity in Aotearoa New Zealand back into focus alongside how we understand ethnic services in relation to Māori and Pacific service delivery. In addition, diversity is more than ethnic, and none of the studies reported here pay particular attention to non-ethnic diversity.

Notes

- 1 https://www.schoolnews.co.nz/2016/11/te-tiriti-o-waitangi-living-thevalues/
- A 'compact' early draft version of the timeline has been used for illustrative purposes. A more recent A3 landscape version has some corrected and additional details; for example, the Office of Māori, Pacific and Ethnic Services was actually established in 2002.

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Social Cohesion and Cohesive Ties: Responses to Diversity

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Abstract

Policy work that was undertaken on social cohesion in New Zealand around 2005 and resulted in a Cabinet paper has had limited uptake. The indicator framework for assessing immigrant and host outcomes that was developed in the context of government aspirations to build a more cohesive society was seen as too complex for government departments to operationalise, despite the relative success of similar theoretical developments in both Canada and the United Kingdom. The idea of cohesive societies has not gone away - if anything, recent high immigration levels have enhanced its relevance – and it is perhaps timely to reconsider the approach underpinning the framework that was developed and suggest an alternative that considers social and personal connectivity. One such approach, drawn obliquely from linguistics, is to consider the idea of 'cohesive ties' rather than the more abstract concept of cohesion per se and to seek indicators that point to the small mechanisms that contribute to unity, togetherness, continuity, coherence, connection, linkages and interrelatedness between people and groups that are critical to the different ways in which we come to 'know' the 'other'. This has the potential to shift the conversation away from the relatively ubiquitous emphasis on cohesion as a property of ethnic differentiation - where ethnicity is seen as a potentially divisive aspect of social organisation that needs to be addressed by public policy - towards an understanding that differences between individuals and groups are multi-faceted, inevitable and enriching. Our argument is that small mechanisms are what mobilise strong cultural interchange, the possibility of interpersonal trust and acceptance, and facilitate robust and meaningful 'everyday' engagements in our multiple institutions, families, neighbourhoods, schools and communities and across multiple diversities.

Keywords: social cohesion, diversity, immigrants, immigration, cohesive ties.

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Te rehearse the reasons why a policy approach that centres on social cohesion has become important in 21st-century New Zealand, specifically in relation to very high levels of inward migration and the 'diversification of diversity'. Similar dynamics – and a range of concerns about exclusion, lack of trust and poor inter-ethnic relations – have prompted a number of countries to consider social cohesion as a central policy goal from the 1990s, notably Canada and the United Kingdom. By the early 2000s, a similar discussion took place in New Zealand and there was a flurry of interest – resulting in a cabinet paper (Department of Prime Minister and Cabinet, 2003) – between 2003 and 2005. But this initial work was not pursued other than in one further exploratory government document (Ministry of Social Development, 2008). We explore the history of this discussion and then suggest an alternative approach to conceptualising our ideas of social cohesion.

We were both involved in the initial policy debates in New Zealand about social cohesion: one as policy analyst in one of the key policy agencies that had responsibility for undertaking the preparatory work and then the writing of the cabinet paper, and the other as an academic who was the programme leader of a major research project, the Integration of Immigrants Programme. We were both personally interested in the complex and problematic issues of migration and settlement, and questions of adjustment and recognition that are subsequent to the arrival of immigrants. In the early stage of work, it was interesting to negotiate the sensitivities and disparate interests of key players, government departments and agencies, note the policy emphasis on economic benefits, and then also note how local community interests (such as in schools, neighbourhoods, shopping centres) might – or might not – be reflected in policy focus. Eventually, the latter was not seen as an important consideration in terms of what needed to happen in relation to adjustment and recognition – and it is this everyday experience of *living within – and with –* diversity that we regard now as being critical. The following account should be read with our direct involvement and particular experiences in mind.

There is also one other omission that we address in this article. Immigration and the discussion of social cohesion are critical in terms of prior and ongoing policy debates in relation to the positioning of Māori, and we would note that this was not a consideration much less a matter of

discussion with relevant individuals, organisations or communities in the early 2000s, and seldom since. However, it should be. Māori were excluded from the initial policy work concerning social cohesion, as they have been with much of the work concerning immigration. As part of our argument, we suggest that important definitional roles in relation to migration belong crucially to Māori as tangata whenua (people of the land). The terms of 'first' settlement were negotiated between Māori and the Crown but those negotiations have been absent from prerogative Crown responses to later waves of settlement. We suggest that the development of a distinctly New Zealand and more people-centred approach to migration may depend on Māori voices being at the table.

Contextualising the New Zealand interest in social cohesion

There are at least two important reasons why social cohesion might be – or should be - considered in contemporary New Zealand. In the 1970s, Britain's entry into the European Economic Community and subsequent changes to New Zealand's terms of trade and engagement with the United Kingdom was reflected (and formalised) in changing migration laws. The review of immigration priorities in 1974 under the incoming Labour Government foreshadowed a first tentative shift from the privileging of British immigration first established under the Immigration Restriction Amendment Act in 1920 (Hutching, 1999; McMillan, 2006). In the 20th century prior to the 1970s, it was simply assumed by the then majority white settler communities that New Zealand was a cohesive society characterised by shared values of egalitarianism, self-sufficiency and a notion of fair play bound in a complex and desirable interdependency with the 'mother country' (Kennedy, 2008, p. 402). The 1970s and 1980s marked a distinct shift from these colonial patterns of governmentality and nation-building (Spoonley, 2014). In the first case, the notion of a singular nation state came under scrutiny and critique as a re-energised and refocused set of Māori politics sought to contest the "displacement of Indigenous others" (Veracini, 2008, p. 364). As Veracini (2008) goes on to note, there has been a significant shift in the discursive and constitutional recognition of indigenous nations in British settler countries like New Zealand, although not without opposition and disapproval. These politics of indigeneity have increasingly reconfigured "political contours in ways unimaginable just a generation ago" (Maaka & Fleras, 2005, p. 9).

The second moment that occurred almost simultaneously with the new politics of indigeneity was the reconnection with other parts of the Pacific in the form of labour migration from Samoa and Tonga (and later Fiji) along with flows from New Zealand dependencies – the Cook Islands, Niue and Tokelau. In the same way that there was a major relocation of Māori in the post-war years, from traditional rohe (tribal territories/regions) to the urban centres of 20th-century production and life, there was an equally significant relocation of Pasifika communities. By 1990, when the migrant generations of Pasifika were outnumbered by those born in New Zealand, many of the New Zealand-located Pasifika populations exceeded those of their homelands. This relocation and insertion into urban, capitalist modes of production was notable for at least two reasons. One was that it represented the first major modern-era migration from 'non-traditional' source countries differentiated from the previous reliance on the UK and Ireland (Spoonley & Bedford, 2012). Secondly, the visibly and culturally different nature of these migrants, especially as perceived by the hegemonic Pākehā, led to a moral panic which in turn politicised and racialised these migrants. This racialisation of migration also shifted public awareness to other ethnically distinct groups such as, for example, Chinese (Ip, 2003) and Indian (Bandyopadhyay & Buckingham 2018).

The next stage in these evolving politics was the change to immigration policy in 1986–87. A key component was the move away from the discriminatory source-country immigration policy that privileged white settlers from the UK. The 1987 Immigration Act discarded source-country criteria and replaced them with an approach that focused on the economic value (skills and qualifications for jobs that demanded more labour than could be locally supplied) that immigrants added to New Zealand as part of the neoliberal agenda of internationalising the New Zealand labour market.

The first notable effects of the 1987 Immigration Act came in the 1990s with significant arrivals from more non-traditional source countries, notably Hong Kong, Taiwan and South Korea. As with Pasifika, this prompted a moral panic that began in 1993 with the "Inv-Asian" articles in Auckland community newspapers (Spoonley & Bedford, 2012) and reached a climax with the high degree of support offered to the newly formed New Zealand First political party in the 1996 general election. The numbers of migrants arriving from Asia slowed in the late 1990s, partially as a consequence of domestic politics that were hostile to migrants of colour but

also because of an economic downturn in Asia. After a number of major reforms by a new Labour-led government from 1999, the numbers of immigrants again picked up (see Figure 1 for overall numbers) but were now dominated by other non-traditional source countries, China and India, and an increasing number of smaller flows from a wide range of other countries. As Figure 1 indicates, for much of the 1980s, the arrival numbers were less than 50,000. By 2017, they had risen to more than 130,000. Between 2013 and 2018, the net gain from migration was 260,000. Compared with the previous inter-census period, when it was 35,000, the flows were considerably larger and were also drawn from very different source countries.

Permanent immigration to New Zealand by category, 1980-2017

130,000
110,000
100,000
90,000
70,000
60,000
70,000
60,000
30,000
10,000
10,000
10,000
Residence
11980
1985
1990
1995
2000
2005
2010
2015

Figure 1: Flow chart of permanent immigration to New Zealand, 1980-2017.

Source: Visualizing superdiversity, Max Planck Institute for the Study of Religious and Ethnic Diversity, www.superdiv.mmg.mpg.de.

The composition of these flows can be illustrated by looking at the source countries for a visa category such as the Residence Visa. The following two figures compare 2003 (when new visa categories were introduced) and 2017. The box sizes reflect the numbers. The contrasts, with growing numbers from China compared with declining numbers from the UK, are notable. (Note that the total flows were larger, so these numbers are relative to overall numbers being given approval for this visa category).

The point to underline is that not only was New Zealand becoming more diverse as a result of very different migration dynamics and characteristics after 1986–87, there were also new sensitivities and anxieties. The politicisation of immigrants and immigration in the 1970s and again in the 1990s had been very disruptive and had undermined interethnic community trust and respect. The numbers and the diversity of new settler groups always had the potential to spark backlash from influential sections of existing communities. In addition, the recognition of indigeneity and the introduction of limited but still influential forms of biculturalism invited successive governments to pay attention to 'diversity management' (see, for example, Jones, Pringle, & Shepherd, 2000). As the new century emerged, and under the auspices of a Labour-led government, key government agencies, led by the Ministry of Social Development, were interested in exploring the notion of social cohesion in relation to increasing ethnic diversity.

Figure 2: Origin of immigrants on residence visas, 2003, New Zealand

Source: Visualizing superdiversity, Max Planck Institute for the Study of Religious and Ethnic Diversity, www.superdiv.mmg.mpg.de

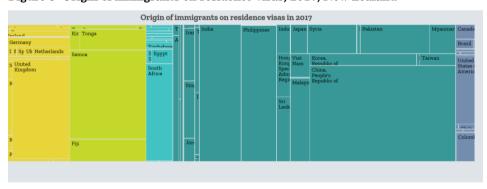


Figure 3: Origin of immigrants on residence visas, 2017, New Zealand

Source: Visualizing superdiversity, Max Planck Institute for the Study of Religious and Ethnic Diversity, www.superdiv.mmg.mpg.de

Social cohesion: International developments

Other countries were exploring how to 'manage' immigration-related diversity. One of the sources of thought leadership in this field was Canada which, from the 1970s when multiculturalism was developed as an official policy, was keen to encourage positive relations between communities, including new settler communities and others. By the 1990s, the stress was on the importance of shared capital. As Jackson et al. (2000) of the Canadian Council on Social Development noted, social cohesion was part of "an ongoing process of developing a community of shared values, shared challenges and equal opportunity within Canada, based on a sense of trust, hope and reciprocity" (p. 34). This approach first appeared in Canada in 2000, and by 2002 was associated with the notion of shared citizenship. By 2004, social cohesion had slipped somewhat as a key policy focus but remained as a high-level policy ambition in Canada.

The Council of Europe (2000) also stressed the importance of shared loyalties and solidarity, which were underpinned by shared values. The aim was to encourage both immigrants and hosts to feel part of a common community and to share feelings of a common identity (although the effect was often to stress the need for these feelings of belonging amongst newly arrived immigrant communities). To achieve these goals, there was an emphasis on trust and the need to reduce disparities, inequalities and social exclusion. The latter reflected the particularities of some European states and a rights-deficit approach, essentially a concern with addressing the absence of rights, in this case of migrants and refugees. As Vasta (2013) has commented (in relation to Europe), there were particular assumptions made about the need for migrants to 'fit in' with existing nation states by many governments and key players.

The continuing backlash against immigration and multiculturalism is occurring across many European countries with the result that 'integration and cohesion' has become a common catchphrase. Integration is often defined in a normative way, to imply a one-way process of adaptation by newcomers to fit in with a dominant culture and way of life. (Vasta, 2013, p. 197)

While the Canadians stressed the importance of shared citizenship in the early 2000s, the Europeans were concerned with the threats posed by economic exclusion – although there was still an interest in social capital enhancement. These differences reflected both the historical role played by

migration in Canada, as opposed to Europe where most countries did not have national narratives that regarded migrants positively, and the importance played by socio-economic factors — or class — in the industrial economies of Europe where there was a long-standing focus on economic marginalisation and exclusion. What was shared was the implicit assumption that cohesion was a desired target or outcome. In addition, Canada wrestled with the discourses of bi- versus multi-cultural approaches but, like New Zealand, was slow to engage indigenous voice in debates about social cohesion across first, later and more recent settler populations (Darnell 2003).

The approach of the UK was influenced by the Commission on the Future of Multi-Ethnic Britain (Parekh, 2000) where cohesion was defined as "community of communities and a community of citizens". This was reliant on a "commitment to certain core values ... equality and fairness, dialogue and consultation, tolerance, compromise, and accommodation ... [and a] determination to confront and eliminate racism and xenophobia" (Parekh, 2000, p. 56). Shared with the European approach is the desire to generate a consensus about shared values and the importance of cohesion as a desirable end state. There was also a more explicit emphasis on social exclusion that was associated, especially in some European and British regions, with the impacts of economic (especially labour market) insecurity and political changes/restructuring.

In Australia, social cohesion as a concept closely connected to ideas of cultural diversity and immigration has been sustained through the annual Scanlon 'Mapping Social Cohesion' survey. Since 2007, this survey has collected national response data against criteria of:

Belonging: Indication of pride in the Australian way of life and culture; sense of belonging; importance of maintaining Australian way of life and culture; Worth: Satisfaction with present financial situation and indication of happiness over the last year; Social justice and equity: Views on the adequacy of financial support for people on low incomes; the gap between high and low incomes; Australia as a land of economic opportunity; trust in the Australian government; Participation (political): Voted in an election; signed a petition; contacted a Member of Parliament; participated in a boycott; attended a protest; and Acceptance and rejection, legitimacy: The scale measures rejection, indicated by a negative view of immigration from many different countries; reported experience of discrimination in the last 12 months; disagreement with government support to ethnic minorities for maintenance of customs and traditions; feeling that life in three or four years will be worse. (Markus 2019, p. 19)

The Australian focus encapsulated in the survey was not dissimilar to the approach developed in New Zealand.

Social cohesion arrives in New Zealand: A policy experiment

Both authors of this paper were involved in the initial debates about social cohesion in New Zealand and so the description of that process that follows is part public record and part autobiographical. During the 1990s, key government departments and agencies realised that some policy settings for immigration were not working effectively, and by the time a new Labourled government arrived in 1999, there was a perceived need to change policy settings. The Minister of Immigration, the Hon. Lianne Dalziel, oversaw a number of policy shifts in the early 2000s (33 in total). These were to emphasise the alignment of migrant supply with local demand, to stress the economic dimensions of migration and the attractiveness of those migrants who could add to New Zealand's economy, and to provide a range of visa categories that met these needs. While the notion that economic benefits followed from bringing in (skilled) migrants had existed through the 1990s, there was a clearer sense that if an economic dividend was to be achieved through immigration, then policy settings needed to be refined after 2000. Very quickly, the source countries shifted again – and now China and India began to dominate many visa categories. Government departments were instructed to pay more attention to settlement outcomes, and this emphasis was signalled by the emergence of a number of regional approaches and a national policy statement National Immigration Settlement Strategy, 2003 (New Zealand Immigration Service, 2004). Not long after, and under the auspices of the Centre for Social Research and Evaluation/Te Pokapu Rangahau Arotaki Hapori at the Ministry of Social Development, a policy paper was produced: 'Immigration and social cohesion: Developing an indicator framework for measuring the impact of settlement policies in New Zealand 2005'. A socially cohesive society was envisaged in the context of rapidly increasing ethnic diversity as one "with a climate of collaboration because all [ethnic] groups have a sense of belonging, participation, inclusion, recognition and legitimacy" (POL Min 03 27/3). While ethnicity was never specified as the foundation for the policy, it was always assumed to be the core driver of the state's need to manage 'difference'. These were not the only contributions to the newly emerged interest in social cohesion and they reflected a broader and growing interest in social capital (Ministry

of Social Development, 2004) and social outcomes (Ministry of Social Development, 2003). Almost immediately, there was attention paid to network development as a contribution to social capital enhancement.

The National Immigration Settlement Strategy (New Zealand Immigration Service, 2004) was focused on the development of networks that were intended to be supportive of immigrants and to build what was referred to as "sustainable community identity". A key ambition was to make immigrants feel safe, especially in expressing their ethnic identity, and to be accepted by the wider community. In turn, it was also critical that they were able to – and did – participate in civic community and social activities. Six goals were identified:

- Obtain employment appropriate to their qualifications and skills.
- Be confident using English in a New Zealand setting or can access appropriate language support to bridge the gap.
- Access appropriate information and responsive services...
- Form supportive social networks and establish a sustainable community identity.
- Feel safe expressing their ethnic identity and are accepted by, and are part of, the wider host community.
- Participate in civic, community and social activities.

(New Zealand Immigration Service, 2004)

In the midst of these documents and discussions, a group from the Ministry of Social Development (Peace, O'Neill) and Massey University (Spoonley, Butcher) produced a working paper on social cohesion. From the outset, there were some interesting challenges and no-go areas. For instance, there were inevitable constraints on writing policy documents for government or contributing to Cabinet debates. Furthermore, the policy work was narrowly concerned with settlement outcomes for recent migrants; the possibility of including Māori in some way was off the table, as both politically sensitive for governments (Māori were not to be considered in the same space as migrants, sometimes for good reason) and unacceptable for some Māori (see Ranginui Walker's concern about migration and the possibility of multiculturalism in Spoonley, 2009). The peculiar definition of ethnicity that operates within government agencies in New Zealand also affected discussions. Some government departments specifically covered things Māori (Te Puni Kōkiri) or Pasifika (the Ministry of Pacific Affairs,

now called the Ministry for Pacific Peoples), so that an agency such as the Office of Ethnic Affairs (now, the Office of Ethnic Communities) was mandated to focus on non-Māori, non-Pasifika, non-European ethnic communities. Therefore, in the documents concerning social cohesion, there was an assumption that social cohesion dealt exclusively with non-Māori/non-Pasifika/non-European migrants. The documents skirt around naming it in this way and, in fact, specific ethnicities or immigrant groups are not identified or mentioned. Aside from the awkward (and bizarre) exclusion of Māori, Pasifika and European from the ethnic categorisation of migrants, no other axes of difference were seen to be relevant in these policy spaces. There was, therefore, no focus on gender, religious or age differentials that might bring force to bear on social cohesion. And we were as guilty as the official agencies of working within these constraints.

Another challenge was to construct a policy approach to social cohesion that did not compartmentalise or place the burden of adaptation on immigrants in a punitive or top-down manner. As we wrote at the time, taking our lead from Beauvais and Jenson (2002),

[I]f common values and a shared civic culture are the lens to be used, then the emphasis will be on the fragmentation or the weakening of 'shared values' and subsequent policy interventions will be designed to strengthen these values. If social order and control are the main foci, then policy might stress the need to reduce exclusion and the importance and legitimacy of institutions and systems. (Spoonley et al., 2005, p. 88)

There were, and are, "definitional choices [that] have significant consequences for what is analysed, what is measured, and what policy action is recommended" (Beauvais & Jenson, 2002, p. 6).

We took our steer from the Canadians, and especially the work by Jenson (1998) who, as part of a major investment by the Canadian Government, had completed some interesting conceptual pieces through the 1990s (see Jenson, 1998; Beauvais & Jenson, 2002). At the core were five elements – belonging, participation, inclusion, recognition and legitimacy – which all came from the work by Jenson and her Canadian colleagues. It is worth outlining the details of what we referred to as the five "intermediate outcomes". These were the key five contributing elements that had previously been identified by Jenson (1998), and were aligned, in this case, with the *Immigration resettlement strategy: A programme of action for settlement outcomes that promote social cohesion* that had been jointly

written by the Ministry of Social Development and the Department of Labour. There, social cohesion was defined as:

New Zealand becomes an increasingly socially cohesive society with a climate of collaboration because all groups have a sense of belonging, participation, inclusion, recognition and legitimacy. (POL Min 03 27/30)

We then built upon these five outcomes, and divided them into two categories, and grounded them – at least in ambition – in a New Zealand context. Firstly, there were two elements that represented socially cohesive behaviour, then a further three that were "conditions for a socially cohesive society" (Peace et al., 2005). What follows is the conceptual framework in detail.

Elements of socially cohesive behaviour

A sense of **belonging** derives from being part of the wider community, trusting in other people and having a common respect for the rule of law and for civil and human rights – New Zealand is home to many peoples, and is built on the bicultural foundation of the Treaty of Waitangi. Ethnically and culturally diverse communities and individuals experience a sense of belonging and their contribution is recognised, celebrated and valued.

Participation includes involvement in economic and social (cultural, religious, leisure) activities, in the workplace, family and community settings, in groups and organisations, and in political and civic life (such as voting or standing for election on a school Board of Trustees). All people in New Zealand are able to participate in all aspects of New Zealand life.

Elements that comprise conditions for a socially cohesive society

Inclusion involves equity of opportunities and of outcomes, with regard to labour market participation and income and access to education and training, social benefits, health services and housing.

All people in New Zealand share access to equitable opportunities and services and contribute to good settlement outcomes in ways that are recognised and valued.

Recognition involves all groups, including the host country, valuing diversity and respecting differences, protection from discrimination and harassment, and a sense of safety.

Diversity of opinions and values amongst the many cultures that make up New Zealand today are accepted and respected, and people are protected from the adverse effects of discrimination.

Legitimacy includes confidence in public institutions that act to protect rights and interests, the mediation of conflicts, and institutional responsiveness. Public institutions foster social cohesion, engender trust and are responsive to the needs of all communities.

(Peace et al., 2005, pp. 17–18).

These elements, although persuasive at one level, are not unproblematic. For example, as Vasta (2013) has noted, "belonging [is] formed between the interplay of the subjective self, collective agency and structural positioning" (p. 198). Personal, community and national forms of belonging might involve very different processes and outcomes – and not necessarily align. Moreover, for immigrants, and especially skilled cosmopolitan migrants, there are strong transnational ties and multiple sites of belonging.

Next, there was the task of actually specifying the indicator framework – what was going to be used to indicate whether certain social outcomes and therefore social cohesion was to be achieved. The other substantive contribution to policy debates in New Zealand at the time was provided by the Indicator Framework, which was included in the MSD document as "under development". The indicators were chosen for their relevance, national significance, ability to be disaggregated, validity, statistical soundness, replicability, interpretability and as being internationally comparable (Peace et al., 2005, p. 21).

The limited uptake of social cohesion in New Zealand

In terms of an overarching strategy that was to influence various settings and policy ambitions, social cohesion was, at best, a minor success. It remerged in some agencies and policy initiatives, but as a rallying call for greater consideration to be given to settlement outcomes and equity and, therefore, social relations and trust, it was of limited influence. It failed to survive in any coherent form, and it was not something that entered political, policy or public discourse as a serious policy priority. In this section, we identify six reasons for the limited uptake.

The first reason was that government departments operate often as silos, sometimes even as competitors. It soon became obvious that while some government departments (other than those involved in the initial work on social cohesion) were needed to drive a comprehensive social policy agenda with specified outcomes and measurements, social cohesion was not something that they were prepared to commit to. There was insufficient cross-agency agreement that social cohesion should underpin policy when it came to settlement outcomes or community development/relations. This lack of inter-agency agreement was not helped by the rapidity with which policies

are re-forged by successive governments and ministers in a cycle of threeyear government terms. The initial discussions concerning social cohesion took place under a new Labour-led government but then spanned a general election in 2005 that resulted in a multi-party coalition, still led by Labour but with a strong anti-immigration voice.

The second obstacle was the indicator framework and the work needed to populate it with appropriate outcome indicators and data. It was simply seen as too complex for government departments to implement within their respective areas of responsibility. This was in spite of the fact that similar indicator frameworks had been made operational in both Canada and the UK and worked as measures of how immigrant communities were faring and how host communities were reacting and playing a part in developing trust and respect.

A third reason was that the term itself remained confined to policy and governmental circles and there was little attempt to explain to various public audiences why it might be an approach that would help community relations. It was – and remains – an abstract policy term that has extremely limited use and understanding in public domains.

Furthermore, there was a move towards the use of the concept of social *inclusion* and *participation* (Bromell & Hyland 2007) with a more direct transactional focus that foreshadowed waning political interest in the complexities of social cohesion by proposing more measurable alternatives.

Figure 4: Draft Indicator Framework for measuring the impact of settlement policies on social cohesion

New Zealand becomes an increasingly socially cohesive society with a climate of collaboration because all groups have a sense of belonging, participation, High level Outcome inclusion, recognition and legitimacy. Individuals and groups exhibit elements of socially cohesive behaviour: belonging and participation Intermediate Outcomes Conditions for a socially cohesive society are demonstrated through: inclusion, recognition and legitimacy Migrant / Refugee Community Host communities Elements of socially cohesive behaviour Belonging nging sense of belonging frequency of contact in intimate networks social involvement index membership of groups telephone and Internet Access telephone and Internet Access
unpaid work outside the home
Participation
participation in tertiary and adult education
participation in tertiary and adult education
participation in ras and cultural activation
involvement in sports teams
civic en unpaid work outside the home

Participation
 participation in tertiary and adult education participation in pre-school education participation in arts and cultural activities involvement in sports teams and leisure percentage of immigrants voting civic engagement Conditions for a socially cohesive society market income per person market income per person paid employment rate labour market participation rates English literacy skills unemployment rates paid employment rate unemployment rates welfare receipt occupational distribution education and qualification recognition home ownership welfare receipt occupational distribution home ownership education and qualifications numbers of support programmes Recognition Recognition gnition racism and discrimination representation in local/national government own language media own language use racism and discrimination resourcing for media Legitimacy
Surve
Confi
Cred
positi Legitimac macy confidence in key societal institutions perceptions of safety service delivery to refugee and migrant groups health levels and access to health services appropriate representation in the mass media Surveys on racism and discrimination Confidence in key societal institutions Credential and qualification verification position in relation to New Zealand's bi-cultural Broad-based demographic knowledge about migrant and refugee communities numbers of overseas immigrants labour force participation numbers of returning migrants industries worked in migration status (business, family reunification, refugee, personal income returning resident) population distribution length of time in New Zealand location in New Zealand on arrival first time or return mobility within New Zealand over the first 5 years previous knowledge of country home ownership existing links to family or friends household size education level household composition qualifications telecommunications vehicle ownership languages spoken religious beliefs

Source: Peace et al., 2005, p. 19.

Unlike Canada and Europe, where there had been an extensive and ongoing public debate about the need for a policy framework that centred around social cohesion, and an alignment between this initiative and existing frameworks concerning an official multiculturalism (Fonseca, Lukosch &

Brazier, 2019), the idea of social cohesion sat uncomfortably with public understanding and discourse in New Zealand. It was not a label that resonated with many. It was seen as politically problematic in its focus on immigrants and settlement outcomes without meshing with a policy environment that was widely influenced by a bicultural framing. Bicultural considerations and recognition of tangata whenua were absent from any of the key discussion documents, and so the question of how it sat alongside, or in competition with (as some would argue), biculturalism was an obvious and significant vacuum.

Overall, in the New Zealand setting, cohesion was seen either as a term that conduced towards 'making everything (ethnically differentiated people) stick together by making it (them) the same', or as binding everyone so strongly to a national idea and national sense of unity and harmony that there was little space for transnationalism, cosmopolitanism, or the full acceptance of non-citizens, including temporary migrants. In either case, the concept was tightly connected to ideas of the ethnic difference of new migrants rather than more broadly with any notion of human diversity and engagement across multiple and intersecting constructs of difference (such as age, gender, sexuality). Religious difference, at least in the context of Islam, was conflated in large part with perceived ethnicity and this lack of clarity produced a range of unaddressed complications. Ideas concerning cohesion were seen to be negative, top-down and reinforcing a 'one New Zealand/we are all Kiwis' view of identity that did not sit well with Māori or, indeed, many others for whom difference defined who they were or their relations with the broader society. It highlighted the way in which Māori were largely absent from debates around social cohesion, either in relation to policy development per se or in relation to the naming of an approach that was grounded in New Zealand and te Tiriti o Waitangi (see Burns et al., 2018). Animosity to the concept grew such that for most, both in relation to the public but also government departments, social cohesion as a policy option had disappeared by the second decade of the 21st century. Even a review of debates concerning diversity and citizenship under the Labour Government (1999–2008) omits any mention of social cohesion (Simon-Kumar, 2012).

Internationally, however, the concept is far from moribund. It has recently been revived in discussions in relation to the tension between European-level social policies and "organic, local social cohesions in everyday life" (Boucher & Samad, 2013), defining cohesion in a South African context alongside *ubuntu* (Burns, Hull, Lefko-Everett, & Njozela, 2018 – see below), in the context of resilient cities (Fonseca et al., 2019), and in terms of its inseparability from its spatial context and place-based dimensions (Mehta, 2019). These latter three publications also go to some length to rehearse the definition and use of the concept of social cohesion and Burns et al. (2018) provide what they describe as a new "austere" definition, to which we return later:

Social Cohesion is the extent to which people are co-operative, within and across group boundaries, without coercion or purely self-interested motivation. (Burns et al., 2018, p. 13)

Fonseca et al.'s (2019) reconceptualisation of social cohesion examined close to 70 European variations of its deployment since Durkheim coined the concept in 1897. This scholarship is useful not least because they also propose a framework that explicitly acknowledges that cohesion exists at the intersection of individual, community and institutional effects. They define the dynamic and complex nature of a cohesive society as:

...the ongoing process of developing well-being, sense of belonging, and voluntary social participation of the members of society, while developing communities that tolerate and promote a multiplicity of values and cultures, and granting at the same time equal rights and opportunities in society. (Fonseca et al., 2019, p. 246)

As they suggest, cohesion is what comes into being in the triangulation of capacities and interdependencies between individual, community and institutional settings and highlights equal rights and opportunities in society as a core component of a definition.

Burns et al. (2018) take issue with the inclusion of equality in a definition of cohesion, suggest this is merely a way of "smuggling" an additional variable alongside cohesion and argue persuasively that this is not a desirable way to proceed if, in fact, the aim is to understand cohesion as "variably realisable" (emphasis in the original, p. 11). In working with the Nguni (South African) conceptualisation of ubuntu, their approach emphasises characteristics of "collective shared-ness, obedience, humility, solidarity, caring, hospitality, interdependence, communalism" (Burns et al., 2018, p. 11). Such conceptualisation also specifically makes space for the "organic" and "local" aspects of social cohesion "in everyday life" as also discussed in Boucher and Samad (2013). It is to these ideas of the organic and the local, and the variably realisable, to which we now turn through the

introduction of a completely different metaphor drawn not from structural images but more directly from language and its role in sense making.

Talk about social cohesion is problematic. In policy contexts, it increasingly reflects a desire to manage difference (Rata & Al-Assad, 2019) and is, as Burns et al. (2018) suggest, a way to smuggle in ideas that suggest we should aim to be 'more the same', while also being more inclusive and more equal. In academic contexts, it is debated vigorously but without reaching consensus about its best use. Here we propose this linguistic turn as a way of reinvigorating a New Zealand approach to social cohesion and suggest a different way of articulating what might be needed to 'glue' communities and individuals into lightly bonded touch points of conviviality, civility and hospitable respect that conduce towards a "vigorous capacity" (Erasmus, cited in Darnell, 2003, p. 117) to build relationships between peoples.

Cohesive ties and interconnections: Extending notions of social cohesion

One idea that has underpinned our determination to keep thinking about social cohesion as a potentially useful concept is the value it has in discussions about collective safety, peace and prosperity. Burns et al. (2018) were also faced with this challenge and chose a very concrete image to underpin the direction in which they wished to proceed. They began by suggesting that "the metaphor of cohesion calls to mind a physical structure whose parts *stick together*. There is a failure of cohesion when a structure *falls apart*" (Burns et al, 2018, p. 9, emphasis in the original). They begin with a presupposition, as all the writings about social cohesion do, that there is implicit value in societies being cohesive in some ways. They take their concrete visual image and suggest that there are:

...two paradigmatic ways in which a structure could fail to stick together: it could either crumble into a multitude of individual fragments, or break into a few pieces. As we will see, these two types of falling apart correspond with two different ways in which a society can fail to be cohesive: by being an *atomised society* and by being a *divided society*. (Burns et al, 2018, p. 10)

These images also permit the imagination of different ways of 'gluing' potential parts together: small sections with tight adhesive and larger pieces perhaps tied together in looser but still connected ways. This

feels, intuitively, like a useful approach to pursue. It is only through determining the direction of the definition that measurement can also be considered.

In our case, we have turned to the idea of a communicative utterance — a sentence or a clause — as the basis for an alternative metaphor. The premise is only loosely derived from linguistics and, in this interpretation, might cause linguists some discomfort. However, the logic of the metaphor proceeds as follows. An utterance that makes sense ('is sensible') to a general reader is the outcome of multiple parts (conceptual language and small grammatical mechanisms) working alongside each other to deliver something that is coherent in any given language to readers of that language. English linguistic scholars have studied and named the ways in which the 'grammar' of English delivers sense to readers and have defined the various ways in which cohesive ties help to deliver linguistic cohesion and sense. A cohesive tie is that part of a sentence "where the interpretation of any item in a text or discourse requires the making of a reference to some other item in the same text or discourse" (Halliday & Hasan, 1976, p. 11) such as where a pronoun, noun or conjunction in one clause refers backwards or forwards to another clause. These are also called reference items. In English, they include personal pronouns, such as I, you, he, she, it, possessive adjectives, such as my, your, his, her; possessive pronouns, such as mine, yours, his, hers; demonstratives, such as this, that, these, those; and the definite article, the. For example, in the sentence "I see six shoes at the door – they are **yours**", 'yours' references the already identified six shoes. We presuppose the tie between the shoes and their owner. These are the small mechanisms of language that those of us who are not linguists take for granted and pay relatively little attention to, but without them, our language founders and our ability to communicate effectively with others is severely limited. They can be likened to the "weak ties" first described by Granovetter (1973) and more recently elaborated in the work of Mehta (2019).

Making a leap from these language observations to the behaviour of people is a challenge. However, we argue that the focus for social cohesion work in New Zealand may well need to shift to paying attention to 'small mechanisms' if we are to make sense of the increasing diversity that requires some presupposition of relationships that are already latent, unobserved but fully present in the everyday intercourse between groups and individuals.

In the previous iteration of a draft indicator framework (Peace et al., 2005, p. 19), we were seeking measures from both host and new migrant communities across a very large number of potential data points. This was thorough but unwieldy and assumed that cohesion is somehow a property of ethnically defined population groups. Arguably, we were looking for evidence of cohesive ties in the wrong place and at the wrong scale.

In order to illustrate an alternative way of thinking about this, we turn briefly to the Islamophobic massacre in Christchurch that occurred during Friday Prayer on 15 March 2019. In this mosque-based shooting, 51 people were killed and 49 were injured, many seriously. Such an attack, related back to Burns et al.'s (2018) metaphor, indicates both an atomised society on the one hand and a divided society on the other. The atomisation is apparent through the destructive capability of individual interconnection through social media. On the surface, a single individual acted to produce destruction but was, in fact, bolstered by an atomised 'audience'. Those who are opposed to diversity recognition range along a spectrum and there has been a tendency to overlook or discount the significance of either the more mainstream within this spectrum or those on the activist fringes. Looking back at our earlier work on social cohesion, it was a major oversight on our part when we omitted to consider the power of the internet to contribute positively or negatively to social cohesion or to consider the ways in which social media connections are driven by highly individualised forms of engagement with others.

The divided society, which manifests itself in the representation of 'this group' versus 'that group' can be seen in all the ways in which white settler New Zealand was complacent in the face of increasing Islamophobic abuse experienced by the Muslim community prior to the mosque massacres. It was generally agreed that religiously based division was not part of the national character of New Zealand as witnessed by the public uptake of the Prime Minister's early claim that "This is not us" (Guardian, 2018). However, as Jess Berentson (2019) has subsequently said: "So better then to say: 'This has been us. And we don't want this to be us.'" This event in Christchurch demonstrated aspects of both an atomised and a divided society, but the complex responses to it may illustrate more of the small mechanisms that we argue point to the possibility of seeing value in cohesive ties rather than seeking the nominalised and more abstract state of social cohesion.

People of all backgrounds, ethnicities, genders and ages responded strongly in the aftermath of the attacks in support of the Muslim communities in New Zealand. They spoke about it, gifted money, wrote about it in public, educated themselves, and castigated themselves for ignorance and apathy. More importantly, they had conversations with their Muslim neighbours, and looked for ways to show respect. While much of that outpouring of solidarity has since subsided, it drew attention to the fact that development of cohesive ties with a particular community is possible.

Pillet-Shore (2011) suggests that strangers, for all of us, embody "a locus of uncertainty" (p. 74). And it is uncertainty that makes us afraid. So, we need ways of stepping out to meet the stranger, to introduce ourselves, and to understand that if we belong to a mainstream, Anglo masculine world of the Christian 40-somethings, then a responsibility rests with us to make that first move. The teaching of civics in New Zealand schools appears to focus on the rights and responsibilities of individual citizenship and critical thinking (Tavich & Krieble, 2018), but does not actively engage questions of community building or developing strategies for identifying and challenging stereotypes or institutional or personal racism. Although schools are relatively age-homogenous, gender, ethnic, sexual and religious diversity thrive within them and would seem to be an ideal space in which to more openly discuss and engage with strategies for meeting the other. Thinking about hospitality as both a philosophy (Bell, 2010) and as an underpinning motive for new architectural forms in cities (Drechsler, 2017) is also an important frame for engaging with others.

Bearing in mind Burns et al.'s (2018) austere definition of cohesion entailing "without coercion or purely self-interested motivation" (p. 13), what are some of the interactions between humans that could be measured? Could we, for example, ask someone to record the number of times they spoke 'warmly' to a stranger because at some previous time, a stranger had spoken warmly to them? Or could we count the number of times Stranger 1 ate a food that was different from their usual food because they had met Stranger 2, who was different from them but who had liked the food Stranger 1 ate everyday as well as their own? Should we count the languages people speak or the greetings they use in everyday life, both with those in their own immediate circles and with strangers or neighbours? Or what about the number of times in a week people find themselves outside their own comfort zones and the strategies they use to find comfort among

strangers? Or the number of times a person visits or shops at a neighbourhood market, sends their children to public schools, uses public health services, public libraries or community centres, or hangs out on street corners with loose gatherings of friends whom they met less than a week ago? Or how do churches of all faiths operate to include congregational strangers? Or could we explore concepts of hospitality as acts of "crossing thresholds between strangers ... creating a dialogue between new arrivals, established newcomers and locals through finding and exploring communalities in different ways" (Drechsler, 2017, p. 49)? Or, as Arezou Zalipour (2019) suggests, "We need to create the space where our stories are told, where our voices are heard, where we create new memories and histories together". Do we need to more energetically build the representation of our differences so we become more familiar with the other through screen presence?

Whereas social capital 'bonds like to like', the kind of thing we are envisaging for the small mechanisms are 'quotidian interactions with difference'. In the way that the word 'yours' interacts with the word 'shoes' and helps us to make sense of some property of the shoes, the small mechanisms of daily interchange help us make sense of our respectful engagement with others: there is a grammar to it - a system of interchange that is not fixed but has the overall purpose of enhancing human connection. Malcom Gladwell (2019) argues for and about the insufficiency of the current tools and strategies we use to make sense of people we don't know and suggests that "what is required of us is restraint and humility" (p. 343). So, too, do many of the essays in Aelbrecht & Stevens' (2019) book. These need to be the new reading. Ties between and amongst individuals who are essentially strangers to each other at first point of contact, constitute the small mechanisms of exchange, respect and interdependence that have the potential to underpin less-Western, less-institutionalised constructs of cohesion. If the task of policymakers is to measure initiatives that conduce towards social betterment of groups and individuals, how then might cohesiveness be measured or evaluated? We argue here that whatever those measures are, they should relate to ties, to the things that lie 'between', that help us to make sense of difference, not sameness, the strange, not the familiar.

It is not our purpose here, however, to outline what such an alternative and quite radically different set of measures might look like in

detail but rather, to sow the idea that other measures are possible and might be more effective at measuring the nature and possibilities (both negative and positive) of what we have referred to as cohesive ties. If we conceive cohesion as something that is the property of positive interaction and meaning-making between individuals, that exists in the ties rather than in some abstract notion of harmony or aspiration toward sameness, then it becomes a concept capable of reinforcing the value of difference. Conceptually, cohesive ties would focus attention on the everyday and microinteractions that occur and give meaning to difference and valorise the importance of these interactions for individuals and groups in real time and scale. It would go without saying that these ties would not just be drawn from a focus on ethnic difference but encompass the diversity of differences that we present each other with.

Conclusion

In attempting to reconceive social cohesion in a New Zealand context, our conclusion returns to the question of the political: What can be measured, which agencies have the will and capacity to measure it, and how might the debate be shifted away from normative, and at times quite skewed, conceptions of ethnic difference as the only difference that counts? We suggest three possible and not mutually exclusive pathways that could be explored.

The first, following the lead provided by Burns et al. (2018, p. 14 ff), is to pass over the definitional capacity of the concept to Māori and give space to Māori scholarship to not only define the concept in ways that might be useful in New Zealand but, indeed, to replace the concept in its entirety with something that would have greater legitimacy for Māori. The concept of whakawhanaungatanga (Rata & Al-Asaad, 2019) mobilised as an alternative to "state-managed multiculturalism" clearly articulates one such approach. The South African work in relation to *ubuntu* in this context may also be of value, as might reflection on Erasmus' concept of vigorous capacity.

Secondly, we argue that social cohesion in New Zealand has been routinely represented as a property of ethnic or ethno-religious/language difference and that it needs to become a more inclusive concept. Our current focus solely on these ethnic and migration-related categories overlooks the impact of other axes of difference such as age, class, gender and sexuality

which are also critical to the negotiation of what can bring positive benefit to wider communities and society. The narrow concern with cohesion related only to migration has also allowed us to focus on the ways that social media has fostered those who use digital spaces to engender hate and to amplify gender, age, religious and ethnic prejudice but has encouraged us to overlook the ways in which media and cultural expression are also important tools of community building.

Finally, we suggest an increased focus on the idea of the cohesive ties that manifest themselves in the small mechanisms that comprise interpersonal engagement and communication. The consideration of this concept in a linguistic sense provides a way to think about how interconnections that make sense to people (and therefore are less threatening or destabilising) are usually based on prior reference points. We can speak more easily to 'strangers' if it is something we have done before, or if we learned strategies in school, for example, or have common places in our cities that we routinely inhabit alongside others who are different from us. Thinking about ways to maximise knowledge of the other through everyday engagement is one way, we would argue, to give more robust meaning to discussions about cohesion - and to the possibilities for enhancing it. Following Aelbrecht & Stevens (2019), who draw attention back to the concept of "weak ties" and suggest that cohesion "demands regular encounters with unknown strangers and with the unfamiliar" (p. 319), we propose that these weak ties are in fact cohesive ties and it is the presence or absence of these ties, at the local level, that need to be the focus of renewed policy engagement.

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Commuting to Diversity

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Abstract

Does commuting increase workers' exposure to difference and diversity? The uneven spatial distribution of different population subgroups within cities is well documented. Individual neighbourhoods are generally less diverse than cities as a whole. Auckland is New Zealand's most diverse city, but the impacts of diversity are likely to be less if interactions between different groups are limited by spatial separation. Studies of spatial sociodemographic diversity generally measure the diversity of local areas based on who lives in them. In this study, we examine measures of exposure to local cultural diversity based on where people work as well as where they live. Our measure of cultural diversity is based on country of birth, with ethnicity breakdowns for the New Zealand (NZ) born. The study also examines whether the relationship between commuting and exposure to diversity differs between workers with different skills or types of job. The study focuses on diversity and commuting patterns within Auckland, using 2013 Census microdata, and using local diversity measures calculated for each census area unit. We find that commuters who self-identify as NZ-born Europeans and residents born in England (together accounting for close to half of all commuters) are, of all cultural groups, the least exposed to diversity in the neighbourhoods where they live. Overall, commuting to the workplace raises exposure to cultural diversity, and to the greatest extent for these two groups.

Keywords: cultural diversity, exposure to difference, exposure to diversity, residential segregation, commuting, Auckland

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uckland is New Zealand's largest city and one of the most diverse cities in the world. According to the 2013 Census of Population and Dwellings, roughly 40 per cent of Auckland's population was born overseas, and Auckland was host to more than 200 different ethnic groups (Mondal, Cameron, & Poot, 2019). Studies of the economic impacts of diversity have identified a range of ways that such diversity might improve economic performance through innovation and productivity and the quality of life experienced by residents (Kemeny & Cooke, 2018; Ottaviano & Peri, 2006; Page, 2007). However, realising these potential gains may be contingent on other factors such as institutional quality or social capital (Kemeny & Cooke, 2017). It also depends on meaningful interactions taking place between dissimilar people. Previous research has documented residential segregation within Auckland by ethnicity (Johnston, Poulsen, & Forrest, 2011) and by country of birth (Maré, Pinkerton, Poot, & Coleman, 2012), which could limit the realisation of gains from diversity.

The current study re-examines the spatial mixing of populations within Auckland, using data from the 2013 Census of Population and Dwellings. It focuses on how location patterns affect people's exposure to difference and exposure to diversity. Whereas previous studies have relied on measures of isolation or segregation to summarise the degree of non-randomness of the spatial distribution of the population, we report measures that capture the probability that people live or work in areas where interactions are likely to be between a diverse range of cultural groups.

There are three novel aspects of our study. First, we measure diversity based on a combination of birthplace and ethnicity, and second, we measure diversity not only in the areas where people live but also in the areas where they work. The third novelty is that we examine the contribution of commuting patterns to peoples' exposure to diversity.

The following section summarises the existing literature on Auckland's residential sorting patterns and key insights from the international literature that looks at exposure to diversity from both the residence and workplace perspective. This is followed by an introduction to the 2013 Census data that we used, and then the measures of exposure to difference and diversity that we analysed. The paper concludes with a discussion of the key insights from our analysis.

Literature review

Residential location patterns in Auckland

More than a dozen empirical papers have been written in the past 16 years documenting the patterns of residential segregation and sorting in Auckland, mostly focused on ethnic segregation. A recurrent finding is that, as in most urban areas, there is pronounced spatial sorting. A consequence of this sorting is that the degree of diversity experienced by any ethnic group is strictly less than city-level diversity – their local interactions are disproportionately with other members of their own group. The broadly defined Pacific ethnic group is generally found to be the most strongly clustered group, as measured by various measures of segregation.

All the papers listed in endnote 2 use data from the Census of Population and Dwellings, from some subset of the five censuses from 1991 to 2013. A strength of the census data is that residential location is observed for very small geographic areas (meshblocks) with an average population of around 100. It also contains detailed coding of relevant indicators of sociocultural groups, including ethnicity, and country of birth. There is, of course, a drawback to analysing small groups in small areas, in that counts of group members can be very small or zero in many meshblocks, yielding high variability in summary measures of residential segregation. This problem is magnified by the confidentiality requirement to randomly round or suppress small counts of groups within meshblocks. Most studies have therefore relied on very broad ethnic groupings (European, Māori, Pacific, Asian), focused attention on only the largest ethnic or country-of-birth groups, or analysed patterns across larger 'area units', with an average population size of around 2000 (Ishizawa & Arunachalam, 2014; Maré, Pinkerton, & Poot, 2016; Mondal et al., 2019).

One of the limitations of the existing studies is that they analyse data that are classified by administrative or statistical boundaries. As a result, they face the 'modifiable areal unit problem' (Gehlke & Biehl, 1934; Openshaw, 1984), with the implication that the patterns that they show may not occur at different spatial scales. Only a few of the Auckland studies have investigated the spatial scale of segregation, reporting statistics such as Moran's I, mapping Getis and Ord's G* LISA measure (Johnston et al., 2011; Maré et al., 2016, 2012), or comparing measures at different spatial scales (Manley, Johnston, Jones, & Owen, 2015). Internationally, recent studies

have developed methods to address the spatial scale of segregation more directly. Olteanu et al. (2019) capture the spatial scale of segregation by measuring how quickly the population composition of a location converges to the city-wide composition, as segregation is measured over gradually increasing circles. They propose an index (named a "distortion coefficient") that summarises, for each location, how close the convergence trajectory is to what would result from complete separation of subgroups (distortion = 1), relative to random allocation of all groups (distortion = 0). This novel approach captures spatially varying patterns of segregation but has not yet been extended to fully capture spatial variation in exposure to diversity, which depends on the diversity of the city-wide population, as well as the degree of residential segregation. In the illustration provided by Olteanu et al. (2019), population composition is identified on the basis of four ethnic groups, which provides only a limited view of diversity. Even among studies that rely on aspatial (boundaried) areal units, the focus is often on segregation rather than exposure to diversity, and often for a small number of distinct groups. Following the segregation focus of Massey and Denton (1988) and Lieberson (1981), some studies have considered pairwise exposure of particular groups to other groups (Johnston, Poulsen, & Forrest, 2003, 2008; Maré et al., 2012), or to the dominant (European) group (Grbic, Ishizawa, & Crothers, 2010), but have not translated this into exposure to diversity per se. Reardon et al. (2008) take an explicitly spatial approach to measuring pairwise exposure, calculating pairwise segregation indexes across four ethnic groups, using bespoke neighbourhoods. The strength of segregation at each location is calculated based on employment composition in the surrounding neighbourhood, where the size of the surrounding neighbourhood is varied - from a radius of 500 metres to a radius of 4 kilometres. They show clearly that the comparison of measures at different radii provides richer information about the spatial configuration of segregation. However, there is a high (0.92-0.99) correlation between measures taken at different radii, suggesting that cross-area comparisons based on one spatial scale provide a meaningful indication of relative exposure to diversity.

In our study, we follow the aspatial approach of relying on administrative boundaries, extending the existing literature by focusing on exposure to diversity, using a more detailed breakdown of cultural groups that combines country of birth and, for the New Zealand-born, ethnicity as well.

Our study is also only the third study to use 2013 Census data (the others are Mondal et al. (2019) and Manley et al. (2015)). Finally, our study extends the New Zealand literature on residential segregation not only by examining its implications for exposure to diversity, but also by jointly looking at exposure at place of residence and exposure at workplace. Combining residential and workplace segregation or exposure to diversity has not been examined in New Zealand, but is an active area of research internationally, which we review in the next subsection.

Non-residential exposure to diversity

The hypothesised benefits of diversity are contingent on social interactions actually occurring, particularly face-to-face, because this permits tacit knowledge exchange and the building of trust (e.g. Page, 2007). As noted by Ellis et al. (2004), the literature on segregation has privileged residential location over other spheres of potential interaction, such as the workplace, commuting, shopping, church or sports and recreational areas. This limitation of focus reflects not only data availability but also empirical tractability.

The simple idea of people 'bumping into each other' is relatively straightforward to capture if we restrict attention to a single spatial (residential) sphere of interaction. More generally, because people are mobile, identifying potential interactions requires tracking of all people across space and time. Hägerstrand (1970) characterised this challenge as "a hard nut to crack", and established a conceptual and analytical framework that has underpinned subsequent studies of 'time geography' in social sciences, ecology and biological science. In the context of segregation and social exposure, there continues to be active development of methods and measures to realise the promise and challenges of analysing spatial, temporal and socio-demographic dimensions of 'social interaction potential' (Farber, O'Kelly, Miller, & Neutens, 2015). Marcińczak et al. (2015) provide a good summary of the relevant literature.

Empirical studies of segregation exemplify the challenges of engaging with the complexity of interaction patterns that vary simultaneously across space, over time, and between socio-demographic groups. There are three main strands of the empirical literature, reflecting different data-collection

approaches: space-time surveys, mobile phone data collection, and analysis of register data.

There is a well-established literature using space-time surveys to capture the range of locations in which people spend their time, and hence where they may be exposed to other groups (Janelle & Goodchild, 1983; Le Roux, Vallée, & Commenges, 2017; Park & Kwan, 2018; Wong & Shaw, 2011). Such studies often combine sample information about location and demographic characteristics with external data about the socio-demographic characteristics of locations. The common finding is that residential segregation is more pronounced than the segregation that people experience when they are away from home.

Recent advances in data availability and computing have supported a number of innovative studies. Data from social media platforms can be used to identify and analyse diversity within friendship networks (e.g. Barker, 2012; Seder & Oishi, 2009), though such studies have generally focused on small samples and lack a geographic focus. Large data sets of mobile phone locations and movements provide exceptionally rich information on 'activityspaces'. Östh et al. (2018) analysed the changing geographic locations of approximately 1.2 million phones in Sweden over a 24-hour period. Each phone was associated with a 'home' location, based on the phone mast nearest its location between midnight and 7:20 a.m., and allocated the socioeconomic characteristics of a bespoke neighbourhood (800 nearest neighbours) around the home location. These data enabled the authors to track each phone's exposure to other phones not only at the home location but also throughout the day, taking into account who else was at the same location at the same time. The study found that diurnal mobility reduces segregation by poverty and wealth.

Galiana et al. (2018) used mobile phone data for selected French cities and examined segregation in social networks, as captured by phone calls made between locations with the same median incomes. Geocoded personlevel income information was aggregated to bespoke neighbourhood cells of 500 m by 500 m. As in Östh et al. (2018), the focus was on segregation, with personal characteristics proxied by areal averages or medians.

Other studies using mobile phone data have captured person-level characteristics from sources such as phone language-settings that are available from the phone tracking data (Silm & Ahas, 2014), or from phone apps, which enable the collection of some additional personal or locational

information by survey. To date, such studies have been limited by fairly small sample sizes (Palmer, 2013; Yip, Forrest, & Xian, 2016), and have also relied on external data sources for data on neighbourhood characteristics. Methods for summarising and analysing the data from phone apps and phone tracking continue to evolve as these data are increasingly used (Palmer, 2013).

As with the diary studies, the consistent conclusion from mobile phone-based studies is that residential (night-time) segregation is more pronounced that segregation at other times of day, with segregation measured along a variety of dimensions such as ethnicity, income, wealth or language.

The strand of the empirical literature that is closest to our own is the use of population register data. The advantage of these studies is that they capture information for a full population, usually coded to fine (100-m by 100-m grid) location information. However, compared with the survey and mobile-phone approaches, register-based studies contain more limited information on space-time movements. Data are generally available for residential contexts (neighbourhood, family) and workplace only.

Tammaru et al. (2016), for instance, used Swedish population register data to examine immigrant men's and women's exposure to native-born Swedes at their workplace as well as in their neighbourhood of residence and within their household. They found that employed immigrants have greater exposure (lower segregation) in residential neighbourhoods than at their workplaces. This finding contrasts with the findings from travel diary studies, which find the reverse. The difference may reflect the different urban contexts of the studies or be a result of restricting attention to employed residents, whose composition and residential location patterns differ from that of the full resident population.

Boterman and Musterd (2016) used register data from the Netherlands to examine exposure to diversity in residential neighbourhoods and workplaces. Neighbourhood diversity was calculated for areas of around 3000 people and workplace diversity was identified from co-workers in the same firm. In addition, the authors combined register data with information on mode of transport from a large transport survey, to capture exposure to diversity while commuting. They measured diversity across nine groups defined by income level (three groups) and birthplace (three groups). As in Tammaru et al. (2016), Boterman and Musterd (2016) found that, for

employed residents, exposure to diversity is greater in residential neighbourhoods than at workplaces, although there is greater variation in workplace exposure. They also find that high-income native-born Dutch people are the most 'cocooned' – having lower exposure to diversity than most other groups (except for low-income native-born Dutch), and more likely to travel by car.

Our study is most similar in scope to the register-based studies, using full-coverage data and focusing on only two activity-spaces — residential neighbourhood and workplace neighbourhood — both captured at the individual level, with detailed geographic location information. Like Boterman and Musterd (2016), we analyse exposure to diversity in each place. We also examine the combined exposure that employed residents experience.

Data and methods

New Zealand census data

We use data from the 2013 Census of Population and Dwellings. In order to analyse detailed birthplace and ethnicity data at a fine spatial scale, analysis was undertaken using census microdata available in the Stats NZ Datalab.³ Birthplace and ethnicity information is available for each person, and residential information is available at a fine geographic level - the census meshblock. There are 10,415 meshblocks within the Auckland Urban Area, with a median area of around 3.6 hectares (190 m by 190 m), and mean population of around 125. In most cases, workplace is also captured at the meshblock level, enabling commuting times to be calculated for over 20,000 potential origin-destination pairs. As described below, diversity measures are calculated by grouping meshblocks into larger administrative units, 'census area units', with a median area of 169 hectares (1.3 km by 1.3 km) and mean population of around 3600. These are similar in size to the definition of neighbourhoods used by Boterman and Musterd (2016), and at the small end of the size range of 'local environments' considered by Reardon et al. (2008).

Sample selection

In order to examine the effect of work-related commuting on a person's isolation or exposure to diversity, we focus on employed residents of the Auckland Urban Area who also work within the Auckland Urban Area. As shown in Table 1, there were 1,035,150 adult usual residents of the Auckland Urban Area in 2013. Measures of residential diversity are based on this full population. Workplace diversity is measured using information on the 531,117 workers who are employed in the Auckland Urban Area. This number includes 30,108 workers who commute into the Auckland Urban Area from elsewhere.

In order to examine the interaction of residence and workplace diversity, we focus more narrowly on a subset of the 501,009 Auckland Urban Area residents who also work in the Auckland Urban Area.⁴ The subset we consider are those for whom we have non-missing income and dwelling information, and sufficiently precise (area unit or meshblock) workplace location information. Omitting 68,184 observations with missing information, 473,559 employed residents remain in our main analysis data set.

Table 1: Auckland workers and residents

		Place of residence			
	Employed persons	Live in Auckland Urban Area	Live elsewhere	All Auckland Urban Area workers	Percentag e of Auckland jobs that are held by people living in Auckland
Place of Work	Auckland Urban Area • dwelling & income details known Auckland Urban Area • missing dwelling or income	473,559 68,184			
	details Auckland (AU) • Total elsewhere Not codeable to AU Employed persons	501,009 40,734 57,612 599,355	30,108 excluded excluded	531,117	[501,009/5 31,117] = 94%
_	Not-employed Auckland Urban Area residents Percentage of employed persons living in Auckland who also work in Auckland	$435,795$ $1,035,150$ $\begin{bmatrix} 501,009\\ \hline (501,009+40,73) \\ = \end{bmatrix}$ 92%			

Note: All counts are randomly rounded to base three to maintain confidentiality. Source: 2013 Census of Population and Dwellings.

Capturing cultural diversity

We create measures of cultural diversity based on Aucklanders' reported country of birth and ethnic self-identification. Such statistical measures of cultural diversity will always be imperfect. There can be cultural diversity among people who have the same birthplace and ethnic identity based on, for example, language, ancestry, religion or customs. Conversely, people from different birthplaces and with different ethnic identities can be culturally very similar. Nevertheless, like most of the literature, we use these observable characteristics as reasonable proxies for true but unobserved dimensions of cultural diversity.

Birthplace diversity is calculated based on detailed country of birth coding. In most cases, a specific country of birth is recorded. However, around 6 per cent of adults failed to specify any country of birth, and others reported birthplace ambiguously or regionally. When coding birthplace, we aggregate countries that individually account for less than 0.2 per cent of the national adult population, which we combine with region-of-birth codes. Our final birthplace codes identify the most common 24 individual countries of birth, which account for 87 per cent of the Auckland adult resident population. A further 6.6 per cent of the population are classified into one of 13 aggregated groupings, with the 6.5 per cent who did not state a birthplace treated as a separate category.⁵ Thus, there are 38 distinct birthplace categories.

New Zealand-born residents account for 49 per cent of the adult population in the Auckland Urban Area. We disaggregate this group into 12 distinct subgroups based on ethnic identification (5-digit coding). The 2013 Census codes up to 6 responses for each person. We treat each unique combination of responses as a distinct ethnic classification. Any classification accounting for fewer than 0.2 per cent of the adult population nationally is aggregated hierarchically using Stats NZ's standard country classification. Remaining small groupings are aggregated based on the number of responses. When examining the ethnicity of New Zealand-born adult residents of the Auckland Urban Area, we use distinct codings for the 11 largest ethnic groups, and combine all other responses into a single residual group. The combined birthplace-ethnicity classification we use thus has 49 distinct groups: 38 distinct birthplace codes, with New-Zealand-born separated into 12 codes. We will refer to the groups identified by this 49-way classification as 'cultural' groups.

Measures of exposure

Using the cultural classification described in the previous section, we calculate two different measures to capture each person's exposure to cultural diversity. The first is a measure of exposure to difference, which captures the probability that a randomly selected person of a given group results in this individual meeting, in a random interaction, someone from a group other than their own. The measure is calculated for each group g as:

Exposure to Difference_g =
$$100 * \sum_{a=1}^{A} \left(\frac{P_{ga}}{P_{g}}\right) * \left(1 - \frac{P_{ga}}{P_{a}}\right)$$
 (1)

where P_{ga} is the number of people from group g located in area a where g is one of the 49 cultural groups, P_g is the number of members of group g, and P_a is the total number of people in area a. We will denote P to be the number of people in Auckland. Exposure to difference is closely related to the commonly used index of isolation, which captures own-group exposure (Bell, 1954; Lieberson, 1981). The index of isolation is simply 100 minus the index of exposure to difference.

The spatial units used as areas in this calculation are census area units (AU), which are similar in size to the neighbourhoods used by Boterman and Musterd (2016). Although diversity can be calculated for smaller geographic units (meshblocks), we consider that AUs provide a more appropriate scale for capturing the diversity of potential interactions. A total of 358 census area units within the Auckland Urban Area were analysed, with an average 'usually resident adult population' of around 2900 and average employment of around 1500. The index was calculated separately for residence area units (using total adult population) and workplace area unit (using total employment). Exposure to difference was calculated separately for each of the 49 groups but tabulated for only the largest 11.

If exposure measures are to be used as a measure of segregation, the literature has recommended the use of a modified own exposure or isolation index $\left(mII_g = \frac{II_g - \frac{P_g}{P}}{1 - \frac{P_g}{P}}\right)$, to make exposure measures comparable for groups of very different sizes. This modified index has been calculated previously for Auckland (Johnston et al., 2008; Maré et al., 2016, 2012; Mondal et al., 2019). This index summarises how close the spatial distribution of a group across areas is to a random allocation in which the probability of a person being assigned to an area is proportional to the area's total population

 $(mII_g = 0)$, or to complete isolation $(mII_g = 1)$. For the current study, where our focus is on exposure rather than segregation per se, we focus primarily on the unmodified index, which reflects the fact that larger groups are less exposed to difference, rather than relying on an index that represents how far from randomly distributed the different groups are.

The second measure of exposure that we examine is exposure to diversity. This provides additional information about different groups' exposure to a mix of other groups. A group that has low exposure to difference will tend to have relatively low exposure to diversity, since limited exposure to other groups implies limited exposure to a mix of other groups. However, high exposure to difference does not necessarily imply high exposure to diversity. A relatively small population group living in an area (e.g. Māori) with only one other group represented (e.g. NZ-born Europeans) will have high exposure to difference, but low exposure to diversity.

Diversity is measured by the commonly used fractionalisation index:

$$FR_a = 1 - \sum_{g=1}^{G} \left(\frac{P_{ga}}{P_a}\right)^2 \tag{2}$$

The measure has a simple interpretation: it measures the probability that in a meeting of two randomly selected individuals in area a of the city, the two belong to different groups. This measure takes its maximum value $\left(FR_a^{Max}=\frac{G-1}{G}\right)$ when all groups are of equal size, whereas a value of 0 arises when everyone belongs to the same group. The FR index is calculated for each area. We calculate the index separately for residence AU (FR_r) using total adult population, and workplace AU (FR_w) using total employment.

We also calculate the diversity associated with each combination of residence and workplace (FR_{rw}) , to capture the diversity of interactions that occur either at home or at work, using the following formula:

$$FR_{rw} = \frac{FR_r + FR_w}{2} \tag{3}$$

In the absence of information on the proportion of time spent in each location, exposure to residential and workplace diversity are given equal weight. A group's exposure to diversity is calculated as the average value of FR_a experienced by group members, where a could refer to residence (r), workplace (w), or a combination of residence and workplace (rw).

Exposure to diversity_g =
$$100 * \sum_{a=1}^{A} \left(\frac{P_{ga}}{P_g}\right) FR_a$$
 (4)

This measure has the appealing interpretation that it captures whether group members live or work in areas where random meetings would generate a high proportion of cross-group interactions. Exposure to diversity is measured separately for residence, for workplace, and on average across residence and workplace.

Table 2 shows the average exposure to diversity for the employed population who work and live in the Auckland Urban Area (n = 473,559). Each individual is assigned the diversity of their residential neighbourhood and the diversity of their workplace and these measures are averaged over all employed individuals. The table is restricted to the sample of intra-Auckland commuters because workplace location is not available for other people.

Levels of exposure to diverse residents in residence neighbourhoods and to diverse employed populations in workplace neighbourhoods are similar: 80.7 and 79.1, respectively. There is somewhat greater variation for residence exposure (s.d. = 9.2; P90–P10 range of 24.0) than for workplace exposure (s.d. = 6.2; P90–P10 range of 14.3). On average, exposure to residential diversity is higher than exposure to workplace diversity. This reflects the fact that the residential measure includes the greater diversity arising from the presence of people who are not employed.

Commuting

Commuting travel time and road distance is calculated from an open-source GIS road-network layer made available by Beere (2017). Census places of usual residence and workplaces are in most cases coded to meshblock. The road distance between each pair of meshblocks was calculated as the shortest distance and travel time was based on the fastest route. 12 For some people, workplace location is less accurately coded, linked only to a census area unit. In these cases, time and distance were imputed based on the mean observed values between the residence meshblock and observed workplace meshblocks within the workplace area unit. 13

Travel distances and time calculated in this way approximate the commuting experience of people who drive to work or are a passenger in a private vehicle. Such commuters account for 82% of all commuters in our data. The average commuting time and distance within Auckland can be

compared with estimates from the New Zealand Household Travel Survey. ¹⁴ In that survey, 85 per cent of home-to-work journeys were completed by drivers or passengers. For such commuters in the Auckland metropolitan area in the 4-year period from 2011 to 2014, the average (single-trip) commuting distance was 11.7 km, taking them 23.0 minutes. The comparable measures from our census data on drivers and passengers show a mean commuting distance of 11.9 km and mean commuting time of 17.1 minutes. The lower commute times in the census data reflect our use of free-flow road speeds and our exclusion of longer commutes associated with people who work outside the Auckland Urban Area.

Table 2: Diversity and commuting (Summary statistics)

	Mean	s.d.	P10	P90
Exposure to diversity – Residence (percentage)	80.7	9.2	67.1	91.1
Exposure to diversity – Workplace (percentage)	79.1	6.2	71.6	85.9
Commuting travel time (mins)	14.65	9.78	2.05	27.67
Commuting travel distance (km)	10.22	8.76	1.35	21.86

Note: Statistics are based on employed residents who live and work in the Auckland Urban Area. (Randomly rounded count = 473,559.)

Source: 2013 Census of Population and Dwellings.

Results

Residential and workplace exposure to difference

Table 3 summarises Aucklanders' exposure to their own group and exposure to difference. Unlike Table 2, which reports means for intra-Auckland commuters, Table 3 reports statistics for the full adult population of Auckland usual residents (n=1,035,150), and for all people employed in Auckland (n=531,117). It is clear that the composition of the employed population differs from that of the resident population. Whereas 49.3 per cent of adult residents are New Zealand-born, 56.0 per cent of employed adults are New Zealand-born, reflecting relatively high employment rates of New Zealand-born Europeans. People from England, India and Samoa also account for a higher share of employed adults than they do of the resident population.

Segregation, as captured by own-group exposure or isolation (Massey & Denton, 1988), is evident in both residential and workplace composition. Each cultural group is more likely to encounter someone from their own group in their residential or workplace area units than would be expected based on their share of the Auckland population. Tongans account for 1.6 per cent of the Auckland population but on average live in area units where 6.3 per cent of the population is Tongan - a ratio of almost four. Similarly, South Africans have a 10.4 per cent chance of encountering other South Africans in their residential AU, though they make up only 3.1 per cent of the Auckland population (a ratio of 3.4). Workplace segregation follows a similar pattern but is much less pronounced than residential segregation. The highest own-group exposure is experienced by New Zealand-born Europeans, reflecting their large population share, as well as their non-random clustering. The modified isolation index described in the section Measures of exposure $\left(II = \frac{col(2) - col(1)}{1 - col(1)}\right)$ is presented in the third column, to show the degree of segregation. By this measure, the New Zealand-born European group isthe most segregated $(mII_q^{residence}=10.8; mII_q^{workplace}=2.5)$. South Africans, Fijians and Chinese also experience relatively high segregation, both residentially and at workplaces.

Despite the observed segregation patterns, most groups have high exposure to non-group members, as shown in the fourth column as 'exposure to difference'. Except for New Zealand-born Europeans, all groups have at least an 89 per cent chance of encountering a non-group member in their residential AU, and more than a 92 per cent chance in their workplace AU. Exposure to difference is lowest for the New Zealand-born group as a whole, with exposure to other New Zealand-born, not differentiated by ethnicity, being 47.8 per cent at residence and 43.3 per cent at workplace. When we look at the groupings used in the calculation of diversity, which disaggregate New Zealand-born by 12 ethnicity groups, we find greater exposure to difference for the more disaggregated groups. New Zealand-born Europeans have the lowest exposure to difference (58.2 per cent at residence and 55.7 per cent at workplace). The final column of Table 3 compares actual exposure to difference with the exposure that would arise if groups were randomly distributed across areas. These are all negative, reflecting segregation, but are all small, reflecting the limited impact that segregation has on exposure to difference for most groups.

Table 3: Exposure to difference

Populati on share	Expos ure to own- group	Modifi ed Isolati on index	Exposu re to differe nce	Deviati on of exposur e to own group from random (ppt)
(1)	(2)	(3)	(4) = (100%-[2])	(5) = (1)

(a) Exposure at place of residence [All adult usual resident of Auckland Urban Area]

All groups	100.0%	18.3%		81.7%	
NZ-born	49.3%	52.2%	5.9	47.8%	-3.0
 European 	34.7%	41.8%	10.8	58.2%	-7.1
 Māori 	3.7%	7.9%	4.3	92.1%	-4.2
Europ/					
Māori	3.1%	3.7%	0.6	96.3%	-0.6
England	5.9%	8.6%	2.9	91.4%	-2.7
P.R.China	6.1%	11.1%	5.3	88.9%	-5.0
India	3.9%	8.1%	4.4	91.9%	-4.3
Fiji	3.5%	9.4%	6.1	90.6%	-5.9
Samoa	2.5%	5.3%	2.9	94.7%	-2.8
South Africa	3.1%	10.4%	7.6	89.6%	-7.3
Korea	1.7%	5.0%	3.4	95.0%	-3.4
Tonga	1.6%	6.3%	4.8	93.7%	-4.7

(b) Exposure at place of work [All adults employed in Auckland Urban Area]

All groups	100.0%	21.0%		79.0%	
NZ-born	56.0%	56.7%	1.5	43.3%	-0.6
 European 	42.8%	44.3%	2.5	55.7%	-1.4
 Māori 	3.0%	4.4%	1.5	95.6%	-1.4
 Europ/Mā 					
ori	3.5%	3.7%	0.2	96.3%	-0.2
England	6.9%	7.6%	0.7	92.4%	-0.7
P.R.China	4.6%	5.8%	1.2	94.2%	-1.2
India	4.3%	5.2%	1.0	94.8%	-0.9
Fiji	3.4%	5.0%	1.7	95.0%	-1.6
Samoa	3.3%	4.0%	0.7	96.0%	-0.7
South Africa	2.2%	4.1%	2.0	95.9%	-2.0
Korea	1.3%	2.2%	0.9	97.8%	-0.9
Tonga	1.1%	2.0%	0.9	98.0%	-0.9

Note: For panel (a), statistics are based on all adult usual residents in the Auckland Urban Area (randomly rounded count = 1,035,150); For panel (b), statistics are based on all employed adults in the Auckland Urban Area (randomly rounded count = 531,117).

Source: 2013 Census of Population and Dwellings.

Exposure to difference – intra-Auckland commuters

In order to focus on the role of commuting, and the different exposure of employed workers at home and at work, we analyse, in Table 4, exposure for intra-Auckland commuters (as described earlier in the section on sample selection). The composition of this population is similar to that of all employed workers as shown in Table 3, differing only in that it excludes people who commute into Auckland and those whose workplace cannot be coded to a specific area unit. Comparing exposure to difference at home (column 2) and at work (column 3), we can see that, apart from New Zealandborn Europeans, all groups have high exposure to difference both at home (over 89 per cent) and at work (over 92 per cent). For most groups, their workplace exposure to difference is greater than that which they experience at their residence. Their combined exposure is an average of these two, as shown in the fourth column of Table 4.

Table 4: Exposure to difference and exposure to diversity: Intra-Auckland commuters

	Population share	Exposure at residence AU	Exposure at workplace AU	Average exposure	Effect of commuting
	(1)	(2)	(3)	(4)	(5) = (4) - (2)
(a) Exposure to	difference				
All groups	100.0%	79.1%	79.3%	79.2%	0.1%
NZ-born	55.2%	47.2%	43.4%	45.3%	-1.9%
• European	42.2%	57.8%	55.7%	56.7%	-1.1%
• Māori	2.8%	93.0%	95.5%	94.3%	1.3%
• Europ/Mā					
ori	3.4%	96.4%	96.3%	96.4%	0.0%
England	6.8%	91.4%	92.4%	91.9%	0.5%
P.R.China	4.9%	89.0%	94.2%	91.6%	2.6%
India	4.4%	92.0%	94.8%	93.4%	1.4%
Fiji	3.5%	91.0%	95.0%	93.0%	2.0%
Samoa	3.4%	94.7%	96.0%	95.4%	0.6%
South Africa	2.1%	90.1%	95.8%	93.0%	2.9%
Korea	1.3%	95.1%	97.8%	96.5%	1.3%
Tonga	1.0%	94.0%	98.0%	96.0%	2.0%
(b) Exposure to	diversity				
All groups	100.0%	80.7	79.1	79.9	-0.8
NZ-born	55.2%	79.1	78.5	78.8	-0.3
• European	42.2%	77.7	77.9	77.8	0.1
• Māori	2.8%	84.7	81.1	82.9	-1.8
• Europ/Mā	3.4%				
ori		80.7	79.2	79.9	-0.7
England	6.8%	76.9	77.8	77.3	0.5
P.R.China	4.9%	84.5	80.1	82.3	-2.2
India	4.4%	86.1	80.9	83.5	-2.6
Fiji	3.5%	87.7	82.1	84.9	-2.8
Samoa	3.4%	80.2	78.9	79.5	-0.6
South Africa	2.1%	88.3	82.7	85.5	-2.8
Korea	1.3%	82.9	78.7	80.8	-2.1
Tonga	1.0%	88.5	82.5	85.5	-3.0

Note: All statistics based on the population of intra-Auckland commuters (randomly rounded count = 473,559). For exposure to difference, column (4) is an average of (2) and (3). For exposure to diversity, column (4) captures the diversity of people encountered at either home or at work.

Source: 2013 Census of Population and Dwellings.

Exposure to diversity

In contrast, New Zealand-born Europeans' exposure to diversity is increased when they go to work, as shown in the second panel of Table 4. Their workplaces are more diverse than their residential neighbourhoods — the opposite of what is experienced by all other groups except those born in England. Among the other groups, the two with the lowest residential exposure to diversity (Samoans and dual-ethnicity New Zealand-born European/Māori) have relatively small differences between residential and workplace exposure to diversity.

Exposure to diversity and the impact of commuting vary not only across cultural groups but also by other characteristics. Table 5 reports differences by gender, by highest qualification, and for quartiles of residential neighbourhood diversity. Gender differences are small. Male intra-Auckland commuters are exposed to slightly higher levels of diversity at home and at work than are female commuters. They also both experience higher exposure to diversity at home than at workplaces, mirroring the pattern observed for the two largest groups, New Zealand-born European and English-born.

Differences by highest qualification are more pronounced. Degree-qualified commuters have the lowest levels of exposure to diversity at home (79.7) and at work (78.9), and also the smallest decline in exposure as a result of commuting (-0.4). In contrast, the relatively small group of commuters with no qualifications (9 per cent of commuters) have the highest residential exposure to diversity (83.1), and also the largest decline in exposure as a result of commuting (-1.6), despite their exposure being greater than that of other qualification groups, both at home and at work.

The final panel of Table 5 reports patterns for commuters living in residential neighbourhoods with different levels of cultural diversity. Commuters are divided into four equal-sized groups based on the diversity of their neighbourhood. As shown in the second column, average residential diversity varies greatly, from 67.5 for people in the least diverse neighbourhoods, to 90.6 for people in the most diverse neighbourhoods. People from neighbourhoods with high residential diversity tend to commute to workplace neighbourhoods that are also more diverse than average. However, because the variation in workplace diversity across these quartiles is smaller than that of residential diversity (reflecting the selection of quartiles based on residential diversity), commuting lowers exposure for

those in high diversity residential areas (-4.3) and raises exposure for people in low diversity residential neighbourhoods (+4.2).

Table 5: Exposure to diversity – by gender, qualifications, and quartiles of residential exposure

	Population share	Exposure at residence AU	'xposure at workplace AU	Average exposure	Effect of commuting
	(1)	(2)	(3)	(4)	(5) = (4)-(2)
2013	100%	80.7	79.1	79.9	-0.8
By gender					
Men	50%	80.8	79.2	80.0	-0.8
Women	50%	80.6	78.9	79.7	-0.8
By highest qualifi	ication				
Degree qualn	34%	79.7	78.9	79.3	-0.4
Sub-degree post- school	22%	80.5	78.9	79.7	-0.8
School qualn	33%	80.9	79.1	80.0	-0.9
No qualification	9%	83.1	80.0	81.5	-1.6
By quartiles of FR	res				
1. Low FR_{res}	25%	67.5	75.8	71.6	4.2
2.	25%	78.9	78.8	78.8	0.0
3.	25%	85.8	79.7	82.8	-3.0
4. High FR _{res}	25%	90.6	82.0	86.3	-4.3

Note: All statistics based on the population of intra-Auckland commuters (randomly rounded count = 473,559).

Source: 2013 Census of Population and Dwellings.

To examine the relationship between residential and workplace exposure more fully, we divide both residential neighbourhoods and workplace neighbourhoods into quintiles (five groups with equal numbers of people). The first row of Table 6 shows the average workplace diversity for each of the workplace quintiles, which range from 69.5 for the lowest group to 86.5 for people in the most diverse workplaces. For residential diversity quintiles, the spread is greater, ranging from 66.1 to 91.1.

The first panel of Table 6 shows the extent to which people from more diverse residential neighbourhoods commute to more diverse workplaces. The statistics reported are row percentages. From the first row,

we see that 38 per cent of people in the lowest quintile of residential diversity commute to the least diverse workplace neighbourhoods. This is much greater than the 20 per cent that would be observed if diversity in residences and workplaces were unrelated. Similarly, 37 per cent of commuters in the most diverse residential neighbourhoods commute to the most diverse workplace neighbourhoods. Although there is clearly a positive correlation, there is also a moderate proportion of people who commute from the least diverse residential areas to the most diverse workplace areas (10%) or from the most diverse residential areas to the least diverse workplaces (8%).

The impact of these commuting patterns on average exposure to diversity is somewhat less symmetric. The second panel of Table 6 shows the difference between average exposure to diversity and residential exposure to diversity for each of the allocation cells. There is a strong increase in exposure to diversity for people commuting from the least diverse neighbourhoods to the most diverse workplaces (+10.0), and a similar-sized reduction in exposure from people commuting from highly diverse residences to the least diverse workplaces (-10.3).

The largest effects of commuting are evident as increases for people who live in the least diverse neighbourhoods, or reductions for those who work in the least diverse neighbourhoods. This is a consequence of the skewness of the exposure distributions, with a relatively large gap between the lowest and second lowest quintiles in the level of exposure either residentially or at workplaces.

Spatial patterns of diversity exposure

Both residential and workplace diversity are spatially correlated, and correlated with each other, given that people generally favour short commuting times. Figure 1 maps residential and workplace diversity for the Auckland Urban Area. The least diverse areas are predominantly those towards the outer limits of the Urban Area, although there are some low diversity areas close to Auckland Central – in Devonport, Ponsonby, Remuera and the Eastern suburbs. Diverse workplaces and diverse residential areas are most concentrated in South Auckland, and in a corridor through the Western suburbs. The map of residential exposure looks less uniformly high in South Auckland, but this reflects in part the greater variability of residential diversity rather than marked differences in the level of diversity. The shadings on the maps are chosen so that 20 per cent

of area units are in each band. Because residential diversity has a higher variance, the top two (darkest) bands of residential diversity are at least as diverse as the most diverse 20 per cent of workplace area units.

Table 6: Exposure to diversity and commuting – by work and residence

		Quintiles of workplace exposure				ure	
Quintiles of							
resident	ial exposure	1. Low	2	3	4	5. High	
$\begin{array}{c} Mean \\ FR_{Work} \end{array}$		69.5	76.8	80.2	82.8	86.5	
	Mean FRRes	(a) Alloc	ation sh	ares			
1. Low	66.1	38%	19%	21%	12%	10%	
2	76.1	25%	24%	23%	15%	12%	
3	83.1	17%	25%	25%	17%	14%	
4	87.3	12%	19%	22%	22%	23%	
5. High	91.1	8%	12%	19%	22%	37%	
	Mean effect	(b) Effect of commuting (average - residential exposure)					
1. Low	4.8	0.9	5.1	7.0	8.3	10.0	
2	1.0	-2.6	0.4	2.1	3.2	4.9	
3	-2.0	-6.0	-3.1	-1.5	-0.1	1.7	
4	-3.4	-8.3	-5.1	-3.6	-2.3	-0.5	
		-10.					
5. High	-4.4	3	-7.1	-5.5	-4.1	-2.1	
		(c) Commuting travel time (minutes, single					
Mean travel time		trip)					
1. Low	15.8	9.8	17.2	17.1	21.6	25.8	
2	14.4	11.0	13.1	14.3	16.8	20.8	
3	14.4	14.2	12.0	13.5	15.8	18.9	
4	14.7	17.1	13.9	14.5	13.8	15.1	
5. High	14.0	19.5	17.0	13.7	14.5	11.9	

Note: All statistics based on the population of intra-Auckland commuters (randomly rounded count = 473,559).

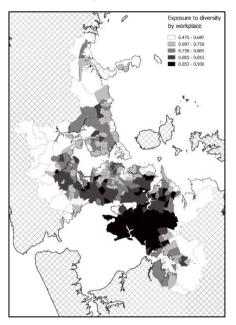
Source: 2013 Census of Population and Dwellings.

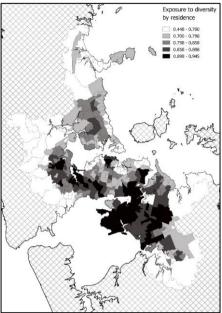
The lower map in Figure 1 highlights areas where the number of intra-Auckland commuters working in the area is larger than the number living in the area. The mismatch between residences and workplace locations generates commuting flows of varying lengths, with differing impacts on exposure to residential and workplace diversity. The resulting

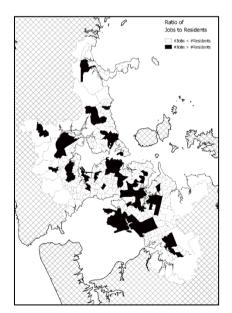
commuting flows are summarised in panel (c) of Table 6. Commuters from low diversity residential neighbourhoods have longer average travel times, consistent with them being disproportionately located in the outer parts of the Urban Area. For the two quintiles with the lowest residential diversity, there is a clear positive relationship between commuting times and the increase in exposure to diversity. It would appear that commuters are prepared to incur a greater cost of commuting to reach jobs in areas that yield them higher exposure to diversity.

The relationship between travel times and the effects of commuting on exposure to diversity (from panels (b) and (c) of Table 6) is displayed graphically in Figure 2. For at least the bottom three quintiles of residential diversity, there is a positive relationship between travel times and increased exposure to diversity. Further work is needed to determine whether commuters' preparedness to commute longer distances to reach more diverse workplaces is supported by higher wages at workplaces or lower rents in less diverse residential areas. These possible explanations of the relationships shown in Figure 2 could arise if diversity raised workplace productivity (hence higher wages) or if people were willing to incur higher rents or commuting costs to live in low diversity neighbourhoods. Research in the Netherlands (Bakens & de Graaff, 2018) suggest that both these factors operate, but that the latter is found to be a relatively small effect.

Figure 1: Exposure to diversity at home and at work (Auckland Urban Area)







Note: Scales differ across maps. Each scale is chosen to split area units into five equally sized groups. Cross-hatched areas represent areas not included in the study. The lower map highlights area units where the number of jobs exceeds the number of residents.

Source: 2013 Census of Population and Dwellings.

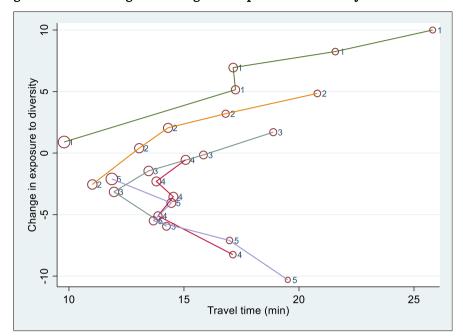


Figure 2: Commuting and changes in exposure to diversity

Note: Numbered labels refer to quintiles of residential diversity, with 1 as lowest diversity and 5 as highest. Each line shows, for a particular residential quintile, the combinations of commuting time and diversity change for commuters travelling to each quintile of the workplace diversity distribution. The underlying numbers are included in panels (b) and (c) of Table 6.

Summary and discussion

We have examined the well-documented residential segregation that exists in the Auckland Urban Area and analysed the impact that this has on different groups' exposure to difference and exposure to diversity, using data from the 2013 Census of Population and Dwellings. As noted at the outset of the paper, the contribution of the paper is built on two novel treatments of the census data: first, using both country of birth and ethnicity to capture diversity among 49 distinct cultural groups, and second, the measurement of diversity at home and at work.

We have captured cultural diversity based on detailed country of birth and, for New Zealand-born, by ethnicity as well. We have found that, despite the tendency of all groups to locate disproportionately with members of their own cultural group, people have on average an 82 per cent chance of encountering someone from a different group in their residential neighbourhood (Table 3, panel (a)) or a 79 per cent chance in the

neighbourhood where they work (Table 3, panel (b)). The most notable exception to this overall pattern is the largest group — New Zealand-born people of European ethnicity. They account for 35 per cent of usually resident adults in Auckland and have only a 58 per cent chance of meeting someone from a different cultural group where they live. Other groups with relatively low exposure to difference include people from South Africa, China, Fiji and England.

The third novel contribution of the paper is our analysis of how commuting affects Aucklanders' exposure to diversity. In order to examine the importance of workplace exposure to diversity, we focus on intra-Auckland commuters. New Zealand-born Europeans account for an even higher proportion of employed residents (55 per cent), so when we focus on commuters, we find that this group has only a 45 per cent chance of encountering someone from a different group either at home or at work (Table 4, panel (a)). Even with this low exposure to difference, however, New Zealand-born Europeans, like all other groups, have a fairly high exposure to diversity, due to potential interactions with people from a diversity of other groups. New Zealand-born Europeans, New Zealand-born European/Māori, South Africans, and English have the lowest overall exposure to diversity, though even for them, diversity is over 77 (Table 4, panel (b)), meaning that there is at least a 77 per cent chance that a random meeting in their home or work neighbourhoods will be between two people from different groups. For two of these groups, New Zealand-born European and English, exposure at work raises their average exposure.

Commuting raises exposure to diversity particularly strongly for groups for whom residential exposure is relatively low. This includes people with high educational attainment, as well as people with lower than median diversity in their residential neighbourhood. The people whose exposure increases most as a result of commuting incur longer travel times, which is at least suggestive of possible wage advantages associated with diverse workplaces, or people willing to incur higher commuting costs to live in less diverse neighbourhoods. As noted above, further work is needed to investigate the links between exposure, wages and rents.

Some caveats are, or course, in order when interpreting the patterns that we report. All the exposure measures that we consider capture only potential exposure. It is possible that exposure may lead to more positive attitudes to immigrants, at least at relatively low levels of exposure (Ward,

Masgoret, & Vauclair, 2011). However, for any of the hypothesised productive advantages of diversity (Page, 2007), there need to be interactions between diverse groups. Our findings, therefore, need to be interpreted as identifying the scope for interactions rather than their occurrence.

Our findings clearly identify the largest group — New Zealand Europeans — and residents born in England as the groups with the lowest exposure to diversity in the neighbourhoods where they live. These are also the groups for which exposure to diversity at workplaces plays the strongest role in raising their overall exposure to diversity, despite relatively low exposure to diversity there as well. If the potential benefits of diversity are to be realised, the greatest gains may result from increasing the exposure of the largest group to diversity — either in workplaces, or in the neighbourhoods where they live.

Disclaimer

Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975. All frequency counts using census data were subject to base three rounding in accordance with Statistics New Zealand's release policy for census data. The views, opinions, findings and conclusions or recommendations expressed in this paper are strictly those of the authors and do not necessarily represent, and should not be reported as, those of the organisations at which the authors are employed.

Notes

- 1 Corresponding data from the 2018 Census were not available at the time of writing.
- See Grbic, Ishizawa, & Crothers, 2010; Ishizawa & Arunachalam, 2014; Johnston, Poulsen, & Forrest, 2002, 2003, 2005, 2007, 2008, 2011; Manley, Johnston, Jones, & Owen, 2015; Maré & Coleman, 2011; Maré, Coleman, & Pinkerton, 2011; Maré, Pinkerton, & Poot, 2016; Maré, Pinkerton, Poot, & Coleman, 2012; Mondal, Cameron, & Poot, 2019; Poulsen, Johnston, & Forrest, 2000.
- 3 Access to census microdata is subject to strict conditions and requirements. See the disclaimer note at the start of the paper.

- These 'intra-urban commuters' account for 92 per cent of those whose workplace could be coded to an area unit. This calculation excludes 57,612 employed residents of the Auckland Urban Area whose workplace cannot be coded to a specific area unit. Many, but not all, of these excluded workers are likely to work within the Auckland Urban Area. For instance, 22,455 residents were recorded as working the Auckland Territorial authority, most of which falls within the Urban Area boundary.
- We replicated all our analyses with the 'not-stated' group omitted from diversity calculations and the results were not meaningfully different.
- 6 'New Zealander' is recoded as 'New Zealand European'.
- Where a person reports more than three ethnic identifications, we use three randomly chosen responses. For our analysis, this an innocuous restriction, since all responses of three or more ethnicities are combined.
- 8 The full classification that we use is summarised in the Appendix. The table also shows, for each country of birth code, the ethnicity classifications that account for either 10,000 people or at least 15 per cent of the country of birth group.
- 9 For a review of a wide range of measures of segregation and diversity, see, for example, Nijkamp, Poot, and Bakens, (2015).
- In the extended notation of Lieberson (1981), our measure is ${}_{g}P_{\tilde{g}}^{*}$, the exposure of group g to residents from other groups (\tilde{g}), where ${}_{g}P_{\tilde{g}}^{*}=1-{}_{g}P_{g}^{*}$. Subsequent studies of segregation often also examine exposure of groups to the majority (M) group ${}_{g}P_{M}^{*}$.
- Using 49 cultural groups, the maximum is $\left(\frac{G-1}{G}\right) = \frac{48}{49} = 0.98$. Multiplying this term by G/(G-1) = 1.02 would create a 'modified fractionalisation index' with a minimum of 0 and a maximum of 1. Our findings are robust to the use of the modified fractionalisation index. We use the unmodified index because of its appealing probabilistic interpretation.
- This processing was done using QGIS: QNEAT3 QGIS Network Analysis Toolbox 3 v1.0.2, available at https://github.com/root676/QNEAT3. Road speeds were based on estimates that reflect road surface and sinuosity, provided by Beere (2017), following Brabyn and Skelly (2002).

Where people live and work within the same meshblock, travel distance is approximated by the mean radial distance within a circle having the same land area as the meshblock, using the formula $Area^{0.5}128/(45\pi^{1.5})$ (Apsimon, 1958). Travel time is underestimated in these cases, reflecting only the time taken to move from the meshblock centroid to and from the nearest point of the road network.

14 The measures are not entirely consistent. For census data, mode is reported for a single day, and time and distance are calculated for travel to workplace of main job in the previous seven days. 2011–2014 Travel Survey measures are based on a two-day travel diary covering all jobs.

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Appendix: Groupings used for diversity measurement

Number of people (2013) (15% or 10,000) New Zealand 509,988 Ethnicity: NZ European Ethnicity: Māori 359,229 NZEUR (70.4% of NZ-born) Ethnicity: NZ European Māori 38,505 MAO (7.6% of NZ-born) Ethnicity: Other single ethnicity 30,852 Other1 (6.0% of NZ-born) Ethnicity: Samoan 14,937 Samoan (2.9% of NZ-born) Ethnicity: Chinese 6,060 Chinese (1.2% of NZ-born) Ethnicity: Tongan 5,721 Tongan (1.1% of NZ-born) Ethnicity: Nuese 6,060 Chinese (1.2% of NZ-born) Ethnicity: Indian 4,920 Indian (1.0% of NZ-born) Ethnicity: Nuean 2,613 Niuean (0.5% of NZ-born) Ethnicity: Nuean 2,613 Niuean (0.5% of NZ-born) Ethnicity: All other combinations 60,798 NZ EUR (70.6%) India 39,861 Indian (96,6%) Fijian Indian (15.4%); Indian (65.5%); Other1 (15.6%) Samoa 32,148 Samoan (94,5%) NZ EUR (38,8%); South Africannec (43.1%); Korean (98,1%) Korea Republic of Conga 16,368 Tongan (97.1%) Fijian Indian (15.4%); Indian (65.5%); Other1 (3.5%)	Birthplace		Main ethnicities
 Ethnicity: NZ European			
• Ethnicity: Māori 38,505 MAO (7.6% of NZ-born) • Ethnicity: NZ European-Māori 32,070 NZEUR_MAO (6.3% of NZ-born) • Ethnicity: Other single ethnicity: 30,852 Other1 (6.0% of NZ-born) • Ethnicity: Samoan 14,937 Samoan (2.9% of NZ-born) • Ethnicity: Cook Islands Māori 6,432 Cook Islands Māori (1.3% of NZ-born) • Ethnicity: Tongan 5,721 Tongan (1.1% of NZ-born) • Ethnicity: Indian 4,920 Indian (1.0% of NZ-born) • Ethnicity: NZ European/Samoan 3,621 NZ European-Samoan (0.7% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: All other combinations 60,798 NZ EUR (70.6%) China, People's Republic of England 60,798 NZ EUR (70.6%) India 39,861 Indian (96.6%) Fiji 35,919 Other1 (15.6%) Samoa 32,148 Samoan (94.5%) South Africa 25,692 NZEUR (38.8%); South Africannec (43.1%); Other1 (15.6%) Korea Republic of 17,469 Korean (98.1%) Tonga 16,368 Fi		509,988	
• Ethnicity: NZ European Māori 32,070 NZEUR_MAO (6.3% of NZ-born) • Ethnicity: Other single ethnicity 30,852 Other1 (6.0% of NZ-born) • Ethnicity: Samoan 14,937 Samoan (2.9% of NZ-born) • Ethnicity: Cook Islands Māori 6,432 Cook Islands Māori (1.3% of NZ-born) • Ethnicity: Tongan 5,721 Tongan (1.1% of NZ-born) • Ethnicity: NZ European/Samoan 4,920 Indian (1.0% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: All other combinations 5,025 All other combinations (1.0% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: All other combinations 5,025 All other combinations (1.0% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: All other combinations 1,0% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: Niuean 5,025 All other combinations (1.0%	• Ethnicity: NZ European	359,229	NZEUR (70.4% of NZ-born)
Māori 32.070 NZEUR_MAO (6.3% of NZ-born) Ethnicity 30.852 Other1 (6.0% of NZ-born) Ethnicity: Cook Islands Māori 14.937 Samoan (2.9% of NZ-born) Ethnicity: Chinese 6.060 Chinese (1.2% of NZ-born) Ethnicity: Indian 5.721 Tongan (1.1% of NZ-born) Ethnicity: Indian 4.920 Indian (1.0% of NZ-born) Ethnicity: NZ European/Samoan 2.613 Niuean (0.5% of NZ-born) Ethnicity: All other combinations 2.613 Niuean (0.5% of NZ-born) Ethnicity: All other combinations 6.769 Chinese (99.1%) China, People's Republic of England 60.798 NZ EUR (70.6%) India 39,861 Indian (96.6%) Fiji 35,919 NZ EUR (70.6%) Samoa 32,148 Samoan (94.5%) South Africa 25,692 NZEUR (38.8%): South Africannec (43.1%); Korea Republic of 17,469 Korean (98.1%) Tonga 16,368 Tongan (97.1%) Philippines 15,525 Filipino (90.4%) Australia 8,772 C	 Ethnicity: Māori 	38,505	MAO (7.6% of NZ-born)
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• Ethnicity: Cook Islands Māori 6,432 Cook Islands Māori (1.3% of NZ-born) • Ethnicity: Chinese 6,060 Chinese (1.2% of NZ-born) • Ethnicity: Indian 4,920 Indian (1.0% of NZ-born) • Ethnicity: Niuean 3,621 NZ European Samoan (0.7% of NZ-born) • Ethnicity: Niuean 2,613 Niuean (0.5% of NZ-born) • Ethnicity: All other combinations 60,798 NZ Eur opean Samoan (0.7% of NZ-born) • Ethnicity: Niuean 5,025 All other combinations (1.0% of NZ-born) • Ethnicity: Niuean 6,075 NZ Eur (70.6%) • Ethnicity: Niuean 5,025 All other combinations (1.0% of NZ-born) • Ethnicity: Niuean 6,078 NZ Eur (70.6%) India 39,861 Indian (96.6%) India 39,861 Indian (15.4%); Indian (65.5%); Other (15.6%) Samoa 32,148 Samoan (94.5%) South Africa 25,692 NZEUR (38.8%); South Africannec (43.1%); NZEUR (39.1%) Korea Republic of 17,469 Korean (98.1%) Tonga 16,368 Tongan (97.1%) Philippines 15,525 F		30,852	Other1 (6.0% of NZ-born)
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		5,373	
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	Sri Lanka	5,322	Sri Lankan (76.9%); nec (18.3%)

Birthplace		Main ethnicities
Number of people (2013)		(15% or 10,000)
Maritime South-East Asia (nfd)	5,127	Chinese (36.5%); Other SE Asian (30.5%)
North-East Asia (nfd)	5,037	Chinese (89.7%)
Southern and Central Asia (nfd)	4,986	Other Asian (78.8%)
Japan	4,311	Japanese (92.3%)
South America (nfd)	4,194	Latin American (83.0%)
Netherlands	4,182	Dutch (71.9%); NZEUR (17.3%)
United Kingdom (nfd)	3,786	British (16.9%); NZEUR (55.0%)
Germany	3,519	German (58.4%); NZEUR (29.3%)
Thailand	3,450	Other Southeast Asian (85.5%)
Zimbabwe	3,252	African (25.5%); NZEUR (39.0%); Other Eur (19.1%)
Southern and East Africa (nfd)	3,207	African (43.5%); NZEUR (22.9%);
Canada	2,811	NZEUR (43.9%); Other European (42.0%)
Ireland	2,673	Irish (63.5%); NZEUR (30.8%)
Western Europe (nfd)	2,625	NZEUR (35.3%); Other European (53.1%)
Not Stated	67,482	Not stated (85.8%)
Other	8,325	NZEUR (20.8%); Other1 (16.6%); Other Eur (22.7%)
	1,035,1	
Total Population	50	

Notes: (1) All counts are randomly rounded to base 3 to maintain confidentiality.

Groupings of countries of birth and ethnic identifications are based on all adult residents of the Auckland Urban Area.

- (2) Listed ethnic groupings are those that account for more than 15 per cent of the country of birth population, or that account for more than 10,000 people.
- (3) nfd: not further defined.

Source: 2013 Census of Population and Dwellings.

Whose Dividend? Diversity as a Selling Point in Urban Development Projects in Auckland

JESSICA TERRUHN*

Abstract

As a result of new policy initiatives that aim to address Auckland's housing shortage and unaffordability, the city has seen a large number of recent housing development projects. This paper critically discusses the discursive role that the idea of a diversity dividend plays in such urban development projects with a focus on the Auckland neighbourhood of Northcote. The Northcote Development is exemplary of current large-scale developments in Auckland: it takes place in a socio-economically deprived neighbourhood with a large area of land owned by Housing New Zealand. In the course of redevelopment, this land will be intensified as well as partially privatised by offering a mix of affordable and market homes alongside public housing. Based on a content analysis of planning documents, website content and community publications pertaining to the Northcote Development, the paper argues that diversity is explicitly mobilised to justify processes that amount to state-led gentrification. This is particularly evident in discourses that frame tenure mix and a likely influx of higher-income earners as a way of achieving greater socio-economic diversity that is said to benefit all neighbourhood residents. While existing ethno-cultural diversity is portrayed as a core strength, it is increasingly transformed into a commodity, especially as part of a food culture attractive to new residents. The discussion situates the findings in critical scholarship on the diversity dividend to argue that such discourses of socio-economic diversity ultimately benefit developers and gentrifiers, while risking direct and indirect displacement of low-income residents.

Keywords: diversity dividend, gentrification, urban development, Auckland, Northcote

uckland is a globalising and rapidly growing city. Over the three most recent years that data are available for (2015–2017), the city has been growing by approximately 800 new residents every single

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week (ATEED, 2018). At the same time, the city has experienced steep increases in inequalities that play out spatially in residential segregation (Terruhn, 2020). In response to both a housing shortage and considerable housing unaffordability, a large number of small and large-scale housing development projects are taking place across the city, which will result in immense change to the urban landscape of many communities, especially those that have been earmarked to accommodate large numbers of new residents. The neighbourhood of Northcote is one of these. Described as one of the most important regeneration projects in Auckland (Isthmus, n.d.), this neighbourhood will, as explained in more detail later, undergo significant population growth and a major transformation of its built environment.

At the metropolitan level, Auckland Council has developed visions of Auckland as the "most liveable city" (Auckland Council, 2012) and, more recently, a "world-class city" (Auckland Council, 2017). Much of this narrative is geared towards economic growth, competition and diversity. The notion of a *diversity dividend* is a central element of the city's branding. However, the Auckland Plan 2050 also specifically recognises inequalities and their spatial patterning, housing unaffordability and structural discrimination as key challenges for the city (Auckland Council, 2018, p. 13). As Ross, McNeill, and Cheyne (2017) argue based on their analysis of policy documents including multiple versions of the Auckland Plan, Auckland Council promotes fairness and urban justice but does so rather implicitly within discourses of quality intensification. Conversely, as Haarhoff, Beattie, and Dupuis (2016) show, justifications for densification now revolve primarily around liveability rather than environmental considerations of sustainability.

This paper examines how these aims translate at the level of planning neighbourhood regeneration projects such as the one in Northcote. Panuku Development Auckland (referred to as Panuku in the remainder of this paper), is a Council Controlled Organisation tasked with leading these redevelopments. It states that it aims to build "great places to live" and improve residents' "quality of urban living" in the context of extensive regeneration and densification of housing (Panuku Development Auckland, n.d.(a)). But what does this look like, and what role do diversity and equality play in the visions for Northcote? This paper reports on a qualitative analysis of the discursive use of diversity and equality in planning documents that guide the Northcote Development and other publicly

available texts that disseminate information and promote the development. The analysis demonstrates that whilst diversity discourses are central to how the neighbourhood is described and imagined, terms that suggest a consideration of the need to address inequalities is entirely absent from the documents. Furthermore, the documents instrumentalise diversity as an asset. Current ethno-cultural diversity is described as a core strength of the existing neighbourhood, but at the same time, the documents claim that the Northcote Development will create greater diversity. This new diversity primarily refers to income diversity. Social mix rhetoric and references to greater lifestyle diversity are mobilised as beneficial for revitalisation. In this context, diversity becomes a vehicle to justify the wholesale transformation of the neighbourhood in order to attract diverse newcomers. This ultimately obscures the likelihood of gentrification as an outcome of the Northcote Development and revitalisation project.

The following section canvasses the role of diversity in critical scholarship on cities and in urban policy and planning. The remainder of the paper focuses on the Northcote Development, providing context and detailing the research design, before outlining key findings and discussing implications.

Urban regeneration and the diversity dividend

Diversity as a concept, value and discourse has gained much traction in urban policy and planning practices and has also been a key concern in urban studies scholarship. For some, diversity is a core value in scholarly visions of urban justice. For Amin (2006), for instance, diversity is a crucial element of "the good city". In urban centres, he notes, diversity is a demographic fact that needs to be accounted for in policy and planning in order to ensure universal access and equitable outcomes for all urban residents. Speaking against the grain of current discourses of cohesion that are based on calls for assimilation, he calls for the recognition of "the right to difference that contemporary urban life demands" (Amin, 2006, p. 1012). In the good city, diversity is not just about a right to difference but forms part of an "ever-widening habit of solidarity" that works towards a common good for all, and especially for marginalised social groups. Diversity is equally important in Fainstein's (2010, 2014) work on "the just city". For Fainstein, diversity, defined in terms of recognising difference and the existence of discrimination of particular social groups, is one cornerstone of

urban justice alongside equity and democracy. Recognising the potential for tensions between these three concepts, she argues that neither one on their own is sufficient for achieving urban justice because, for instance, greater equity alone may not be enough to address issues of recognition nor will greater inclusiveness of difference necessarily lead to a more equitable city.

Critics, however, have argued that the concept of diversity is not only an inadequate tool for achieving urban justice but worse, one that perpetuates persistent and growing inequalities. Such critiques rest on observations that the notion of diversity has been increasingly appropriated to serve economic growth agendas. In the context of the US, de Oliver (2016) argues that diversity used to be a social value employed to counter racism and widespread spatial segregation but is now largely a commodity far removed from considerations of justice. Raco and Kesten (2018) further argue that diversity diverts attention away from growing socio-economic inequalities and that diversity is used in a way that only benefits a few, rather than those communities most in need. Similarly, Steil and Delgado (2019) propose that instead of a diversity perspective, urban policy and planning need to adopt an "anti-subordination" approach that actively counters the effects of racism and historical discrimination as well as of contemporary policies that will further disadvantage specific social groups even if they may seem neutral.

Indeed, over recent decades – which have seen cities turn into neoliberal entrepreneurial entities in competition with each other – the notion of a diversity dividend has gained traction in urban policy and with it, diversity has become a policy goal. Seen as a catalyst for innovation, creativity and economic growth (Florida, 2002), diversity is desirable and sought after and is, conversely, a marketable asset that signals the city's attractiveness to potential young, affluent, highly skilled migrants and investors. As such, cities tend to promote "cultural diversity without social justice" (de Oliver, 2016, p. 1312) for the benefit of those who are already privileged.

Especially in the context of urban regeneration, diversity itself – and particularly culture (Miles & Paddison, 2005) – is mobilised to create the "diverse, vibrant, urban environments" that make cities attractive to talent, capital and investment in the context of global interurban competition (Syrett & Sepulveda, 2011, p. 495). As Ahmadi (2018) argues based on research in Toronto, regeneration projects often involve central areas of

cities, especially those that attract businesses and tourism, rather than deprived neighbourhoods (see also Vormann, 2015). She further argues that such politically and economically motivated mobilisations of diversity entail the social construction of hierarchies and dichotomies, such as that "between 'desirable' and 'undesirable' diversity" (Ahmadi, 2018, p. 65). The difference between the two is determined by whether this diversity can be turned into profit or not (Ahmadi, 2018). Especially in the context of competition, diversity is tied to discourses of liveability. Within such liveability discourses, cities "market ... themselves as being built on a foundation of 'inclusive' neighbourhoods capable of harmoniously supporting a blend of incomes, cultures, age groups and lifestyles" (Rose, 2004, p. 281).

Increasingly, diversity is also mobilised in development projects that involve the regeneration of public housing areas. Projects, like the Northcote Development, that involve turning public housing areas into a denser mix of public and private dwellings have become prevalent in attempts to supply a great number of housing through public-private partnerships (Arthurson, Levin, & Ziersch, 2015). These mixed developments usually offer a range of housing and tenure types as well as price points. Aiming to increase the housing supply for rapidly expanding urban populations and to address housing unaffordability, these developments also explicitly claim to promote greater diversity. The benefits of this diversity are said to emanate from improved neighbourhood amenities, a boost in local business activity as well as opportunities for 'social mixing' between residents of different socioeconomic backgrounds. Social mixing has been widely adopted as a policy and planning objective in many Western cities (Bridge, Butler, & Lees, 2012). Even though, like diversity more broadly, social mix approaches were at one time tied to considerations of "spatial equity" (Rose et al., 2013, p. 445), they are now rooted in widely criticised yet continuously hegemonic theories of neighbourhood effects (Slater, 2013). According to these theories, the environment people live in affects their life chances. Subsequently, improving deprived neighbourhoods and attracting higher-income residents is regarded as a way of addressing poverty and deprivation. Greater diversity is seen as a tool to uplift low-income residents through building bridging capital and, by extension, as a way to remedy issues of socioeconomic deprivation through diluting areas of concentrated poverty. Rose et al.'s (2013) multi-sited study of how social mix was conceptualised by local policy actors in locations as dispersed as Canada, France and the UK,

showed that while there was some variation based on local histories and urban conditions, similar neoliberal discourses were guiding the implementation of mixed-tenure projects. These included discourses of individual choice and boosting the local economy as well as arguments for positive gentrification based on neighbourhood effects arguments (Rose et al., 2013).

Many scholars have cautioned that developments that are based on social mix perspectives amount to state-led gentrification because the rhetoric of social mix refers to an influx of higher-income earners into deprived communities, rather than the other way around (Bridge et al., 2012; Cole, 2015; Lees, Slater, & Wyly, 2008). Concentrations of poverty are seen as problematic while concentrations of wealth are not. As such, an influx of higher-income earners, hidden behind a rhetoric of diversity and mix, is tasked with breaking up concentrations of socio-economic deprivation. Regardless of whether there are any merits to the social mix perspective, research has shown that in neighbourhoods that have undergone such redevelopments, social diversity is temporary, and over time, communities become more homogenous. In an edited collection that revolves around the question of whether mixed communities constitute "gentrification by stealth" (Bridge et al., 2012), Shaw (2012) argues that while gentrification may not necessarily be the overriding objective, mixed housing is nevertheless a "Trojan horse" for it. Importantly, Fergusson (2018) has recently shown that not all redevelopments of public housing use a social mix approach but that they are predominantly employed in areas with high land value that, therefore, have the potential for gentrification. This observation strengthens the claim that social mix rhetoric is actively used as a vehicle for gentrification.

In policy and planning, the diversity dividend has become a buzzword. Even though diversity is also seen to pose challenges (for instance to cohesion), it is largely portrayed as beneficial for everyone. However, the notable shifts from justice to amenity just described raise the question of who benefits from these contemporary diversity discourses. Diversity – in its desirable, commodified incarnation – satisfies what Butcher (2019, p. 390) refers to as a "desire for conviviality from a position of privilege" that has become the basis of a "new kind of social distinction" (Tissot, 2014, p. 1193) for middle-class residents (see also Blokland & Van Eijk, 2010). These phenomena also underlie Steil and Delgado's (2019) main criticism of

diversity, which rests on its prevalent use as "a characteristic of urban life that may help dominant individuals overcome irrational prejudices through the free flow of ideas when exposed to diverse peers" (p. 42). As such, diversity benefits those already privileged.

Context

The suburb of Northcote is situated on Auckland's North Shore, just beyond the Harbour Bridge which links the area to Auckland City. Northcote is typical of Auckland's suburban landscape insofar as it largely features standalone homes in a residential area serviced by a local town centre. Its resident population of approximately 9000 can be described as diverse with respect to socio-economic and educational backgrounds, professions, age groups and ethnic profile. Northcote is a medium-income community but there is significant variation. Especially in the Census Area Unit (CAU) of Tuff Crater, which is the site of the Northcote Development, the median personal income (NZ\$23,600) is considerably lower than that of the neighbouring CAU of Ocean View (NZ\$28,600) and for Auckland as a whole (NZ\$29,600) (Statistics New Zealand, 2013a, 2013b). This reflects the strong presence of public housing in this part of Northcote. With a deprivation index score of 8, Tuff Crater is an outlier on Auckland's North Shore where deprivation scores otherwise do not exceed 5 and are often lower. As housing has become less affordable, home ownership among Northcote residents has decreased from 56 per cent to 44 per cent between 2001 and 2013. Northcote's population is age-diverse but there is a higher-than-average presence of residents aged 65 and over. With respect to migrant populations and ethno-cultural and linguistic diversity, at the time of the last available Census in 2013, more than 40 per cent of all Northcote residents were born overseas. Since the 1990s, Northcote has become home to a growing number of migrants from Asia. The share of residents under the broad category 'Asian' has increased from just over 20 per cent in 2001 to 28.5 per cent in 2013. The largest ethnic group within the broad 'Asian' category were people identifying as Chinese, who made up 17 per cent of residents. The neighbourhood is also home to many Pasifika (nearly 10 per cent) and Māori (8.5 per cent) residents, many of whom are low-income public housing tenants.

Northcote is currently undergoing a large-scale housing development programme and the revitalisation of the neighbourhood's town

centre is scheduled to begin in two years' time. As part of the housing development, approximately 300 public housing dwellings on Housing New Zealand-owned land have been demolished and will be replaced with up to 1500 new dwellings on the same land. The planned town centre will include an additional 750 homes. As a result of these two projects, Northcote's resident population is expected to increase by approximately 4500–5000 people within the next few years. To illustrate the extent of this population growth, the local primary school, which currently has a role of 71 students, expects to enrol nearly 1000 students in 10 years' time (HLC with Panuku, 2018, p. 4).

The Northcote Development is one of several large development projects currently taking place in Auckland. Alongside many smaller projects across the city, these housing developments are designed to address the city's housing shortage and growing housing unaffordability. Like the other large-scale developments, the Northcote Development forms part of the Auckland Housing Programme, an initiative by Housing New Zealand (HNZ) and its subsidiary developers Homes.Land.Community (HLC). The Unitary Plan, a document that guides Auckland's growth strategy, identified areas that were amenable to densification and the Northcote Development area is one of many designated Special Housing Areas that enable swift developments within the current urban boundaries in a move towards a more compact city. This means that existing communities are undergoing significant changes to their demographic make-up and built environment. In concert with densification of housing, there are also moves towards postsuburbanisation in Auckland, which means that traditional residential suburbs are gradually turned into higher-density, mixed-use centres (Johnson, Baker, & Collins, 2019).

Notably, all large-scale brownfield developments in Auckland take place in neighbourhoods that rank highly in the index of relative deprivation.² In part, this is because these neighbourhoods have large areas of HNZ-owned land that is available for extensive development. The Unitary Plan has predominantly earmarked low-income communities, including Northcote, as zones for mixed housing while high-income communities have largely been "protected under heritage rules" (Cole, 2017, p. 7). This means that disadvantaged communities are more likely to carry the effects of dramatic neighbourhood change than affluent neighbourhoods are.

As is the case for the other large-scale brownfield housing developments in Auckland, the Northcote Development is characterised by a mixed housing approach. Of the 1500 new dwellings built on HNZ land, 400 will be retained for public housing tenants while the remainder will be privatised and offered to buyers as a mix of 'affordable' and market homes. All 750 homes that will be part of the new town centre are for the private market. This means that, overall, 80 per cent of all new housing will be for the private market. This approach to redevelopment reflects the origins of the Auckland Housing Programme under the National Government and a strong emphasis on encouraging both housing supply and home ownership. However, as Gordon et al. (2017) have pointed out in their discussion of the redevelopment of the Auckland neighbourhood of Glen Innes, the privatisation of land in the face of the city's housing unaffordability crisis is concerning. Even though affordable housing is included in these developments, the mixed-tenure approach directly and indirectly threatens to displace low-income residents and primarily benefits people on higher incomes. In light of these processes, a recent OECD report has suggested that more resources should be allocated to "assist low-income renters, whose well-being has suffered most from declining affordability" (OECD, 2019).

Alongside the housing redevelopment sits the planned revitalisation of the neighbourhood's town centre. Known as Northcote Central, the area consists of a mix of 90 retail and food outlets, services and community organisations. The Northcote town centre reflects the neighbourhood's ethno-cultural and socio-economic make-up in that it caters to a low-income population and a large Asian migrant population, to the extent that Northcote Central is described as an ethnic precinct (Fichter, 2013; Spoonley & Meares, 2011). Northcote Central was the first publicly owned town centre and continues to be owned by Auckland Council, making it amenable to redevelopment. Even though there is currently little indication as to what will happen to existing businesses and services, the imagery on the Town Centre Masterplan (Panuku Development Auckland, 2019b) suggests a wholesale transformation of the area that leaves few traces of what has come before. The documents analysed in this study suggest that there will be significant disruption to the retail landscape. In 2010, the North Shore Council warned that any "rigorous redevelopment could result in higher rents, which could drive out some of the shops that add to the local character and provide valuable daily services to the community" (North Shore City

Council, 2010, pp. 31–32). However, in 2016, plans included references to Panuku's mandate to "negotiate the surrender of the leases with the existing leaseholders or acquire the leasehold interests using its compulsory acquisition powers to give effect to urban renewal" (Panuku Development Auckland, 2016b, p. 15).

Research design

This paper draws on a qualitative content analysis of documents pertaining to the housing redevelopment and town centre revitalisation of Northcote as a valuable source for a close examination of the discursive role diversity plays in policy, planning and developers' visions of 'the new Northcote'. I selected publicly available policy and planning documents as well as website content from organisations and corporations involved in the project (such as the Council Controlled Organisation Panuku, HLC and Isthmus Group) as well as five issues of *Everyday Northcote*, a biannual neighbourhood magazine published by HLC with Panuku. The policy and planning documents include the Northcote Town Centre Plan (2010) and all those plans Panuku lists as "the plans guiding Northcote's regeneration" (Panuku Development Auckland, n.d.(b)): the Northcote High Level Project Plan (2016), the Northcote Framework Plan (2016) and the Northcote Town Centre Benchmark Masterplan (2019).

The website www.northcotedevelopment.co.nz addresses current as well as potential future residents and visitors. Initially, sections on 'How does it affect me?' with subsections on 'I am a tenant/neighbour/local resident' and 'What is the area like?' focused primarily on current residents. In June 2019, the website content was updated to showcase new apartments and include a 'For sale' tab. By October 2019, a new 'Visit' tab had been added to promote the neighbourhood as a visitor destination. The *Everyday Northcote* magazine is designed to keep current residents informed of the development and, according to Isthmus (n.d.), "to hero the people of Northcote and their stories".

Using a qualitative content analysis approach, the interpretive process consisted of several stages. After an initial close reading of all documents to establish a broad sense of authorship, audience and message of these texts, I systematically searched the documents and recorded all instances of terms relevant to the analysis. The result of the search is

documented in Table 1. I then analysed all appearances in context and reread all documents in order to examine the discursive role diversity plays in descriptions and visions of the neighbourhood.

The following section outlines the findings of the content analysis. Following an initial overview of the prevalence of terms related to diversity and equality in the canvassed documents, the section highlights key aspects of the work diversity does in planning and marketing the housing development and transformation of the Northcote town centre.

Diversity and equality in the Northcote Development

The search for and tally of terms for the qualitative analysis proved very insightful, insofar as this mere initial count conveys a clear sense of which concepts are foregrounded and which ones are marginalised or entirely omitted in descriptions of the existing community and visions of the new Northcote. As Table 1 shows, the term 'diversity' itself appears recurrently (39 times), alongside notions of 'difference' (52 times) and 'mix' (85 times). Mentions of culture were particularly frequent, appearing 111 times across the documents.

In stark contrast, terms related to socio-economic status and inequalities were almost or completely absent from these texts. Given that Northcote, and the development area in particular, is home to large numbers of low-income residents and public housing tenants, this is surprising. Further analysis showed that the few (16 times) appearances of 'income' reflect the anticipation of greater income diversity in visions of post-development Northcote. While 'poor' is mentioned six

times, these appearances refer exclusively to the built environment and the related noun 'poverty' was not mentioned at all. Particularly striking is the complete absence of the terms 'inequalities' or 'equality'.

Overall, these figures indicate that diversity, and more specifically cultural diversity, plays a prominent role in the descriptions and visions of Northcote, whilst considerations of socio-economic disparities are not only sidelined but entirely absent from the planning discourse guiding the development. The roles culture, diversity and mix played are explored in detail below.

Table 1: Frequency of search terms in analysed documents

Terms	Number
Culture(s) / cultural(ly)	111
Mix / mixed	85
Different / difference(s)	52
Diverse / diversity / diversities	39
Income(s)	16
Ethnic / ethnicity / ethnicities	11
Poor	6
Deprived / deprivation	2
Poverty	0
(Un)equal / (in)equality / inequalities	0

Diversity now and then: From culture to income and lifestyle

The findings discussed in this section demonstrate a notable shift in depicting diversity from descriptions of the existing neighbourhood that foreground its ethno-cultural diversity to visions that centre on a diversity of incomes and lifestyles as a positive outcome of the development.

The analysed documents portray diversity – and more specifically ethno-cultural diversity – as a longstanding, important and positive characteristic of the existing neighbourhood and as a feature that constitutes a key strength of the local community. The texts contain manifold references to Northcote as a "culturally diverse community", "multicultural" and made up of "culturally diverse groups" of people or of "different cultural groups". With reference to the most prominent ethnic groups, the documents variously describe Northcote as a multicultural community with a "truly multicultural" or "truly multi-ethnic" town centre.

References to other facets of diversity are much less frequent in these documents and often the focus ultimately remains on ethnicity and culture, as the following quote illustrates: "The centre is also well used by a cross-section of people: the young, elderly, families, professionals and people from different cultures making it a truly multi-ethnic centre" (North Shore City Council, 2010, p. 18). References to residents' socio-economic backgrounds are especially rare and hardly occur beyond a mention of the neighbourhood's median household income. However, one occurrence stands out. Under the heading of 'Diversity', The Northcote Town Centre Plan

states: "The Northcote population with its strong mix of cultures contributes to a truly multicultural centre. The presence of a large number of HNZC properties further contributes to a strong identity and a unique community in Northcote" (North Shore City Council, 2010, p. 30). Notably, this passage does not refer to a diversity or mix of incomes but to the presence of public housing, and therefore by implication low-income residents (which are hidden behind "properties"). What is more, this passage presents culture and class as two separate entities, thereby obscuring the intersections between them. Consider the above extract together with the following text from the Northcote Development website. A tab labelled 'The Local Community' revealed the following description:

Northcote has a strong community spirit, aided by the many families that have lived in the area for a long time. The ethnic make-up of the suburb of Northcote differs from the Northcote Development area. Within Northcote, 66% of residents are of European heritage, 24% Asian and Maori and Pasifika residents make up 7% of the population each. In the development area, Pasifika are the largest group (41%), followed by European (27%), Asian (21%) and Maori (17%).

(https://northcotedevelopment.co.nz/about-us/community/)3

In line with the analysis so far, this description also puts ethnicity front and centre and in doing so fails to point to the fact that the difference in demographic profile that they chose to highlight reflects the stark overrepresentation of Pasifika and Māori amongst public housing residents in Northcote (and elsewhere).

Importantly, analysis revealed that whilst ethno-cultural diversity was explicitly upheld as a key strength of the neighbourhood, the presence of low-income residents was portrayed as a challenge. Under the heading 'Northcote Strengths and Challenges', The Northcote Framework Plan (Panuku Development Auckland, 2016a) explicitly bullet points as one key strength that Northcote is one of "the most culturally diverse residential and business communities on the North Shore, with strong Chinese, Korean, Māori, and Pacific presences" (p. 32). In the same section, the plan states that one of the challenges Northcote faces is its "contrasting and sometimes polarised communities in terms of levels of home ownership, income and backgrounds with pockets of concentrated socio-economic deprivation." Even though this statement implicitly speaks to tenure and income disparities, the mention of the concentration of socio-economic deprivation suggests that the challenge is posed by low-income residents. In the only other mention of

the phrase socio-economic deprivation, the same document notes that "the town centre remains a focal point for its increasingly diverse community, but there has been a lack of investment over the years in the buildings and immediate surrounds and socio-economic deprivation issues have become evident across parts of the community" (Panuku Development Auckland, 2016a, p. 30).

Even though strength is explicitly attributed to ethno-cultural diversity, for instance in references to a "strong mix of cultures" (North Shore City Council, 2010, p. 30), the specific powers that this kind of diversity harbours for the neighbourhood are often left unsaid. The 2010 Town Centre Plan refers to the neighbourhood's multicultural centre and presence of a variety of ethnic groups as a sign of distinction and the Northcote Central website refers to these as a source of uniqueness. With reference to its wider work as place-makers across Auckland, Panuku refers especially to Māori culture as "a point of difference" for Auckland as a whole. The paucity of clear statements as to the benefits of diversity reflect a wider established orthodoxy that ethnic diversity is a value in and of itself but the three instances that speak directly to the point suggest that diversity is regarded as a selling point for marketing the neighbourhood and wider Auckland. Such tropes mirror the hegemonic understanding of diversity as a marketable asset and generator of profit identified in international research (see, for instance, Ahmadi, 2018).

In visions of Northcote's post-development future, diversity remains an important feature. However, there were notable differences in comparison to the descriptions just discussed. For one, diversity is portrayed as an outcome of the redevelopment, rather than something that already exists. Secondly, whilst ethno-cultural diversity remains important, this new diversity is framed primarily around income. Thirdly, discussions of the new diversity are tied to discourses of improvement that, the analysis suggests, aim to create a more desirable diversity geared towards attracting new middle-class residents and consumers.

Analysis showed that the texts that advertise the development depict diversity as an anticipated outcome. Bearing in mind that ethnocultural diversity was also seen as an established characteristic and strength of the neighbourhood, this is somewhat surprising. For instance, in a promotional video (Hobsonville Land Company & Housing New Zealand, n.d.) the featured developers claim that as a result of the development, "a

wider range of people will be able to live in and enjoy Northcote". Similarly, the magazine *Everyday Northcote* (HLC with Panuku, 2017, p. 21) emphasises that the many newcomers will "bring greater breadth" to Northcote's resident population. Despite such verbal assertions of increasing diversity, much of the imagery used to illustrate the new Northcote seems to contradict this prediction. Analysis of imagery used in the promotional video as well as in renders used to depict Northcote's future population shows that these images are dominated by whiter, younger and ostensibly affluent people. Whilst images of the current population reflect the ethnic diversity of the neighbourhood adequately, in visions of the future, people of ethnic minority background are much less visible.

Even though the discourse of diversity as strength permeates descriptions of the existing neighbourhood, documents addressed at current residents also explicitly aim to make diversity palatable. The following paragraph, which appeared in the first issue of *Everyday Northcote* as part of an explanation of why Northcote had been selected for this extensive programme of housing and town centre redevelopment, illustrates this well.

CHANGING NEIGHBOURHOODS

Overseas research points to diversity being a key factor in the strength of a community. People feel happier and more satisfied with where they live when their community includes a mix of people of different ages and stages, incomes and ethnicities. Over the next six years the immediate neighbourhoods affected by the Northcote development will grow and change as new people move into the 800 new homes which will be sold to a cross-section of Aucklanders. These new people will bring greater breadth, and therefore strength, to their neighbourhoods.

(HLC with Panuku, 2017, p. 21)

This passage not only highlights diversity as an anticipated result of the Northcote Development, it also makes a case for it, claiming that the diverse newcomers will make the neighbourhood stronger and improve neighbourhood satisfaction.

Most notably, in visions for the future of the neighbourhood, income diversity plays a more prominent – and a positive – role. As discussed above, descriptions of the current neighbourhood refer to income only in descriptive statistics and otherwise as a challenge, with particular reference to pockets of socio-economic deprivation. In the plans laid out for the future of the neighbourhood, income diversity is an explicit goal of the development. For

instance, the key performance indicators formulated in the Northcote Framework Plan 2016 state that one goal of the development is to "create a place that supports a diverse mix of people (and incomes) who are actively engaged in and enjoy the benefits of living, working and playing in a successful and culturally rich place". A similar goal is articulated for attracting visitors who are hoped to be diverse with respect to "age, ethnicity, income, [and] origin" (Panuku Development Auckland, 2016a, p. 111).

Whilst the term 'income' itself appears infrequently, the notion of income diversity most strongly resonates in housing-related discourses of mixing. As outlined earlier, the Northcote Development is based on a mixed housing approach, offering private affordable and market homes alongside accommodation for public housing tenants. The documents repeatedly draw attention to the greater choice the redevelopment will offer. Importantly, this choice is presented as bringing with it a "mix of lifestyles" that, conversely, attracts more newcomers to the area.

Despite the social mix rhetoric, there is ample evidence to suggest that the development is geared towards higher-income earners and the private market. The High Level Project Plan openly refers to "increasing demand and values in Northcote [which] have created a new market context, with the area's market attractiveness deriving from close proximity and views to the CBD and an established cultural hub" (Panuku Development Auckland, 2016b, p. 14). The development is further portrayed as "a catalyst to the private sector" (Panuku Development Auckland, 2016a, p. 49) and HLC explicitly state that including market homes in neighbourhoods with social and affordable housing will make the neighbourhood more vibrant and diverse. Echoing neighbourhood effects theories, this discourse explicitly promotes the notion of positive gentrification, which means that rather than diversity being beneficial for everyone, it is the presence of higher-income earners that is beneficial for the neighbourhood (Fergusson, 2018; Rose et al., 2013). Indeed, "helping address social issues" is explicitly referred to as one key aspect of the development. Increasing the lifestyle mix - which appears to stand in for gentrification – will mean that "Northcote's people will have a strengthened sense of community and pride in the area. More people will want to move to and visit Northcote, attracted by the lifestyle mix, the renowned Asian food and easy connections to wider Auckland" (Panuku Development Auckland, 2016a, p. 49).

New, improved and vibrant: Attracting diversity

The discourse of attracting diverse newcomers to Northcote is intertwined with narratives of improvement. International research has identified discourses of decline and blight as typical tropes that justify regeneration and gentrification (Slater, 2018). In a similar though perhaps less pronounced vein, the analysed documents variously describe Northcote as "underperforming" or as "a dormant suburb in the process of reawakening" (Isthmus, n.d.). Describing Northcote as a suburb whose time has come, HLC proclaim "we're ... building a bigger and better community than exists at the moment" (Hobsonville Land Company & Housing New Zealand, n.d.). This is explicitly done in order to make the area more desirable. This discourse of improvement entails assumptions that the area is not currently desirable, which begs the question of who HLC and Panuku aim to attract.

Alongside the upgrade of public housing, discourses of improvement revolve particularly around the town centre. Even though the reviewed documents praise the existing town centre for its multicultural atmosphere (a point I will return to shortly), they also decry aspects of it that relate to class and income. The fact that the town centre predominantly offers "low value retail" - which arguably caters to its current residents - is given as one reason that the neighbourhood is "hard to love" (Panuku Development Auckland, 2016a, p. 32). The imagery of the Northcote Town Centre Benchmark Masterplan (Panuku Development Auckland, 2019b) leaves little doubt that Northcote Central is bound to undergo wholesale transformation with respect to the built environment, as well as its retail and hospitality landscape. Most of all, the town centre is imagined as the "vibrant heart" of the community, "a lively and welcoming heart that celebrates culture, and where business thrives and everyone's needs are met". As the Isthmus website states, "[A]t the town centre, reimagined for the future, there will be improved retail amenity that will accommodate a wider demographic, so the town centre caters to many, while holding onto identity and food culture as a way of bringing people together" (Isthmus, n.d.). Panuku and the Isthmus design studio re-envision Northcote as vibrant at day and by night, with retail, al fresco courtyard and laneway dining, events and festivals, and as a destination for visitors.

As the above quote shows, diversity is drawn on to argue that the new town centre will cater to a "wider demographic", mirroring narratives about housing mix. However, the text and visual analysis suggests that the

centre will cater to a different rather than a wider demographic. The activities the plans refer to and depict in their visual renders cater to a middle-class aesthetic and leisure and consumption practices: the images show night-time activities in a central plaza with a market atmosphere, al fresco dining in a laneway lit by fairy lights, and, in the case of the HLC promotional video, a farmers market offering organic produce. In all the images, the majority of people are white. Ethno-cultural diversity re-enters the conversation here in the form of food culture as a thing to "hold on to" (see above) as the town centre is reimagined and transformed into a space for middle-class consumption. Upmarket cultural diversity - a new and improved, high-value diversity, or "a gentrification-tailored exoticism", as Huse (2016) calls it – becomes a selling point for newcomers and a drawcard for visitors. The most recent news item on the Northcote Development website, called "Live in and Dine out in Northcote", advertises the neighbourhood and its surrounds as a foodie destination. It says, "[W]ith a host of multicultural eateries in the town centre, and in close proximity to some of Auckland's chicest restaurants and eateries in nearby suburbs, it's little wonder so many people want to live here" (Nortcote Development, 2019.). Beyond food culture as a drawcard, this extract is also notable for being perhaps the first instance that describes the process of attracting newcomers as achieved. No longer is Northcote spoken off as a suburb that "should be desirable" but as one where "many people want to live".

Whose dividend?

In this conclusion, I consider the findings of this study in light of debates about the place of diversity in working towards urban justice. The findings show that much like at the level of cities more broadly, the texts guiding and promoting the neighbourhood development in Northcote present an image of diversity as entailing a dividend for everyone. Both ethno-cultural diversity as well as the socio-economic and lifestyle diversity that purportedly results from the redevelopment are said to strengthen the community as a whole.

However, the analysis has also demonstrated that these claims are problematic because the ways in which diversity is discursively employed suggest that it is geared primarily towards benefitting newcomers while current residents, especially those on low incomes, are hardly considered. For one, the shift in what kinds of diversity are promoted in the documents

can be interpreted as a deliberate sleight of hand on the part of planners and developers. Referring to imminent demographic changes simply as a greater mix of incomes and lifestyles diverts attention away from the fact that newcomers are likely to shift the demographics of the neighbourhood substantially towards a higher-income profile. In other words, it obscures state-led gentrification in ways that echo local (Fergusson, 2018; Gordon et al., 2017) and international research findings. As outlined earlier in this paper, 80 per cent of all new housing built as part of the Northcote Development is for the private market, and given the current pricing and eligibility criteria of KiwiBuild, the share of affordable housing included in these 80 per cent will largely cater to mid-income professionals and remain unaffordable for low-income households. While the upgrade of HNZ dwellings may be commendable because it will provide healthier homes to public housing tenants, the partial privatisation of HNZ land is problematic in the face of a growing wait list for public housing. Latest figures show that the number of people on the housing register has tripled over the past five years, reaching more than 12,000 in June 2019 (Brunsdon, 2019). Research into an earlier and similar, though even larger, housing development in the Auckland neighbourhood of Glen Innes demonstrates that such mixed housing developments amount to state-led gentrification with vast ramifications for low-income residents (Cole, 2015; Fergusson, 2018; Gordon et al., 2017).

Within narratives of aiming to attract and cater to a wider demographic, diversity is a veneer for inclusion and justice. Social mix discourse and narratives of improvement are prime conductors for claims that diversity benefits everyone. For the most part, these claims mask gentrification although, at times, the documents explicitly refer to the potential of market housing (rather than diversity) to enhance the neighbourhood's vibrancy. Indeed, enhancing vibrancy is a key goal of the town centre revitalisation. This involves a transformative process of replacing the current low-value retail landscape with improved amenities and consumption choices. As I have shown, these discourses of improvement are guided by assumptions that low-value diversity is undesirable, echoing Ahmadi's (2018) observations in Toronto. As Turner et al. (2019) have shown in their study of property advertisements on Auckland's North Shore, the notion that suburbs appeal to particular lifestyles has become an increasingly common sales technique that we also observe in Northcote.

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Importantly, these images are "socially and economically exclusive" (Turner et al., 2019, p. 10) and particularly problematic vis-à-vis growing inequalities and housing unaffordability.

One aspect of particular concern that emerged from this analysis is the striking absence of any references to inequalities, or equality, in the documents guiding the Northcote Development. While Panuku and HLC are developers, which means a pro-development discourse may be expected, Panuku is also a Council Controlled Organisation that aligns its work with local government plans and strategies. Panuku identifies as a primary contributor to the Auckland Plan's stated outcome of 'Belonging and Participation' (Panuku Development Auckland, 2019a) which clearly features strong imperatives to serve those communities most in need and address inequities associated with increasing housing unaffordability, such disparities in access to opportunities and participation and intergenerational wealth (dis)accumulation. Yet, the only phrase that implies attention to questions of equality in the documents guiding the Northcote Development is the vision of Northcote as a place "where everyone's needs are met". This means that the consideration given to addressing inequalities in rhetoric at the municipal scale does not translate at the level of neighbourhood regeneration. Instead, the plans, read against extensive research into the effects of gentrification, further disadvantage low-income residents (public housing and private tenants) by putting them at risk of direct and indirect displacement through rising property values and an imposition of a gentrification aesthetic in the neighbourhood's public and consumption spaces that reflects the lifestyles of its new middle-class residents (Kern, 2016; Langegger, 2016).

On the whole, then, it can be argued that diversity as envisioned in the plans benefits developers, home owners who will see property values increase, and those affluent enough to be able to afford one of the new Northcote homes. More important, perhaps, than the question of who benefits is who does not benefit. These are people and households that may no longer be able to rent in the area and people who will not be able to afford the improved neighbourhood amenities and retail options. As such, it can be concluded that diversity discourses in the Northcote Development contribute to further disadvantage already marginalised communities.

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Notes

1 For the purposes of this study, Northcote is defined as comprised of the two Census Area Units Tuff Crater and Ocean View.

- The term brownfield refers to sites that already have infrastructure in place and are inhabited; in other words, they are already existing neighbourhoods. By contrast, greenfield developments take place on previously undeveloped land. Other sites of current large-scale brownfield developments in Auckland are Tāmaki, Māngere, Mt Roskill and Oranga. In addition, there are a number of large-scale greenfield developments under way in Auckland.
- Retrieved 30 July 2019. The tab and text have since been altered because the website is undergoing continual updates.

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Diversity Dividends and the Dehumanisation of Immigrants in the News Media in Aotearoa New Zealand

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Abstract

In New Zealand and elsewhere, immigration and ethnic diversity continues to be a highly contentious issue. Immigrants, refugees and ethnic minorities have often been portrayed in the media in negative ways, yet neoliberal agendas have also actively promoted capturing diversity dividends and the benefits of immigration. In this paper, we examine the discursive representations of immigration and ethnic diversity in a prominent national newspaper, the *New Zealand Herald*. We found media reporting tended to focus on three themes: economic benefits, pressure on infrastructure, and criminality. Our critical, contextualised analysis of media coverage revealed problematic latent constructions of immigrants underlying these explicit discourses. Immigrants as a group are denied their humanity and constructed as merely economic objects, while ethnic minority immigrants, in particular, are cast as morally inferior. We argue that these subtle dehumanising representations are underpinned by liberal expectations of an economic 'diversity dividend' that stresses 'quality migrants' and reinforces xenophobia and long-standing public and political anxieties in New Zealand about immigration and ethnic diversity.

Keywords: media, ethnic diversity, immigrants, diversity dividend, dehumanisation, Aotearoa New Zealand

he media's role in shaping public perceptions and opinions about immigration and ethnic diversity is well known. Scholars have taken issue with media reporting that casts immigrants and ethnic minorities as threats, raising concerns about the way in which such portrayals incite conflict (for example, Esses, Medianu, & Lawson, 2013;

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Pugh, 2004). But in many Western nations today, neoliberal ideologies have normalised a new public rhetoric regarding the 'superdiversity' (Vertovec, 2007) immigrants introduce. Within the rubric of competition, diversity is now frequently promoted as a competitive advantage (Florida, 2002; Hasmath, 2016) with immigration policies now favouring wealthy/skilled migrants of any nationality rather than focusing on race (Simon-Kumar, 2015). An overt discourse around the economic benefits and 'diversity dividends' (Terruhn, 2020) now exists, even though these tend to exclude the non-economic contributions of working-class migrants (Syrett & Sepulveda, 2011). Despite its prevalence, this positive discourse has largely been neglected in critical media studies. Though it is indeed imperative that inflammatory portrayals are highlighted and urgently addressed, we insist that other dominant representations must also be scrutinised as they too influence the minds and opinions of readers regarding immigration and diversity. This is particularly important given that diversity programmes in organisational contexts have long been critiqued as merely window dressing that conceal existing relations of power while doing little to achieve true inclusion (Marques, 2010). Examining the range of representations in the media is thus necessary to uncover the nuanced messages that are being communicated and how different migrant groups may be implicated in them.

In this paper, we explore these issues in the context of Aotearoa New Zealand. We draw on research examining the dominant discourses related to immigration and ethnic diversity in the New Zealand Herald, a prominent newspaper produced in Auckland but with a national readership. Immigration, and the related social transformation it produces, have been contentious issues in New Zealand where Asian and ethnic minority immigrants have been the target of institutional as well as everyday racial discrimination. The government's intention for a 'little Britain in the South Seas' actively restricted Asian migration with its disguised White New Zealand policy up until the 1980s (Brawley, 1993). And contrary to the promotion of a national image of racial harmony and equality (Brawley, 1993; Nolan, 2007; Skilling, 2013), racism and discrimination have been directed towards and experienced by Asians, Pacific Islanders and other non-European migrant groups (Bedford, 2002; Brawley, 1993; Loto et al., 2006; Spoonley & Bedford, 2012), along with Indigenous Māori. Neoliberal reform has significantly increased the ethno-cultural diversity of immigrants over the last three decades, with the benefits of superdiversity

and its 'dividends' becoming a common trope (for example, Siu, 2017). But, despite this, immigration and ethnic diversity remain a controversial issue debated in the media while immigration itself creates inequalities among diverse migrant groups arriving in New Zealand (Simon-Kumar, Collins, & Friesen, 2020).

The paper begins with a brief review of the current international literature on media representations of immigration and immigrants, highlighting a preoccupation with negative portrayals and a relative absence of positive framings that recognise immigrants' heterogeneity. We then introduce our study which addresses this lacuna by looking at the range of discourses that are prominent in the *New Zealand Herald* articles about immigration and ethnic diversity and their implications. We first attend to the explicit representations, identifying overtly positive as well as negative portrayals of immigrants, before progressing with a critical analysis of underlying assumptions in these representations. In doing so, we extend the current literature by providing a more nuanced understanding of how media in the contemporary neoliberal context reinforce problematic views of immigrants in general, and ethnic minority migrants in particular, in ways that are much more insidious.

Media representations of immigration and ethnic minorities

International scholarship on media representations of immigrants and ethnic minorities has focused almost exclusively on negative portrayals and raised concerns about how these messages inflame anti-immigration sentiment, discrimination and exclusion. A common approach used by researchers has been to examine the contexts and conditions in which immigrants are framed. Many studies have critiqued the prevalence of reporting on criminal activities and arrests, creating stereotypes that reinforce fear and aversion of immigrants (for example, Eberl et al., 2018; Farris & Mohamed, 2018). These studies take issue with the partiality of media coverage that portray minorities only in unfavourable situations. This is particularly problematic with regards to Muslims, where negligent reporting has perpetuated the rise of Islamophobia. Courty and Rane (2018) argue that through careless and simplistic reporting, the Western news media have helped to feed into dominant narratives that falsely link Islam with terrorism. Though an important distinction between Islam (the religion) and Islamism (the political ideology) exists, groups such as al Qaida

and the Islamic State have strategically and selectively used Islamic teachings to justify violence against non-Muslims. But with the media's failure to more critically interrogate the conflation of Islam with terrorism, and to underreport on Muslims condemning such acts of violence, the authors argue that the media indirectly advances the interests of these terrorist groups and contributes to the marginalisation of Muslim communities.

Media representations do not necessarily need to overtly associate immigrants and minorities with dangerous behaviours in order to invoke fear towards them in the public. Many studies have found the use of metaphors to play into broader concerns about migrants. The use of liquid metaphors such as 'leaks', 'flows', 'floods' and 'waves' (Charteris-Black, 2006; Khosravinik, 2009; Musolff, 2015; Pugh, 2004) invoke associations with natural disasters and appeal to public fears not only about a loss of control in regards to the influx of people across national borders but also about the rate of societal change (Charteris-Black, 2006). Other metaphors may also have much more visceral reactions of disgust and aversion. Cisneros's (2008) study of media in the United States, for instance, illustrates the way in which immigrants are visually and metaphorically represented as "dangerous and destructive pollutants" that contaminate local communities. Portraying immigrants as toxic pollutants dehumanises them in similar ways to reporting that draws on metaphors of parasites, leeches, bloodsuckers and insects (for example, Musolff, 2015; Russell, 1996). Such dehumanising representations generate disdain and disgust that help to shore up public support for stricter legislation and securitisation of national borders.

Some scholars have argued that media are now much more subtle in their dehumanising depictions of immigrants (Leyens et al., 2001). These more difficult-to-detect forms of dehumanisation deny members of 'outgroups' their humanity by ascribing fewer human qualities to them, particularly uniquely human emotions and attributes associated with 'human nature' (Haslam, Bastian, & Loughnan, 2010). An example of this is in Bleiker, Campbell, Hutchinson, and Nicholson's (2013) study of the representation of refugees in Australian news media. Analysing cover-page images in *The Australian* and the *Sydney Morning Herald*, the researchers found that images predominantly captured refugees in large anonymous groups, or what Faist (2018) describes as a nameless and faceless

"undifferentiated mass", rather than as individuals with recognisable facial features. With the relative absence of images depicting individuals and their emotional experiences, the images constrain feelings of empathy and compassion in readers. This then obscures the humanitarian challenge of the refugee issue (Bleiker et al., 2013). At the same time, the dominance of group images plays into broader concerns about refugees and immigrants 'flooding' the country and being 'burdens' on society.

The studies above reveal various mechanisms through which the news media create problematic perceptions of immigrants and minorities that, at their best, generate apathy, but at their worst, evoke fear and aversion. These representations have real-world consequences as they generate public support for more punitive immigration policies (Farris & Mohamed, 2018). But the existing studies neglect the fact that immigrants are a significantly diverse group who range in ethnicity, nationality, religion, class and gender, amongst a host of other differences. Very few studies have acknowledged this heterogeneity and instead conflate immigrants with the 'ethnic other'. Eberl and colleagues' (2018) literature review on European media discourses on immigration indicated differences in the way media frame different migrant groups, including depictions of Roma as economic threats. North Africans as cultural threats and Eastern Europeans as threats to the economy and welfare system (p. 212). But while they register these differences, the authors nevertheless argue that immigration coverage in general tends to be negative.

While few in number, researchers in New Zealand have begun to acknowledge the different realities of migrant groups, their unequal positions, and the differing portrayals of them in the media. Loto et al.'s (2006) study revealed how Pacific Islanders are framed as unmotivated, unhealthy criminals who are dependent on European support while, in contrast, Palagi (White European) migrants are implied as active, independent, competent and caring. This is one of the very few studies that draws attention to positive portrayals of certain immigrants and the significance of contextual relations of power. Other recent work in New Zealand has directly challenged the dominant, one-sided focus on negative representations through metaphors in the media. Analysing a major Auckland newspaper, Salahshour (2016) asserts that, while discourses did exist around the burden of immigrants on society, liquid metaphors were also used to depict the positive economic benefits of mass migration. She

argues that this positive view is unique to New Zealand and suggests distinct characteristics of the country's geography and economy that give rise to these more favourable depictions. However, this acceptance of the discourse of economic benefits at face value neglects the historical – and ongoing – stratification of immigrants and reinforces the myth of egalitarianism (Nolan, 2007). What it fails to recognise is the exclusionary nature of this neoliberal reframing (Jones, Ram, & Villares-Varela, 2019) and how it reinforces dominance and control over immigrants. As such, the positive representations do not necessarily reflect the absence of discriminatory attitudes toward immigrants.

What is lacking in existing literature is the acknowledgement of immigrants' diversity, the varied positions different migrant groups occupy in society, and how they are differentially represented in the media. Our study therefore seeks to address this gap by broadening the lens to consider not only the negative portrayals of immigrants but positive and ambivalent ones as well. However, we also take seriously the fact that dominant views of immigration and diversity in the media are shaped by those with power (Ellis & Wright, 1998; Teo, 2000), which leads us to remain sceptical about accepting positive renderings at face value. Instead, we look beyond surface-level representations to unpack how discourses may reinforce the unequal positions of different migrant groups in society.

Immigration in Auckland, New Zealand

Aotearoa New Zealand is one of the most ethnically and linguistically diverse countries in the world (International Organization for Migration, 2015), with more than 200 ethnic groups represented and more than 160 languages spoken, as reported in the 2013 Census (Statistics New Zealand, 2013; Royal Society of New Zealand, 2013). After 1840, the population of Māori drastically declined as a result of British settler colonialism, with their numbers hitting a low of around 42,000 by the start of the twentieth century (Durie, 2005), while the settler population grew substantially. A race- or kinship-based immigration policy favoured and privileged new settlers from the British Isles (Cain, 2017), and by 1986, Pākehā were the dominant ethnic group, at 86 per cent of the population, while Māori made up 12 per cent (Pool, 1991). As noted earlier, immigration policy was liberalised in 1986, opening the country's borders to greater numbers of migrants from a greater number of source countries. Subsequent policy

changes included the introduction of points-based selection criteria in 1991 which rated prospective immigrants on a range of factors including qualifications, work experience and age, as well as a series of policies implemented in the 2000s to facilitate pathways to residency for international students (Ho, 2015). The softening of national borders to reflect a neoliberal, skills- and capital-based immigration policy resulted in rapid ethno-cultural diversification as the country competed in a global race for talent (Simon-Kumar, 2015).

Such rapid demographic changes and population growth occurred especially quickly in the superdiverse context of Auckland, the country's largest city where most new migrants settle (Spoonley, 2016). Auckland has a population of around 1.66 million people, 39 per cent of whom were born overseas (Statistics New Zealand, 2014). Although the United Kingdom remains one of the top source countries, increasing numbers of migrants have arrived in Auckland from across South East Asia and India - 23 per cent of Aucklanders identified with the broad category 'Asian' at the most recent census, an increase from 5 per cent in 1991 (see Friesen (2015) for a detailed overview of migration flows from across Asia). These new migration and settlement pathways have resulted in newly emerging residential (Friesen, 2015) and business concentrations (Meares et al., 2015), new employment trajectories (Spoonley & Bedford, 2012) and, more recently, new patterns of transnational mobility (Ho, 2015). It is in the context of these new patterns of ethnic diversity and population change in Auckland that this research is carried out.

Method

We collated *New Zealand Herald* articles over the one-year period between 1 July 2016 and 30 June 2017, examining the ways in which immigration and ethnic diversity were discussed and represented. This period led up to the New Zealand general elections in September 2017, which – as was the case in the lead up to the Brexit referendum in the United Kingdom (Gavin, 2018) and the election of Trump in the United States (Clawson & Jengelley, 2018) – generated much media discussion about immigration. The study was also conducted at a time when changes were being made to Skilled Migrant visa categories in New Zealand, including the introduction of remuneration bands and increasing the number of required points for securing a visa,

changes ostensibly designed to support the needs of prospective employers and foster better outcomes for migrants.

A website search (http://www.nzherald.co.nz/) of New Zealand Herald articles for the period was carried out using the keywords 'ethnic diversity' and/or 'immigration'. The decision to use these distinct but interconnected search terms was informed by an understanding that Auckland's ethnic diversity results from periods of immigration in the first instance, in addition to longer-term patterns of settlement whereby residents might or might not identify as migrants; for example, as in the case of children of migrants, or new settlers from the United Kingdom who might not think of themselves as 'ethnically diverse'. In all, 518 articles were identified and read to determine their relevance to the study. Relevance was determined by the article's focus on and engagement with key issues associated with ethnic diversity and/or immigration specifically in Auckland. Articles that were only peripherally related to immigration or diversity issues were discarded. This process eliminated nearly 350 articles, leaving 174 articles as the final data set. These articles comprised opinion pieces from a range of academics, politicians, business leaders, social justice advocates and other professionals, as well as editorials and regular contributions from New Zealand Herald journalists.

Data analysis was informed by an understanding of the news media producing and shaping dominant discursive understandings of social phenomena. Language – the words that are chosen, the way those words are framed, and the context in which they appear – is an important contributor to the construction of dominant attitudes towards migrants and immigration (Blinder & Allen, 2016; Hall, 1995; Wodak & Reisigl, 2015). As power relations shape the dominant discourses, it was important to delve deeper than the surface-level topics discussed in the articles. Accordingly, we used a generative and inductive approach and conducted a thematic analysis of the data, identifying both the explicit themes and more latent ideas behind them (Braun & Clarke, 2006). First, we generated descriptive codes to reflect the ways in which immigration and ethnic diversity are explicitly discussed and represented in the articles. Three themes were then extracted: (1) economic benefits to the country – ostensibly the diversity dividend, (2) burdens on infrastructure and services, and (3) criminal activities. We then undertook a critical analysis to draw out some of the more-latent underlying ideas and assumptions that gave rise to the thematic content (Braun &

Clarke, 2006, p. 84). By looking closely at the discursive framing of the issues, we found an implicit denial of the basic human needs of immigrants in general, and a subtle portrayal of ethnic minority migrants as morally inferior. We argue that these discourses dehumanise immigrants, create apathy towards the lives and experiences of immigrants, and reinforce the stratification of immigrants in ways that reflect long-standing racial hierarchies in New Zealand.

Results

Immigration and ethnic diversity were explicitly discussed in relation to the economic benefits to New Zealand society; the impact on Auckland's infrastructure, services and resources; and criminal activities, including fraud and exploitation of employees. Almost a third of the articles reported on some form of direct or indirect economic contribution that immigrants make, which formed the basic premise for their presence in New Zealand. Reporters drew on statements from politicians and business leaders insisting that immigrants provide labour in key industries such as dairying, farming, horticulture, hospitality, aged care and construction where employers have difficulty filling positions with local workers. As such, immigrants were portrayed as fundamental to these industries that support the country's economy. But labour was not the only contribution that immigrants were portrayed as making. Articles reporting on the success of migrant businesses also drew on the notion of population diversity itself as an economic asset, insinuating a diversity dividend. Immigrants were recognised for their entrepreneurial activities setting up successful businesses that often leveraged their cultural resources, skills and existing networks. The Indian restaurant Cassia winning the Restaurant of the Year award in 2017, for instance, was described as the owners "exploring their culinary heritage" to show "Auckland diners there were more to the subcontinent's cuisine than curry" (Nichol, 2017). This cultural diversity was itself celebrated for adding "vibrancy" to communities while also emphasising the economic contribution. Festivals celebrating ethnic holidays such as Diwali and Chinese New Year, amongst others, were said to bring a "boom" to the tourism industry with more than "33,000 Chinese holidaymakers from China anticipated to arrive for the lunar celebration", visitors who are "traditionally big spenders, with an average spend of \$5000 per head" (Tan, 2017).

At the same time that immigration and diversity are portrayed as desirable for the economy, a paradoxical discourse was also evident that cast immigrants as burdening the city. More than 40 articles made some reference to the impact of immigration on infrastructure, housing and services in Auckland. Like the findings in the existing literature, water metaphors, along with other pressure-based metaphors, were used frequently in many of the articles to depict the issues. This included descriptions of the city "swelling" (Gray, 2017), "bursting" and "creaking at the seams" (Higgins, 2017; New Zealand Herald, 2017), with "creaking infrastructure" (Hisco, 2016), roads that are "choked" (Higgins, 2017), and the city "sinking" (Orsman, 2017) under extreme population size pressures, all of which contribute to a threat narrative and the need for border control (Nguyen & McCallum, 2016). The articles also frequently quoted politicians expressing their concerns about the impact of immigration. Then Labour Party leader Phil Goff, for instance, was quoted as saying:

Immigration is good for New Zealand, but we need to ease the level down until housing and transport infrastructure catches up with the growth, or we will end up with worsening congestion and even less affordable housing. (Phil Goff, in Jones, 2016)

With the relative authority of politicians making such claims, the role of immigration in burdening the city and pushing up Auckland's house prices was largely unchallenged. While a few articles cited a study by economists Bill Cochrane and Jacques Poot (2016) finding no conclusive evidence to support the assertion that immigrants drive up house prices, this did little to change the prevailing discourse. Instead, discussions moved to demands for reducing immigration numbers as means of resolving the issues.

The third thematic portrayal of immigrants in the articles was in relation to criminal activities. More than 50 of the articles in the one-year period reported on stories of crime where immigrants were either the perpetrator or the victim, and also in some cases, both. This included a range of offences such as money laundering, drug smuggling, deception, cases of domestic violence and sexual assault. The most frequent, however, were cases of immigration fraud and exploitation, which accounted for more than three-quarters of the articles. Some cases placed the blame squarely on migrants exploiting fellow nationals (Feek, 2017a, 2017b), but others drew attention to migrant vulnerability. A 2016 case, for example, involved a

group of Indian international students misled by immigration agents about the legitimacy of their immigration documents. After initially seeking refuge in a central Auckland church, the students were eventually deported. The case gave voice to a range of competing opinions. Some articles quoted the students' lawyer, Alistair McClymont, who blamed the government for narrowly focusing on profits from international education (Collins, 2016, 2017). Other articles cited the Tertiary Education Minister Steven Joyce who defended the legitimacy and robustness of the Government's policies and blamed the individual students (for example, Laxon, 2017). Though there may not have been consensus regarding responsibility, it has been argued that the frequent association of immigrants with crime in the media nevertheless represents them as deeply problematic for society as a whole (Bleich, Bloemraad, & Graauw, 2015).

In summary, the semantic themes identified in the *New Zealand Herald* articles indicate ambivalent representations of immigrants consistent with Salahshour's (2016) study discussed earlier. While immigrants are cast as problematic due to their physical demands on the city as well as their threat to safety and security, they are also actively portrayed as vital contributors to the economy and the vibrancy of communities. In the next section, we critically analyse how these issues are discursively framed and reveal the implicit underlying assumptions.

Denying the humanity of immigrants

The discursive framing of immigration and its impact on the city negates the human needs, desires and aspirations of immigrants. In eighty per cent of the articles, the reporters and the experts they cited used terms such as 'net migration', 'immigration figures', 'immigration policy', 'record migration', 'immigration' and 'high migration' to talk about the issues associated with increased population sizes putting pressure on the city. These terms obscure the actual people who make up the numbers. The most prominent reports in the *New Zealand Herald* portrayed 'high immigration' as the cause of Auckland's traffic congestion, inadequate provision of health care and schools, and inflated house prices that are unaffordable for 'everyday Kiwis'. While this avoids directly blaming immigrants, the linguistic framing also defines what counts as a 'problem' and constrains the set of issues relevant for debate and, with that, the solutions to address the problem (Lakoff & Ferguson, 2006). As the problem is with the figures and policy, it logically

flows that reducing the number of immigrants would be the reasonable solution. Numerous articles cited statements from key politicians insisting the need for changes to immigration to minimise pressures on housing and infrastructure. In emphasising the system, policy and figures, what becomes obscured is the fact that migrants themselves are people who, like all other residents, have needs and desires for housing, education, health care and mobility in and around the city. Acknowledging these human emotions is critical in humanising migration (Carling & Collins, 2018; Collins, 2018), but the discourses wholly neglect the fact that these emotional drivers are what cause extra demands on the existing infrastructure and services when the focus is exclusively on immigration policy and numbers.

The discursive construction of immigrants as economic resources is folded into decision-making around solutions to alleviating the pressures of immigration on the city. This is particularly striking in the report *The New New Zealanders – Why Migrants Make Good Kiwis*, where the authors recommend charging migrants a levy to help the Government fund infrastructure developments (see Hodder & Krupp, 2017), which was discussed in Liam Dann's (2017) article 'Should migrants pay for infrastructure costs?' While the report's authors warn against blaming immigrants for rising house prices, they concede that high levels of migration have increased pressures on the need to fund more roads, schools and hospitals. The authors note:

No research seems to have been conducted at a local level on whether the financial contribution of migrants sufficiently offsets the costs it imposes on local jurisdictions in the long run. (Hodder & Krupp, 2017, p. 29)

Recommendations are based purely on an objective cost-benefit analysis suggesting that only a financial gain warrants the presence of immigrants in the country. Their need for housing, health care, education and transport are seen as a 'cost' and added pressure on the 'already stretched' infrastructure and portrays immigrants as a physical and financial burden. Despite substantial economic and cultural contributions which are readily welcomed, immigrants themselves are not entitled any rights to the basic services and necessities of living in a city.

With the relative power and authority of politicians, these discourses normalise a public disregard for the basic needs and desires that immigrants inevitably have. A *New Zealand Herald* reader, Don Conway, for instance,

was quoted discriminating specifically against immigrants' use of resources and services:

120,000 new residents was too many. It was okay for returning New Zealanders, but the others are clogging infrastructure – schooling, health, facilities, etc. (Don Conway, in Orsman 2017)

That "returning New Zealanders" are permissible despite the inevitable pressure they would also put on infrastructure and services highlights the fact that it is more than merely the capacity of the city to accommodate increased population that is of concern. Instead, this comment highlights a normative discourse that fails to recognise the human dimension of immigrant labour, which reinforces indifference towards their needs.

Critique of this singular view of immigrants as economic resources devoid of needs and desires was evident in a small number of articles that directly attempted to challenge the prevalence and ubiquity of these discourses. But not only were these few in number, the authors of the articles had little authority and power in shaping dominant views. For example, one opinion piece titled 'Why are so many New Zealanders so scared of immigrants?' was written by German migrant Laura Kneer, who warned against the rise of xenophobia in political debates about immigration and stressed the shared humanity of immigrants:

Immigrants too want to be able to afford their own home. We hate being stuck in traffic or waiting on hospital lists because budgets haven't appropriately been adjusted to the amount of people they cater for. We are worried about the quality of our water and air as much as you are. (Kneer, 2017)

Kneer draws commonalities in the desires, emotions and experiences of immigrants with those of New Zealanders, inserting a human dimension into media discussions about the pressures on infrastructure, services and housing.

Deborah Hill Cone, a columnist for the *New Zealand Herald*, also rejected the uncritically accepted commodification of immigrants. In her 2017 article 'On immigration we're looking in the wrong queue', Cone, who migrated to New Zealand with her family at the age of eight from South Africa, directly challenged the normalised framing of immigrants as either the cause or the solution to the country's economic woes:

Our economy seems to function largely through the import of people. This notion, that immigration is a valid instrument of growth, seems to have become so accepted that it doesn't even get questioned much. So, when Immigration Minister Michael Woodhouse said last week the new immigration policies announced are about "attracting migrants who bring the most economic benefits to New Zealand" no one bats an eyelid. It is a given. We are just bringing in a better-quality commodity. Ahem, these are human beings, not merely an apparatus to use to boost our GDP.

Immigration is not the cause of our economic woes ... But immigrants are not the solution, either. Immigrants are people, like my family, who are would-be citizens, who want to make a life for themselves, human beings, not economic levers. (Cone, 2017)

While both Kneer and Cone occupy relatively privileged positions as White immigrants and are likely to have very different experiences to racialised migrants in New Zealand, their exasperated challenges to the dominant economic framing of immigrants makes evident the influence exerted by the powerful in the political-economic arena of the media (Teo, 2000). Both these migrants provide an explicit assertion – and reminder – of the humanity of immigrants amongst an otherwise relatively complicit acceptance of their economic utility. Decisions and opinions regarding immigration changes are based purely on cost-benefit assessments without any concern for the desires and emotions that drive migration or the needs that migrants have for resources and services in the city.

Ethnic minority immigrants as lesser-than

While immigrants in general were objectified without acknowledging their needs, desires or aspirations, we found ethnic minority immigrants were constructed as morally lesser than New Zealanders. This was particularly notable in the articles discussing the issue of immigrants, particularly Chinese immigrants, pushing up Auckland's house prices. Though few in number relative to the articles assigning blame to immigrants more broadly, the articles reinforced earlier concerns and discourses of Chinese investors buying Auckland property and *causing* the housing problems. This included an article on 26 July 2016 reporting on the move by Ray White Real Estate to link up with a major real estate agency in China to list properties for sale in New Zealand (Gibson, 2016) and another on 27 October about real-estate agents urging property owners in Auckland to sell up due to the "looming decline in cashed-up Asian property buyers" (Tapaleao, 2016). Aside from the lack of reliable data to corroborate the accusations, these discourses

actively encourage New Zealanders to exploit the opportunity of "cashed-up" Asian migrants, reinforcing their economic objectification. Yet, media reports constructed those of Chinese ethnicity as violating certain moral principles when they are seen to profit from property. An opinion piece by an anonymous Chinese real estate agent who reproduces the racial profiling of Chinese house buyers pushing up Auckland's house prices is instructive:

I remember seeing young couples with their hands clenched and eyes glued to the auction screen, only to find their first dream house outbid by someone screaming in Mandarin. And I shudder to imagine their feeling when they see the very house they missed out on back on the market within a couple of months, this time, with 200k added on top ... meanwhile, a champagne is uncorked at another New Zealand property expo in China. (anonymous Chinese real estate agent quoted in NZ Herald, 2016)

Aside from the fact that the Mandarin speaker is assumed not to be a New Zealand citizen, there are several ways that those of Chinese ethnicity are discursively constructed as other and morally lesser-than in this extract. Uniquely human emotions are attributed only to the young couple who have their "hands clenched" and "eyes glued", capturing their state of nervous anticipation. This evokes empathy in the reader for the couple losing their 'dream home' to a supposed foreigner who lacks refined emotions and comportment and is "screaming" in Mandarin. Portraying the Chinese buyer as an investor who intends to on-sell the house to turn a sizeable profit also reinforces a view of them as lesser than moral New Zealanders. There is an assumption that the Chinese buyer is not purchasing the house for themselves or their family, again negating any needs and desires they have for shelter and familial responsibilities. Instead, the Chinese buyer is portrayed as ruthless in their actions, taking the house away from the young couple who are ostensibly there to find a dream home. Societal biases towards couples and parenthood (DePaulo & Morris, 2006) are also folded into this narrative. The motivations of the young couple are not interrogated, with the implication that their intention is to raise a family rather than purchase an investment property. Thus, while it is acceptable, and explicitly encouraged, that New Zealanders profit economically from migrants, when these migrants themselves are seen to profit, there is a disdain of such practices and the migrants are implicitly constructed as lacking in moral values and refinement.

There were also implications of immorality in the reporting of criminal activities involving Asian and ethnic minority migrants. Existing studies have shown how frequent coverage of immigrants as delinquents or criminals leads to negative public attitudes and stereotypes (Bleich et al., 2015; Eberl et al., 2018). Almost a third of the New Zealand Herald articles over the one-year period related to criminal activities including cases of money laundering, drug smuggling, domestic violence and sexual assault. But the most frequent cases reported on were of immigration fraud and exploitation where ethnic minority immigrants were often both the victims and perpetrators. Numerous articles reported on the fraud and exploitation involving Indian international students, international education agents and private training establishments in New Zealand. Many focused on the structural issues and the Government's prioritisation of profit as the underlying cause; some pointed to the fraudulent activities of education agents in India; and others framed the international students as the perpetrators. Yet, it is not so much who the sole blame is placed upon here that is of concern, but the way these discourses construct those of Indian ethnicity, including immigrants, as lacking moral decency and civility compared with New Zealanders. For example, the article in December by New Zealand Herald News Editor Andrew Laxon portrays Indian education agents and bank managers as the ones responsible for "significant, organised financial document fraud", corrupt practices that posed "a significant threat to NZ's education integrity" with possible links to organised crime (Laxon, 2016).

Casting Indian nationals as the problematic other is further supported in an opinion piece titled 'Indian students need to go' by Rachel Smalley, who has a relatively public profile working as a television and radio journalist and presenter. In the article, Smalley draws on her experience of returning to New Zealand from London with her White South African spouse as a comparison that leads her to blame the students themselves for the fraud:

It is they who are at fault and whether it's knowingly or unknowingly, the students have committed fraud.

I have been through a similar process. I married a South African in London and when our son was one, we moved to New Zealand.

It was all quite sudden. I had a week until I was on-air hosting Nightline on TV3 and I was trying to find somewhere to live, so I employed an agent to look after my husband's visa.

You have to jump through a lot of hoops to get a resident's visa... in our case, we had to prove our marriage wasn't a sham, both of us needed police checks from the British Police and in my husband's case, from South Africa too. He needed full medicals, authenticated birth certificates, proof that we'd lived together for some time... you name it, we needed it. And that's why I used an agent. (Smalley, 2017)

Using her personal experience to assess the actions of the Indian student migrants neglects the historical privileges she and her husband have had (as a European New Zealander and White South African migrant to New Zealand, respectively) over those of Asian descent (see Brawley, 1993), while her reasoning also draws a moral distinction between herself and these other morally inferior immigrants (Jones et al., 2017) who have committed fraud. Thus, while these two articles may direct the blame differently, they both contribute to the construction of Indian migrants as lacking the moral values that define (white) New Zealand.

The reporting on exploitation also contributed to the discursive construction of ethnic minority immigrants as lesser than New Zealanders. Exploitation included various cases of tax evasion, money laundering and under-payment of hours worked, and these were often in businesses owned and staffed by co-ethnic minority groups. While we recognise the need to bring awareness to and understand the conditions that give rise to exploitation in New Zealand (see Stringer (2016) for details), we argue that the prevalence of mainstream media reports on crimes committed by ethnic minorities implicitly reinforces moral hierarchies. For instance, the articles covering the "first human trafficking convictions in New Zealand" (Carville, 2016, 15 September, 14 December, 15 December) detailed the "elaborate trafficking scam" by Faroz Ali, his wife and her twin sister. Together the trio "lured" fifteen "established middle-aged men and women with families" from Fiji to New Zealand under the pretence they would be paid \$900 a week to work in construction and fruit picking. The perpetrator is described as a "Fijian national with New Zealand residency" and the "first" to be convicted of human trafficking in the country. There is, therefore, a subtle suggestion that these inhumane acts did not exist before the arrival of these migrants.

Like the immigration fraud committed by Filipino mother Loraine Jayme (Feek, 2017a, 2017b), it is the New Zealand law enforcers who intervene to help the "vulnerable" migrants "ripped off" by the migrant perpetrator. Immigration New Zealand's assistant general manager Peter Devoy's insistence that the "victim" is the "New Zealand citizen" is telling:

The situation from our point of view is that the victim here is very much the New Zealand citizen. It's the systems that Immigration have in place to protect New Zealand, to protect the border, which have been the subject of the offending more so than the 17 victims named in the case. (Feek, 2017b)

As the 'victim', Devoy suggests that New Zealanders are devoid of such criminal inclinations, and that they are no longer 'protected' from these morally inferior immigrants who have now crossed the border. This echoes commonly invoked imaginations by right-wing parties of a better past, free from the issues brought about by increased immigration (Charteris-Black, 2006), although in a much more subtle manner. Thus, while the cases of exploitation and fraud frequently reported on in the *New Zealand Herald* may at first appear to be about bringing awareness to the plight and injustice suffered by vulnerable immigrants, there is also a more insidious discourse here. This discourse portrays New Zealanders as embodying moral virtues, of upholding basic human rights and dignity, that is put in contrast to the less civilised and less ethically refined ethnic minority immigrant other.

Conclusion

In this paper we set out to examine the representations of immigration and ethnic diversity in the *New Zealand Herald* at a time when capturing diversity dividends is a normative goal in the current era of neoliberal capitalism. Looking closely at the seeming ambivalence found in the positive and negative portrayals of immigrants, we identified particularly concerning issues. As we indicated, immigrants in general are denied any acknowledgement of their humanity through discourses that focus exclusively on immigration figures and policy when discussing problems related to the pressures on the city. Compounded by the dominating logic of economic utility, abstracting the cause of the issues to highlight the system rather than migrants' needs and desires for housing, education, medical care and mobility in and around the city, leads to support for policy changes that

are indifferent to the experiences of immigrants themselves. And for Asian and ethnic minority migrants, their morality is also called into question. As we demonstrated, the discursive framing of issues in relation to Chinese property investors and the prevalent reporting of criminal activities, in which ethnic minorities are implicated, construct these immigrants as callous and lacking certain moral values. What is implied is that the values of fairness, honesty, dignity and empathy, as well as care and concern for others, are violated through these acts – values that are supposedly upheld in New Zealand society. As such, ethnic minority immigrants are portrayed as lesser than White immigrants and New Zealanders.

These underlying ideas and assumptions of different immigrant groups reveal subtle forms of dehumanisation in the New Zealand Herald produced in part by the emphasis on 'quality migrants' to reap the diversity dividends. Through a singular focus on what can be gained from immigration-led diversity, the media discourses discount the needs and desires of immigrants as a group, denying their human right to the city (Harvey, 2003), and cast them as merely disposable objects for the economy. And, alongside portrayals of ethnic minority migrants as morally inferior, what this creates is not just public concern regarding the overall number of immigrants, but anxieties about the presence and number of Asian and ethnic minority migrants in particular (Spoonley & Bedford, 2012). These anxieties are not entirely new. As noted at the outset, immigration policy up until the 1980s in New Zealand intentionally discriminated against Asians and others of non-European ethnicity. Claims of an 'Asian invasion' have long instilled concerns about this 'alien culture' and the ability of these immigrants to integrate into society (Bedford, 2002). What this racialised and racialising discourse in the media enables, then, is ongoing xenophobia but in a much more covert manner that is buttressed by concerns about the impact of these immigrants on moral society. Consequently, this perpetuates the long-standing racial hierarchies and exclusions in New Zealand society.

An emphasis on the benefits of immigration and diversity dividends discursively frames immigrants in a favourable light. This is undeniably a more positive view of immigrants than media reports that explicitly demonise immigrants and encourage discrimination and aversion. But, as we have indicated, there are also significant problems associated with these subtly dehumanising representations. Given that migrants are important contributors to the socio-cultural, political and economic fabric of New

Zealand, media reporting needs to provide fuller, more rounded stories of migrants' lives. This means providing important context when presenting complex socio-political stories, ensuring that there are balanced depictions of diverse migrants, and that authority figures are also cited when they assert the humanity of immigrants. Importantly, it also means amplifying the voices of migrants through personalised narratives while recognising that not everything a migrant achieves is attributable to their ethnicity or migrant status.

The present study raises additional questions about the media's role in constructing public understanding of immigrants and ethnic diversity in Aotearoa New Zealand. As noted by Vertovec (2007), superdiverse populations have emerged from new patterns of global mobility which has included increasing movements of people from more varied national, ethnic, linguistic and religious backgrounds, diversification of migration channels, legal statuses and conditions, and gender and age ratios. In this research, we chose not to explore the intersectionality implied in these newly complex configurations of human mobility, nor did we examine the differing media constructions between immigrant groups. Further work could investigate specific migrant groups who experience high rates of discrimination, such as Muslims, or disaggregate the term 'Asian' to explore the differences or similarities between subgroup representations, and explicitly look at how migrants from the United Kingdom, Canada and South Africa are discursively portrayed. This will help to generate much more nuanced understandings of the diversity of immigrants and how the media reproduces and/or challenges racial hierarchies in Aotearoa New Zealand.

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Whakawhanaungatanga as a Māori Approach to Indigenous–Settler of Colour Relationship Building

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Abstract

Communities of colour are racialised and oppressed differentially by settler colonial states (Saranillio, 2013), yet the discourse of diversity and inclusion that dominates state interactions with communities of colour tends to conflate marginalised groups as equivalent and interchangeable to the detriment of intergroup relations. An approach to community building that recognises racial difference in general and the irreducibility of indigeneity in particular is needed if racialised communities are to create solidarities for transformative change. We engage Indigenous and settler colonial theories to address these imperatives, while noting the distinct character of these frameworks. In particular, we seek to highlight the specificity of indigeneity in settler colonial contexts, such as Aotearoa New Zealand, and to generate a model for relationship building that is not founded on settler colonial ideologies, by drawing on Indigenous concepts. Through thematic analysis of interviews with Māori community leaders, we explore Māori-tauiwi (settler) of colour (ToC) relations. The results of our qualitative analysis provide evidence for Maori-ToC relations that are consistent with whanaungatanga (good relationships characterised as family-like, based on similar experiences, and bound in conditional solidarity; see Benton, Frame, and Meredith, 2013). Furthermore, we identify the following four aspects of whakawhanaungatanga (relationship building): positioning, power sharing, dialogue and cultural practice. Thus, we suggest whakawhanaungatanga as a Māori approach to relationship building with the potential to generate Indigenous-settler of colour solidarities towards transformative change.

Keywords: Māori, Indigenous, settler colonialism, diversity, whakawhanaungatanga

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In August 2017, at a glitzy Auckland gala, Fletcher Building accepted a national award for diversity and inclusion. At the same time, merely 20 kilometres to the south, local Māori (Indigenous New Zealanders) at Ihumātao prepared for another night, occupying and protecting a sacred ancestral heritage site from developers — developers owned by Fletcher Building. The following year, organisers of the Auckland Pride Parade asked marching police officers not to wear uniforms: an effort to ensure LGBTQIA+community members would feel safe, particularly trans whānau (community members) and people of colour who suffered police harassment. The Police refused. And Fletcher Building responded by pulling their sponsorship of the event. Their claim that the parade was "not in line with the [sic] Fletcher Building, 2018) brings into sharp focus the way in which diversity is performed by both state and private institutions unwilling to give anything up for the communities they claim to celebrate.

Controversy surrounding both the proposed development at Ihumātao and the withdrawal of the Police and corporate sponsorship from the Auckland Pride Parade generated antogonism and division within the communities affected. The use of diversity discourse to perform organisational and national unity while failing to challenge underlying power structures and simultaneously undermining the political movements of oppressed peoples should concern minoritised communities, including racialised communities, on whom our research is focused.

The failure of the state to create unity through diversity discourse is currently on full display, as a replica of HMS *Endeavour* tours the nation, 250 years on from Captain James Cook's first arrival. The Ministry for Culture and Heritage and local government contributed over 20 million dollars to the event, dubbed Tuia 250. While the word *tuia* means to sew, or to bind, the event has had the opposite effect. Critics have noted the malificence of re-enacting Cook's murderous invasion of Māori land, and several iwi (Māori groups) refused to welcome the replica to their territories. In addition, Tuia 250's focus on New Zealand's 'dual heritage' (Ministry for Culture and Heritage, 2019) serves to erase *tauiwi* (settlers) of colour from the national narrative. Responses to Tuia 250 demonstrate that the national settler colonial narrative can no longer be justified, which we argue points

to a larger constitutional crisis, around which communities of colour are beginning to organise.

Communities of colour are racialised and oppressed differentially by settler colonial states (Saranillio, 2013), such that our political projects are "incommensurable but not incompatible" (Snelgrove, Dhamoon, & Corntassel, 2014, p. 3). It is possible for racialised communities to unite for liberation. Yet the discourse of diversity and inclusion that dominates state interactions with communities of colour tends to conflate marginalised groups as equivalent and interchangeable to the detriment of intergroup relations.

An approach to community building that recognises racial difference in general and the irreducability of indigeneity in particular is needed if racialised communities are to create solidarities for transformative change. Indigenous and settler colonial studies are both well placed to address this imperative. While noting the distinct character of these frameworks, both are engaged to articulate key issues which otherwise remain conceptually opaque. In particular, we seek to highlight the specificity of indigeneity in settler colonial contexts, such as Aotearoa New Zealand, and to generate models for cultural actions not founded on settler colonial ideologies by drawing on Indigenous Māori concepts.

Having outlined recent controversies to provide context, in this study we review international critiques of diversity discourse as used by settler colonial states, before focusing on the context of Aotearoa New Zealand, where Treaty-based biculturalism is often framed as being in opposition to multiculturalism, and where diversity discourse inhibits Māori-tauiwi of colour (ToC) relations. Despite this challenging context, Māori and ToC can and do build relationships, and we analyse interview data to explore how Māori leaders go about this, drawing on Indigenous concepts. We identify that Māori-ToC relations were described as being consistent with whanaungatanga: good relationships, characterised as family-like, based on similar experiences, and bound in conditional solidarity (Benton, Frame, & Meredith, 2013). Furthermore, we identify four aspects of whakawhanaungatanga (relationship building): positioning, sharing, dialogue cultural practice. We power and suggest whakawhanaungatanga as an alternative to settler colonial narratives of 214 Rata & Al-Asaad

diversity and inclusion, with the potential to generate Indigenous–settler of colour solidarities towards transformative change.

In a sense, this research was itself an exercise in Māori—ToC relationship building. We recognise the importance of positioning (as the themes we extracted from the qualitative analysis listed above attest), so we provide brief positioning statements here. The first author of this paper, Arama Rata, is of Ngāruahine, Taranaki and Ngāti Maniapoto descent. The second author, Faisal Al-Asaad, was born in Iraq and migrated to Aotearoa New Zealand with his family as a child. We began working on parallel research projects: Arama's focus was on Māori—migrant relations, and Faisal's Muslim—Māori relations. We attempted to bring our projects together and write a joint piece. However, we soon discovered our approaches to be "incommensurable but not incompatible" (Snelgrove et al., 2014, p. 3), and the productive tension resulted in two separate manuscripts, this being the first. Forthcoming work led by Faisal will analyse interviews conducted with members of Muslim communities in Aotearoa.

Diversity discourse in settler colonial contexts

The concept of diversity has tended to attract critical scrutiny in scholarly writing in almost equal proportion to the symbolic currency it has acquired in administrative and governmental practice. In relation to race and racism, the critique of diversity has been particularly potent by engaging it as a structural or institutional problematic.

Critiques of diversity have included responses to its circulation in discourses and ideologies of nationalism and national culture (Gunew, 2004; Hage, 2012; Stratton & Ang, 1994). In this capacity, and particularly through its permutation as 'multiculturalism', diversity was interrogated for its purpotedly descriptive value, or rather its role in subtending certain discourses: in describing what the nation *is,* what does diversity actually do in relation to what the nation is not? How is the nation constructed as pluralistic, and what racial histories, asymmetries and inequalities are erased in the process?

More recently, diversity has also been critiqued for its discursive power, specifically and explicitly in its circulation in institutional spaces (Ahmed 2007a, 2007b; Ahmed & Swan, 2006). In this capacity, and particularly as an institutional prerogative to address failures in

representation as well as redistribution, diversity is interrogated for its supposedly prescriptive value, or its presumption to enact certain changes: in prescribing what an institution *should be,* what does diversity actually do in relation to what it shouldn't be (and already is)? How is the diversity of an institution 'performed', and what structures of advantage and disadvantage remain unaltered in the process? These critical currents have helped to render and make visible operations of power that condition the thinking, talking and doing of diversity.

Race, and also gender and sexualities, have importantly been foregrounded as both the social realities and sociological tools constituting diversity discourses. At the same time, the place of and emphasis on colonialism, or more precisely colonial relations, in such discussions remains somewhat ambiguous. As is often the case, colonialism is refracted through the prism of race and racialisation, rather than addressed as a question pertaining to its own specificity – as a specific articulation of diversity. As such, the problem of emphasis is not simply one of quantity so much as quality: it is not that colonialism is ignored, but rather the emphasis is simply elsewhere, and colonialism is generalised – as 'history', for instance. Race, ethnicity, gender, etc. come to the foreground; colonialism moves to the back.

Diversity has been both discursively and analytically optimised to engage the cultural politics of identity rather than the structural dimensions of sovereignty – when in fact the colonial question is, as Steinmetz (2007) puts it, ultimately one of sovereignty. And yet, as historical sociology has often stressed, colonialism can only be weakly and insufficiently engaged as historical monolith (see Goh, 2009; Steinmetz, 2007, Correspondingly, a diverse range of colonial analytics have been made possible. For instance, postcolonialism is one particular strand of thought that has tried in archeological fashion to unearth the colonial past in the present, and has often been the 'go to' toolkit for engaging questions of diversity and pluralism (see Goh, 2008). As in relation to other problem spaces, however, this lens has exhausted its capacity to render anything that can't be examined via other frameworks; e.g. critical race theory, critical feminism studies, queer studies, etc. On the other hand, an analytic emphasis on settler colonialism can illustrate two things: 1) the specificity and irreducability of colonialism as a structure and site of analysis, and 2)

the particular, and potentially productive, tension inherent in the encounter between the diversity problematic and the colonial analytic.

Where indigeneity is concerned, both the institutional practice of diversity and its normative critique have often been entirely inattentive. Premised as it has been on frameworks of inclusion and recognition, diversity, like multiculturalism, is woefully ill-equipped to engage Indigenous sovereignty (Coulthard, 2014; Moreton-Robinson, 2015; O'Sullivan, 2017). Interestingly enough, even non-Indigenous scholarly critique of diversity has at times had very little to say about the specificity and singularity of indigeneity. Putting it simply, while Indigenous peoples may have a stake in the diversity game, it is rarely played on their own terms, even when those terms are mobilised around issues of race. This is not least also due to the fact that diversity's problems – monoculturalism, exclusion, White supremacy, racism, etc. – are endemic to settler, not Indigenous, societies.

Diversity's erasure of Indigenous sovereignty is part of a structural tendency exemplified by settler colonialism. As Patrick Wolfe (2013) has argued, settler discourse has historically sought "to shift Native Affairs out of the realm of international relations and reconstitute it internally as a depoliticised branch of welfare bureaucracy" (p. 258). This shift entails a process whereby sovereign collectives are liquidated and alchemically transformed into a collection of groups and individuals. One palpable expression of this transmutation is borne in the fact that even where diversity engages Indigenous peoples, it is not their indigeneity per se but their 'ethnicity' that is at stake.

Foregrounding colonial relations, and specifically settler colonialism, underscores the important structural issues in question. Firstly, where indigeneity and Indigenous sovereignty is concerned, diversity is not contingently but inherently and necessarily problematic – consider the place of the ideological and conceptual mainstay of diversity, 'inclusion', in the wider colonial dynamic of assimilation whereby entry into settler society has always entailed Indigenous peoples exiting their own. Secondly, and perhaps more importantly for our purpose, recognising the incommensurability of settler and Indigenous life-worlds may in fact help to engage the diverse ways in which diversity can be done.

Māori and diversity in Aotearoa New Zealand

Diversity discourse in Aotearoa must be understood in the context of the colonial project to eliminate and disposses Māori. While He Whakaputanga o te Rangatiratanga o Nu Tireni (The Declaration of Independence 1835), and te Tiriti o Waitangi (the Treaty of Waitangi 1840) recognised Māori independence, the Crown has used the English language treaty text to claim Māori sovereignty was ceded. In the four decades following the signing of the Treaty, the Crown's presumed sovereignty was asserted through unscrupulous land dealings, legislation, demographic swamping, colonial violence, land confiscation and forced relocation (see Pool, 2015).

By the turn of the 20th century, Māori were largely landless and considered a dying race (Pool, 2015). However, Māori presence continued to challenge the Crown's presumed sovereignty, so the campaign to eleminate the natives continued through attempts to define Māori out of existence. The Crown's assimilation agenda included policies based on ever diminishing 'blood quantum' (Kukutai, 2012), English-medium Native schooling, criminalising Māori knowledge experts, 'pepper potting' (i.e. relocating Māori from tribal homelands and scattering them amongst urban populations), and the removal of Māori children from their parents through closed adoption to Pākehā (New Zealanders of European descent) families. While rhetoric shifted from assimilation to integration, the assimilation ideal continued (Fleras & Elliot, 1992). A relatively recent manifestation of this agenda has been the Treaty settlement process, which requires iwi (tribal nations) to define themselves according to Crown criteria (Jospeh, 2012). Through this process, sovereign nations are reconfigured as trusts operating under Pākehā law.

In contemporary Aotearoa, the state's bicultural foundation is put in opposition to the multicultural demographic reality (Cormack, 2008; Smith, 2007), relegating colonialisation to a historical event as opposed to an ongoing structure. Diversity discourse positions Māori as a minority ethnic group in a multicultural society: as 'other' alongside and equivalent to settler communities of colour (Bauder, 2011). Within this framing, the differential constitutional positioning and settler racialisation experienced by Māori and tauiwi communities of colour is obfuscated. Māori needs are assessed against the competing needs of other communities, presumed to be in an

equivalent struggle for inclusion and equality (see DeSouza & Cormack, 2009; Lawrence & Dua, 2005), overlooking the political projects of Māori who, "unlike ethnic and immigrant minorities who are voluntarily looking to settle down and fit in within the existing social and political framework, Indigenous peoples constitute forcibly incorporated nations who want to 'get out' of imposed political arrangements that deny, exclude and oppress" (Fleras & Maaka, 2010, p. 15).

Indigenous-settler of colour relations

Solidarity between Māori and ToC presents a strong challenge to the settler colonial social order. Yet, diversity discourse restricts Indigenous—settler of colour relations. While convivial intercultural interactions are encouraged, the White/non-White binary underpinning settler colonialism, and refracted through diversity discourse, means the only direct relationship open to both Indigenous Māori and peoples of colour is one with Pākehā (the White majority; see Bauder, 2011). These multiple binaries arranged as they are with Whites at the top and communities of colour at the bottom signify oppressive/oppressed relationships (Saranillio, 2013). As Indigenous peoples and settlers of colour engage one another as distinct groups, contention for the position with which they identify – that of the oppressed – results: a conflict that ultimately only serves White supremacy.

Yet settlers of colour and Indigenous peoples exist in a power relationship with one another, albeit indirectly. Settlers of colour often legitimise the White settler state with which they see their interests aligned, undermining Indigenous claims to sovereignty (Saranillio, 2013) and allowing settlers of colour to share in the spoils of Indigenous dispossession (Lawrence & Dua, 2005; Moreton-Robinson, 2003; Sium, Desai, & Ritskes, 2012). However, "possession is jealously guarded" in settler colonial states (Moreton-Robinson, 2003, p. 27). The racialised social positioning of settlers of colour excludes them from possession. Thus, they are positioned as complicit but not culpable vis-à-vis Indigenous dispossession.

White supremacy also operates through Indigenous communities who internalise and reproduce European-conceived racial hierarchies, and jostle with minoritised racial groups for social status within a system stacked against both Indigenous people and settlers of colour. Thus Indigenous–settler of colour relations are complex, and continually shifting.

At times, we are in solidarity in our efforts to disrupt White supremacy; at other times, our claims are contradictory and we are in opposition, as White supremacy operates through us (see Saranillio, 2013).

The racialising settler colonial state creates antagonisms between minoritised, racialised groups, and yet, through diversity and multiculturalism discourse, the state detracts from the issues of White supremacy (DeSouza & Cormack, 2009) and positions itself as the answer to the 'problem' of racial difference. Foundational settler colonial structures render the state incapable of allowing Indigenous—settler of colour relations to flourish.

Despite this challenging context, Māori and tauiwi communities of colour can and do forge relationships that embed mutual accountability, resist reproducing settler colonial domination, and make solidarity in resistance possible (see Snelgrove et al., 2014). The role Māori play in welcoming communities of colour and the appetite of new migrants to engage with tangata whenua (ACE Aotearoa, 2019) provide tangible examples of these, as do the establishment of solidarity groups such as Asians Supporting Tino Rangatiratanga, Tauiwi mō Matike Mai, Inclusive Aotearoa Collective and others. Despite the relationship building that occurs at the community level between Māori and ToC, there has been little research into how this process occurs to date.

Decolonising Māori—ToC relations requires Indigenous starting points (see Sium et al., 2012). Smith (2007) highlights the need for "strategies based on [the] continuous and mutually transformative process of cross-cultural encounter" (pp. 83–84) and outlines the potential of *tikanga Māori* (Māori laws, protocols) as a living force, to stretch the national imaginary. As an alternative to state diversity discourse, we turn to the Indigenous Māori process of relationship building, whakawhanaungatanga, as a starting point for building solidarity between Māori and ToC in Aotearoa New Zealand.

Whakawhanaungatanga

Any approach to intercultural interactions in Aotearoa must acknowledge the violence of colonisation (see Smith, 2007), as well as the structural racism that shapes the experiences of all non-Pākehā peoples in Aotearoa.

Whakawhanaungatanga provides a framework for intercultural interactions that does not force people of colour to make out their silhouette against the backdrop of Pākehā culture, but rather, allows peoples of colour to define themselves in relation to and build relationships with one another.

The root word of whakawhanaungatanga is whanaunga (kin, relation), which, when the suffix tanga is added, becomes an abstract noun denoting the state or quality of being related, encompassing "kinship and the rights, responsibilities, and expected modes of behaviour that accompany the relationship" (Benton et al., 2013, p. 524). While the more traditional usage of the term is based on whakapapa (genealogy), modern usage is applied broadly to include "kin-like reciprocal relationships among people generally" (Benton et al., 2013, p. 524). What might distinguish whanaungatanga from relationships more generally is that these non-kin whanaungatanga relationships are forged through shared experiences (Mead, 2003, p. 28), and imply a "special social solidarity" (Benton et al., 2013, p. 524).

As a fundamental value and regulating principle within Māori culture (Mead, 2003), the importance of whanaungatanga cannot be overstated. Whanaungatanga (along with other tikanga principles) guides social interactions, reinforcing reciprocal obligations and behavioural expectations. However, the ideal of whanaungatanga is "difficult to achieve" as "relationships are fragile and need to be nurtured" (Mead, 2003, p. 28).

Whanaungatanga is established through the process whakawhanaungatanga. The prefix *whaka* means 'to action', and when added to *whanaunga* forms the verb *whakawhanaunga* (to get to know one another, or to build relationships). The suffix *tanga* nominalises the verb to form whakawhanaungatanga, which can be translated as the "process of establishing relationships, relating well to others" (Māori Dictionary, 2019).

While contemporary whakawhanaungatanga is often discussed in reference to interactions between Māori individuals and groups, in the following section we explore if and how whakawhanaungatanga might occur between Māori and ToC, despite the tendency of diversity discourse and settler colonial structures to inhibit such relations. We do this through descriptive qualitative analysis of interview data provided by Māori with experience interacting with ToC at the community level.

Method

Participants

As part of a broader study on Māori attitudes to immigration in the Auckland and Waikato regions, the first author conducted one-on-one interviews with six Māori leaders. Participants were recruited through the social networks of the research team and selected because they had experience interacting with tauiwi of colour while performing Māori governance roles. The organisations they worked for included a tribal entity, local government, Māori urban authorities, and an NGO. Some participants opted to use their real names, while others opted for pseudonyms.

Materials

The interviews followed a semi-structured schedule, designed to gain information on community members' experiences of engagements with ToC, and their views on immigration. The interviews were recorded on smartphones, transcribed and coded using NVivo software.

Procedure

We obtained ethical approval from the Faculty of Arts and Social Sciences Human Ethics Committee at the University of Waikato. Those interviewed were visited at their homes or workplaces (depending on their preference), were given information sheets and invited to ask any questions before signing consent forms. Interviews (as opposed to focus groups) were held for logistical reasons, as we had identified individuals working for different organisations at distal locations across two regions. The interviews ranged from 39 minutes and 24 seconds, to 1 hour, 23 minutes and 15 seconds, and were conducted in English, with occasional words and phrases in te reo Māori (the Māori language).

Analysis

During the interviews, the participants made reference to whakawhanaungatanga (a process for establishing relationships). While the initial focus of the research had a broader focus on attitudes to immigration and Māori—ToC relations, in order to explore the concept of whakawhanaungatanga, we created a data set by collating interview

excerpts that described the nature of the relationship between Māori and ToC, and/or prescribed ways to foster good relationships between Māori and ToC. The data were, firstly, subjected to *deductive* thematic analysis (Braun & Clarke, 2006) to explore whether those interviewed described whanaungatanga relationships between Māori and ToC; i.e. relationships that are family-like, based on similar experiences, and bound in conditional solidarity. Secondly, the data were subjected to *inductive* thematic analysis (Braun & Clarke, 2006) to identify the processes through which good relationships are formed. Four such aspects of whakawhanaungatanga were extracted: positioning, power sharing, dialogue and cultural practice. As Māori—ToC relationship building has received limited scholarly attention to date, we chose to present descriptive findings. The results of our analyses are discussed in the following section.

Results and discussion

Whanaungatanga (relationships)

The interviewees described whanaungatanga relations between Māori and ToC as family-like, based on shared experiences, and joined in solidarity (see Benton et al., 2013).

Family-like

In the following excerpt, interviewee Matutaera identifies his ability to interact positively with former refugees by treating them as though they are family.

"If it's a young man, I look at him. I say, well just imagine if that was my son. How would he be treated in another country?... I'm looking at the lady who's about seventy-something years old... How would I like my nanny to be treated if she was in a foreign country?... I find that so easy, because I treat them exactly how I treat my own nanny... that's how simple it is."

Rangimahora adds that sometimes relations with ToC are not just family-like, but actually based on whakapapa. In doing so, Rangimahora rejects settler colonial binaries (Native/settler, and White/non-White; see Saranillio, 2013), presenting an Indigenous understanding of relationality that moves beyond settler-colonial racialisation.

"There's a reality with an increasing global world, and that is that our mokos (grandchildren) and our future mokos will be of all colours and all races."

Shared (similar) experiences

Shared experiences (another aspect of whanaungatanga) are identified in Māori—ToC relations in the following quote as Matutaera describes how former refugees come to Aotearoa with an understanding of what a *tangata whenua* (an Indigenous person) is because they too have likely encountered imperialism in their country of origin.

"They already know what a tangata whenua is. And that's the reason why all the fighting's going on in the world. People are standing up because they are tangata whenua of a particular land. So, they're fighting intruders or people who have come to their country to raid their country."

Matutaera goes further, drawing parallels between the displacement experienced by former refugees and that experienced by Māori in their own lands.

"We, too, are almost like refugees in our country. We, too, are almost like aliens. We're aliens to a foreign government that rule over us... Strangely, when we do our pepeha (tribal saying), we say, "Oh so-and-so's my maunga (mountain) and my awa (river) is so-and-so". But is it really my maunga? Or does the maunga belong to the Conservation Department?"

In the excerpt above, Matutaera's use of the phrase "almost like refugees" (as opposed to "just refugees") acknowledges the similar, yet distinct experiences of members of different communities. Despite sharing similar experiences, the incommensurability of Māori as Indigenous peoples and ToC is made clear in the following excerpt, in which Mereana points out how the Treaty-based constitutional position of Māori is often overlooked by the council she worked for.

"Racism is present all right. They look at us not as a [Treaty] partner. Just as a stake-holder."

Mereana's observation highlights the way in which the specificity of Māori identity as tangata whenua is reconfigured as a ethno-racial category and conflated with other minoritised ethnic groups (i.e. stakeholders that must be consulted as opposed to signatories to the Treaty of Waitangi with claims to sovereignty that are external to that of the Crown; see Lawrence & Dua, 2005). This observation was also made by Vanessa as she critiqued

the approach often taken by local government in categorising Māori with Pacific peoples, thereby eliminating Māori claims to sovereignty.

We say no it's Pākehā and Pacific Islanders. Not Māori and Pacific Islanders. You're all on the other side of the Treaty partnership. You're partners with Māori. So yes, when I say to Pākehās, you're on the same team as Pacific Islanders, Indians, Americans, Germans, foreigners, they're all in your team, they can't cope very well with that. So, we really have to change the narrative that they've got locked in their heads through this whole Māori and Pacific Islanders thing. And they try to say to us, well Pacific Islanders have the same issues as you. And I said, well they don't have the same constitutional rights as us. So that's a major difference... you sort of put us in the same pile as Pacific Islanders because we look – because we're brown."

Vanessa's analysis illustrates the ways in which Indigenous identification and claims to sovereignty grate against settler colonial racialisation, including diversity discourse that casts racialised communities as equivalent, interchangeable 'others' (Bauder, 2011). Her comments demonstrate the need for a complex understanding of how White supremacism differentially oppresses communities of colour, and how these histories of oppression must be understood as existing in "complex unity" (Saranillio, 2013, p. 282).

Conditional solidarity

While the excerpts above note the specificity of Indigenous identity in relation to settlers, in the following excerpt, Helen rejects the settler colonial Native/non-Native binary by outlining how the oppression experienced by ToC distinguishes them from Pākehā. She notes that this may place ToC in solidarity with Māori.

"I understand their reluctance to be classified as Pākehā because people of colour, if you want to use those terms, have also got political connotations of having been oppressed, whether they're the majority or minority, by White privilege and colonisation, so you hope that they're allies, and many are."

The solidarity between Māori and ToC is described as conditional, however, by Rangimahora:

"It depends on context. It depends on people's moods and what the take (issue) is on the table. There are things that will draw us together and make solidarity really evident. But there's also things that you put on the table that can make it really clear about how very different we are as well... So, when we have a multi-ethnic day, it's a day of celebration, there's stalls, there's kai (food), there's dances, and there's all sorts of

things. We have a debate on the foreshore, and you'll soon see what else comes out on that particular day."

Rangimahora's analysis points to the distinct political projects of Indigenous peoples and settlers of colour, which Snelgrove et al. (2014) describe as "incommensurable but not incompatible" (p. 3).

Whakawhanaungatanga (the process of establishing good relations)

The interviewees identified ways in which good relationships between Māori and ToC could be fostered. We grouped the excerpts into the following four themes: positioning, power sharing, dialogue and cultural practice.

Positioning

The practice of whakawhanaungatanga often involves sharing one's *pepeha* (tribal sayings that reference particular geographic features and ancestors). This process locates the speaker to particular lands and people and allows listeners to find points of connection. In this process, knowing how one is located in relation to the social and natural world allows connections to be made between individuals and groups.

When asked how one might 'manage interactions' with ToC, Kiri rejected the question and spoke instead about what she thought was central to whakawhanaungatanga: knowing oneself.

"Not so much managing interactions, just making sure that I can stand up and be who I am because of what's behind me."

Matutaera, too, understood that knowing and positioning oneself was key when connecting across cultural difference:

"For me, I have to know, how do I connect to myself? Unless I fully understand that... I will be hopeless to communicate with somebody else... get to know who you are, before you launch out and greet another person. Respect yourself. If I do all those things, manaakitanga (caring, hospitality, respect) to myself, to my own whānau (extended family), to my own hapū (tribe), iwi (confederation of tribes), then I'm able to practise that, or to utilise that powerful resource when I greet another people."

These comments resonate with international literature on Indigenous–settler of colour relations that identify the need for solidarities to have Indigenous starting points, to be place-based, and to begin with an

understanding of communities' own positionalities (Sium et al., 2012; Snelgrove et al., 2014).

Power sharing

Power sharing was extracted as a theme in the whakawhanaungatanga process. This theme comprised the subthemes of *manaaki* (mutual respect), *aroha* (compassion, love, charity) and *koha* (reciprocal support).

The idea of manaaki, or mutual respect, was raised by Kiri. She noted this as being particularly important for racialised peoples through whom Pākehā supremacy may operate. She gave this advice:

"Not to make judgement on others, and hope that they don't judge me. So again, I give respect and expect respect back. But the way I treat someone is what I expect them to treat me back. So if I'm going to be racist to someone, oh it's my own fault if they're going to be racist to me."

Intentions are central to whakawhanaungatanga. Aroha is seen as an "expected dimension" of whanaungatanga (Law Commission, 2001). And if interactions are not entered into with aroha – with open-mindedness and willingness to share power – the interaction will be a *hara* (transgression). In the following excerpt, Matutaera describes the attitude or intention he embodies when meeting former refugees for the first time.

"'Welcome, sir'. I'm talking to him in my mind, as I stare in his face, 'Welcome'. I know what you've been through. I know you have been stripped. I know you have been persecuted. Welcome. And let me, let me, for now, embrace you."

While a translation for aroha given here is 'charity', it's important to note the reciprocal nature of support in whanaungatanga relationships, which differs sharply from the paternalism the English word charity often implies. The situational nature of this support is alluded to in Matutaera's excerpt above with the words "for now".

Protocols in Māori ceremonial gatherings of koha/whakaaro (gifting) and hākari (feasting) demonstrate the importance of sharing or 'breaking bread' to build trust and demonstrate generosity in relationships. In the following excerpt, Matutaera outlines how koha, or reciprocal support, is part of relationship building.

"Whakawhanaunga means I have to create a relationship where I can support the person. See, there is another saying that our kaumātua (elder) always quotes and the saying goes something like this in English: The person who is weak or sick, let him who is healthy reach out to that

one. Because one day it might turn around the other way — you become sick and then that person will come and reach out to you. So, we talk about koha along those principles. It's exactly the same thing. You give, I receive. Tomorrow I give back to you, like that."

<u>Dialogue</u>

Creating space for *whakawiti kōrero* (dialogue) to occur was identified as a process for fostering good relations between Māori and ToC, as Rangimahora explains:

"So honestly just talking and listening to one another, but allowing one another space to respond... just allowing that korero (discussion) to flow, to come to end, and then having you're opportunity to come back."

In contemporary Māori settings, when individuals or groups encounter one another, whakawhanaungatanga is often enacted following whaikōrero (formal speechmaking). Through the whaikōrero, take (issues, grievances) are aired and the individuals or groups are brought together: A space is created in which whakawhanaungatanga can occur. Rangimahora goes on to note that airing any take was crucial to creating dialogue between people/s.

"It's like anything, when there's differences in the room, you've got to allow people to have their say and to express their feelings... Unless you allow people to talk things through then you're not going to hear their 'why'. Their 'why' behind the raru (conflict). Their 'why' behind the riri (anger). And you're not going to really get an understanding. And if you don't get an understanding you can't come to a compromise. You can't work together to form a solution."

Matutaera noted how he thinks from their perspective when attempting to understand the position of former refugees:

"Most of the people I work with are people who don't want to be in our country. They don't want our support. But because of whatever's happened to their countries or their people, they have no other options. In fact there are still people in our country that have come from other countries that are very lonely and homesick. Of course they would crave for things like their own food, their own lifestyle, their own tikanga (customs/protocols), their own culture. Like anybody else. If I was taken to another country, how do you think I would feel? I would feel homesick. I would miss my rivers, my eels, and so forth."

This type of dialogue and perspective taking is crucial to allow communities of colour to subvert the colonial lens: that is, to reach "beyond

our deeply learned ways of seeing ourselves and each other through the eyes of the settler nation-state" (Patel, 2015, para. 13).

Cultural practice

Finally, cultural practice was used to whakawhanaunga (build relationships). In the following excerpt, Helen outlines how she was able to foster good relations between Māori and ToC through sharing stories and whakataukī (proverbs).

"We'd do an exchange of whakataukī. So, you know, 'What's our view of a leader? Here are some proverbs. What are your proverbs?' And then from that we'd tell each other our story. And so, from that it's very humanising, because you can connect on the universal values."

Helen also noted the importance of understanding and sharing our marginalised histories to connect with each other, and with these lands.

"It's the fact that we don't have a decolonised education system, and we do live in a world shaped by media that's not about telling our stories. So I think the most powerful thing we can do... is actually talk about our histories... I truly believe that people... in knowing the history of this land, can get a sense of where they belong in it."

Historicising and connecting forms of racialisation and oppression has been identified as conducive to Indigenous—settler of colour solidarities. Saranillio (2013) notes that making these connections could allow settlers of colour to "conceptualize liberation in ways that are accountable to Native aims for decolonization" (p. 282), while Bonita Lawrence suggests that "antiracism cannot take place without addressing Indigenous decolonisation and Native peoples have to understand that colonialism was not just local; it was (and is) global" (Rutherford, 2010, p. 13).

Conclusion

Through this qualitative analysis of interview data, we explored whether and how Māori are practising whanaungatanga with ToC, against the paradigm of diversity that dominates state interactions with Māori and ToC, and despite settler colonial structural binaries that inhibit Māori—ToC relations. Māori leaders who participated in this research characterised relations with ToC as whanaungatanga, that is family-like, based on shared (similar) experiences, and bound in (conditional) solidarity. Our participants spoke about strategies they used to build good relations with ToC. We

grouped these whakawhanaungatanga strategies into four themes: positioning, power sharing, dialogue and cultural practice.

While the scope of this project was modest (including interviews from only six Māori community leaders), through our analysis we suggest that strengthening Māori–ToC solidarities requires us to subvert the settler colonial lens, deconstruct identity binaries, recognise our distinct yet interrelated experiences of settler colonial racialisation and oppression, accept the conditional nature of inter-group solidarity, and align compatible Indigenous sovereignty and anti-racism movements. Further research canvassing the Māori whanaungatanga initiatives with ToC already taking place at the community level would enhance understanding of Māori–ToC relations and solidarities further.

On a practical level, in Māori cultural contexts, creating spaces in which whakawhanaungatanga can occur often requires whaikōrero to have taken place, during which time take are aired, if not resolved. In the context of Māori—ToC relations, this could take the form of explicit acknowledgement of power relations that exist between groups, or acknowledgement of the ways in which Pākehā supremacy operates through both Māori and ToC.

As we write the conclusion to this paper, tensions at Ihumātao have escalated. Following five years of peaceful occupation, on 23 July 2019 bailiffs delivered an eviction notice and a police cordon was established. The protectors of the whenua (land) have remained steadfast. Supporters of the campaign have flocked to the site, their number swelling to an estimated 5000 at its peak (RNZ, 2019), and additional protests have also been held in Hamilton, Wellington and Dunedin. At the same time, the 'Hands off our Tamariki' campaign to end the removal of Māori children by the state, the 'Kia Mau' campaign protesting the state-sponsored re-enactment of Captain Cook's invasion of Aotearoa, and various campaigns around water rights are gaining significant traction, leading these groups to suggest there is "a crisis for Māori rights" (Kia Mau, 2019).

Campaigners at Ihumātao have received support from international Indigenous delegations from Rarotonga, Hawai'i, West Papua, and Turtle Island (among many others), as well as from tauiwi-led groups including Asians Supporting Tino Rangatiratanga, Tauiwi mō Matike Mai, and

members of Muslim communities in Aotearoa, who themselves are challenging the state's inquiry into the Christchurch terror attacks due to a lack of transparency and failure to centre Christchurch victims. The strength of these movements and solidarities demonstrate widespread resistance to settler colonial racism, and point not only to a Māori rights crisis, but a constitutional crisis.

New Zealand's constitutional crisis arises due to Māori claims to sovereignty that is external to that of the Crown. The Treaty of Waitangi (the nation's founding document) guarantees Māori independence, and the right of Māori to self-determination is affirmed in the United Nations Declaration on the Rights of Indigenous Peoples, to which New Zealand is a signatory. While the Crown claims that Māori sovereignty was ceded through the Treaty of Waitangi, the Waitangi Tribunal (i.e. the Crown themselves) recently found that the Māori claimant group did not cede sovereignty by signing the Treaty (Waitangi Tribunal, 2014). While the Crown continues to use its own legislative processes in the attempt to extinguish tino rangatiratanga (Māori independence), these attempts (including contemporary Treaty 'settlements') will continue to be challenged, as Māori sovereignty is external to that of the Crown, and can only be extinguished through tikanga Māori (Māori law). While tino rangatiratanga is self-evident to many Māori, achieving a constitutional transformation that gives full expression to the Treaty of Waitangi, such as that envisioned by Matike Mai (2016), will face considerable opposition. But the movement to do so will be strengthened through Māori-ToC solidarities.

Tauiwi of colour supporting the campaign at Ihumātao and those already working to achieve Treaty-based constitutional transformation understand that anti-racism action in a settler colonial context must extend beyond seeking equality within a White-dominated social system to include supporting Indigenous peoples in their sovereignty movements: that is, action that cannot be accommodated within the discourse of diversity and inclusion. But for transformative solidarities to be forged, an alternative to the Crown's settler colonial structures must be available to ToC (see Amadahy & Lawrence, 2009). That is to say, there must be a place for ToC in the power relations Māori imagine. Smith (2007) suggests the cultural forces that prevail beyond settler colonial structures must be subject to "perpetual critique" (p. 67). We offer the iterative process of

whakawhanaungatanga as one method to decolonise relationalities and to build and rebuild solidarities.

Notes

- See, for example, a review of Sara Ahmed's work by Tracey McIntosh (2014)
- Increasingly, critical race and Whiteness studies have sought to conceptually foreground White supremacy as a framework for understanding ongoing, materially and historically grounded practices of race and racism, particularly with a view to settler colonialism. See, for example, Bonds and Inwood (2016).

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