

ANTH313**Flexible learning through flexible architecture:****How tactical urbanism can improve the wellbeing of Deaf students in Aotearoa**

The wellbeing of Deaf students in Aotearoa can be improved through a redesign of classroom spaces. An open style of architecture, different again to the open classroom, will allow for the boundaries between the Deaf and hearing worlds to be dismantled. Design anthropology theories such as intersectionality and tactical urbanism are applicable to this project as they bring the target group to the core of the design process. My project will involve manipulating pre-existing school and classroom structures (in private, public schools and in kura kaupapa) through installing moveable curvilinear semi-circular, transparent walls that slide along tracks. For the purpose of this essay I will describe these walls as flexible architecture. These walls will allow for multiple learning spaces to be created within a singular built environment. They will be sound-proofed to avoid distraction and tactile so that children and physically disabled students and staff can adjust and operate them. The reason I am focusing on this aspect of school architecture and design is because physical segregation of Deaf students fosters alienation has hindered their academic success and general wellbeing for decades. In transforming physical classroom environments, the teaching and learning experiences in schools will also improve and become a collective and inclusive space.

It is crucial when undergoing this research and design project to consider the harmful ways the education system has affected Deaf children and students. Processes of ableism and discrimination against Deaf people have long been linked to the traditional education system. Until as recently as the 1980's sign language was banned amongst deaf children and lip reading promoted as the preferred means of communication regardless of the degree of hearing loss. This resulted in generations of deaf growing up unable to properly converse in either world, not understood by hearing people and deprived of a shared deaf sign language in common. This educational philosophy and practice was specific to Aotearoa, in the United Kingdom for example British Sign Language BSL has a strong, established history long recognised as a legitimate cohesive language with its own structure and grammar. The ramifications for Deaf have been wide ranging, influencing and limiting their life choices. Perceptions associated with mental and emotional intelligence, embodied in the phrase 'deaf and dumb' (based on the assumption that Deaf cannot vocalize and extended to imply they are therefore stupid), have created stereotypes that have hindered Deaf students from succeeding and in their wellbeing and self esteem. Similarly, Deaf lives have been reduced to exactly that. The ramifications for Deaf in the outside 'hearing' world have meant that as a consequence of being failed by the educational system they have also struggled to gain academic qualifications and sustainable jobs beyond the menial. Historically, teachers of Deaf students had not been thoroughly trained enough in NZSL to aid with literacy. Adult literacy remains a serious problem for Deaf (Powell 2014, 129). The perception and acknowledgement of Deaf identity has only recently begun to be properly understood and embraced since the officialization of

New Zealand Sign Language in 2006. Research into Deaf education systems is significantly delayed as a result of this and it wasn't until the mid 1980s that serious research into sign language in New Zealand developed (McKee & Manning 2015, 473-4). The Deaf community were consulted in the process of designing the Public Health and Disability Act, in regards to the recognition of NZSL and 'reversing the harm that resulted from the minorisation of sign', the government agreed to make compulsory education available in NZSL. Despite agreeing to this at an institutional, top down level, little progress was made (McKee & Manning 2015, 476). Public submissions suggested thorough implementation of sign language in education, this was not reflected in the final bill. The NZSL Act encompassed rights to language and to disability. This was a clear political statement and generally elevated the status of the deaf community in terms of public and social recognition and awareness. What this Act did not achieve however, was a focus on wellbeing. This can only be truly achieved through a complete redesign of schools. We must acknowledge the government's role, or absence of, in this discourse in order to move forward. A lack of support for Deaf Māori manifests when teachers and translators are not necessarily Māori themselves nor can they understand the needs of these students. Whānau and hapū based learning environments must be introduced from early on for Deaf students. At present, the parents and guardians of Deaf children can choose to place their children in either; a hearing school with 'ancillary' support, a Deaf class in a hearing school or a Deaf education centre. There are currently only two Deaf education centres in the country, Kelston Deaf Education Centre in Auckland and Ko Taku Reo - Deaf Education in Christchurch. Symptomatic of this, most deaf students attend regular or hearing schools, where there is inadequate, patchy or no 'ancillary' support. Classes

specifically for deaf students in hearing schools are often lumped together with other 'special' or 'disability' classes. These environments significantly hinder success and potential for deaf students to be truly immersed in NZSL and neither do they encourage hearing students to understand and adequately communicate with the Deaf community.

Design anthropology will allow for this project to have a more nuanced outcome that better fits the needs of Deaf students in Aotearoa. Tactical urbanism specifically is a design tactic that works from a bottom up approach (Domínguez Rubio & Fogué 2015). The main objective of tactical urbanism in this project is systemic and physical inclusion. Inclusion is the primary way of helping Deaf students succeed, feel encouraged and effectively improve their wellbeing. This is also what has been reported as the primary challenge for Deaf students in Aotearoa today (Powell & Hyde 2014). Tactical urbanism is a form of cosmopolitical design which would enable students to see the potential of built architecture to change and adapt. This is a powerful strategy as it acts as a material way to conceptualise the capacities and strengths of students themselves (Domínguez Rubio & Fogué 2015, 150). Deaf Māori particularly, have been marginalised. Crenshaw's theory of intersectionality can be applied here. This framework will allow for wide reaching improvements for all students. What has been described as the 'matrix of domination' continues to exist in the education system because it has not been designed for or by marginalised groups (Costanza-Chock 2018). The intersectional design aspect of this project would be to ensure that Deaf Māori students make up the core of the design process and is therefore, a just design. The current perception of Deaf Māori students is that they are

less capable of achieving well. Feelings of exclusion for Deaf Māori are due to a lack of support and understanding of Mātauranga Māori by education policy design (Smiler & McKee 2006, 95). By whole heartedly trusting the opinions of Deaf students across the country, from different backgrounds and socio-economic statuses, the final result will reflect their differing needs, rather than a hegemonic one based on a limited number of interviews or surveys. An anthropological approach would involve interviews with Deaf students who are comfortable to partake - in their home, school and social environments. These could observe the ways Deaf students respond to and feel in learning settings, whether their emotional needs and educational aspirations are being addressed. Teachers expectations of student achievement in New Zealand is concerning and recalls harmful racial stereotypes (Rubie-Davies & Webber 2015). The concept of 'subconscious bias' has had more exposure recently. A study in the U.S. has shown that segregated, partially integrated and mainstreamed settings have all proven to have limitations. Design anthropology would allow for a thorough understanding of what the specific factors are that make Deaf children feel isolated. For Deaf Māori, intersectional design would involve Māori anthropologists and designers working alongside Deaf Māori students and their whānau to ensure their voices are heard and needs met. This is incredibly important as most Deaf spaces are predominantly Pakeha. Access for Deaf Māori students to learn about their whakapapa and Māori identity is therefore limited (Smiler & McKee 2006, 99-100). These emotions have been alluded to in studies regarding participation and inclusion (Musselman, Mootilal & MacKay 1996). There is a risk of tokenism if suddenly Deaf students are invited into a design council that has been largely a matrix of domination. A matrix of domination is a concept that articulates how "race, class, and gender as

interlocking systems of oppression, rather than each operating 'on its own' at a systemic level," (Costanza-Chock 2018, 4). Through design justice, the experiences of past and present Deaf students will dictate how classrooms change and adapt. Moveable walls will make way for this discussion to continue as a visual indication of a shift in the way schools are designed and the way that education in general is perceived. Intersectionality and tactical urbanism will create schools that promote self-directed learning for students, contingent on their lived experience and culture.

I propose that the achievement gap could be decreased and, wellbeing increased, with this open and adaptable model of classroom. If Deaf students are encouraged to direct their own learning rather than be restricted to just a single stream, their success at school will also have a broader scope. Rigid architecture perpetuates the enforcement of segregation and categorisation of marginalised peoples. Moveable walls can act as a form of decolonisation in ridding schools of these kinds of idealisations (Gunn, Otto & Smith 2013). Each of the three aforementioned streams of education have boundaries, open classrooms would allow for students to freely choose to engage with each of these streams at their will. Employing tactical urbanism in the form of moveable walls would allow Deaf students to migrate between learning situations that suit them best on a particular day. This form of individualised learning will only be useful if teachers actively learn and use NZSL on a daily basis. Walls are by design, exclusionary and separative. Self-directed learning is important as it returns agency to Deaf students, it will encourage Deaf students to stand as class representatives and leaders who can promote the advocacy and inclusion of other Deaf students. Should this amplify over time, Deaf students will not feel as though they are carrying the weight

of the entire Deaf student body. An example of this prototype in action would be several different learning situations occurring in one space and teachers operating respectively within each group. By moveable walls I specifically mean soundproof walls that are made of a transparent material that can move along tracks easily within a larger 'open classroom' space. This could create numerous small rooms or one big room, depending on the students' preferences. Transparency is key to this design to ensure that all students in the building are aware of how other students are learning and bring awareness to the Deaf community. It will teach students to appreciate that there is no one way of learning and to not limit themselves to their own experiences. For hearing students, being able to see how Deaf students learn and communicate will not be a distraction because it will be normalised. Exposure to both hearing and Deaf students of multiple learning environments will benefit wellbeing as these spaces are not restrictive or static. The reason I am focusing on open classrooms and moveable walls is because physical exclusion is a harmful means of discrimination. Group learning is not appropriate 100% of the time. A key factor for all students but particularly the Deaf can be the distraction of background noise. The term Deaf covers a broad range of hearing at different decibel levels which are statistically divided into four: Mild, Moderate, Severe and Profound. The final two measure a hearing loss of 61-80 decibels (dB) and more than 81 dB respectively. Modern developments in the technology of the hearing aid have meant that sensitivity to sound can be registered among those profoundly Deaf with minimal residual hearing. While a useful tool, the hearing aid also adds a layer of complication to interpreting and distinguishing a range of sounds, from human voice to furniture being moved indoors to traffic noise outdoors. Another significant development, much

debated over recent years, has been the cochlear implant which provides a sense of sound for the Deaf and hard of hearing. The device does not provide 'normal' sound and similar issues discussed above confront the user (Blume 2010). In lessons that require intense concentration and a restricted teacher / student ratio, focusing on reading, writing and numeracy skills for example, moveable partitions would be employed to create such spaces. They would have sufficient sound proofing to further reduce referred noise. In lessons that warrant a communicative and open discourse; an art class, a cultural performance, a brainstorming session debating bigger issues, for example, the panels could be removed. Tactical urbanism will benefit the wellbeing of Deaf students because if all students are interacting with the physical space openly, the learning choices for Deaf students will be defined, not by their deafness, but by their personal motivations and identities. It will also integrate or 'normalize' for hearing students the presence of those who cannot hear and who need to observe facial expression, lip movement and body language to understand meaning. Rigid walls, rigid classrooms and regimented positioning within these spaces all combine to exclude Deaf. Spaces that are well lit and built so everyone can see each other is crucial for Deaf learners. Transparent moveable walls could run on circular tracks to create 'deaf friendly' environments with good visibility, that hearing students could also experience and benefit from. Congruent to this, teachers trained to teach in an open classroom will also learn NZSL, as the majority of learning occurs through language, it is vital that all school teachers are able to communicate with Deaf students in every situation that arises rather than having a designated, separate translator (Luckner, Slike and Johnson 2012, 59). The mental wellbeing of Deaf students is contingent on teachers and school counsellors being equipped with and fluent in NZSL in order to

communicate with students. The role of a translator interrupts the flow of human interaction. To decide which school to enrol in is a hugely significant commitment to make at early childhood age. The schooling options and potential for Deaf children is multiplied if this new architectural model becomes widespread and readily available. Moveable walls would allow students to try different learning environments and levels of immersion without having to make a concrete and structured decision that displaces them. This project will include intergenerational classrooms that encourage the use of te reo Māori and NZSL. Collaboration between teachers and the families of Deaf Māori students could involve implementing the structure of open classrooms onto marae settings so that such engagement is not disruptive for students (Smiler 2014). Marae structure and internal space is more closely attuned to open plan than a traditional school room. Moveable walls will foster casual interaction between Deaf and hearing students outside of the classroom as well as within. Being conversant in and comfortable with using sign language and finger spelling, the hearing student enhances the Deaf student's cognition of subject and context in general conversation. Moveable walls will make Deaf students more visible, included and therefore less marginalized.

Having grown up in close proximity with my Aunt who is profoundly deaf, I have become aware of the difficulties faced by the Deaf community in Aotearoa. I have specifically chosen not to include much scholarship around 'what Deaf students need' as this has clearly not been working historically or currently. I also acknowledge that I cannot claim to understand Deaf experience in any way and my project is therefore limited. However, by understanding anthropological design methods I am able to

recognise what is not working and the reasons for that. This is a model project which would change and adapt with the consultation of the Deaf community. I am aware of my positionality as a person of privilege and ableism who has benefitted from and felt supported by the education system. For this reason I am aware that this project could risk being presumptuous of the needs of Deaf students and particularly Deaf Māori students. My prior studies in Anthropology have made me sceptical and critical of archaic forms of anthropological research that distance and alienate the participants of a study even further. For this reason I have found tactical urbanism and intersectional design theory to be palpable and positive ways of creating change as they act at a grounded level that is more akin to a social movement than a social experiment.

By transforming the architecture of schools and institutionalised education, all students would experience school as a beneficial time extending into their adult life, not only those who are Deaf or hard of hearing. The positive aspects of a flexible learning environment are underscored by the importance of retaining flexibility within the structure as a whole. Internal spaces must be adapted to suit the circumstances and needs of the programme, the syllabus, the lesson and the individual in order for students to succeed both at school and in life. If teachers are trained from the beginning to teach in open environments, it will result in a cultural reset that also includes learning sign language. To implement individualised learning, grading and the use of NZSL in schools into pre-existing structures will not in itself achieve as strong an outcome as shifting the geographical and architectural orientation of the school, and in turn the mindsets of teachers and students. The teacher / student

paradigm will also shift and encourage a greater communication. Removing physical barriers will inherently remove language barriers because the use of sign language in the classroom will be normalised. Movable walls in classrooms are a step towards inclusion for Deaf students in the wider world, which will benefit their livelihood, expression, sense of self, meaning, worth and wellbeing.

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