

Education as a homogenizer engine in indigenous cultures: Aymara children in northern Chile's case

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Case Report

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Abstract

Chile is a multi-ethnic republic; situation which contradicts itself when one looks at the relationship between the State and its ethnic groups, such as the Aymara in the North. One example of this is the implementation of a state-centric educational model which is homogenizing. Taking a Children's Geographies approach, the following work will analyse the specific types of relationship in educational institutions located in the Arica & Parinacota Region, between children from Aymara communities, the State and adults. Through different qualitative investigative techniques, such as content analysis of different instruments, it was possible to verify that the educational process which the Aymara children experience does not consider their culture, which sets them apart from their parents and community's identity. This study also uses the lens of Children's Geographies to identify some landmarks in their spatial worldview transformation and their spatiality. Lastly, some conclusions will be stated, on how the normative educational model causes uprooted children.

1. Introduction

The following work analyses a specific type of relationship between the State, adults and children, which is present inside educational institutions in the Arica Region between Aymara children (Chile's second biggest ethnicity, but still socially excluded and marginalized), their teachers, and a normative educational model, which leaves out their culture, fracturing their identity and setting it apart from their families through different ways (teachers' speech, school festivities and the interaction with non-Aymara students).

On the second place, it will be analysed, from geography, the Aymara children identity tearing and its effects over the transformation of their spatial worldviews. Finally, some conclusions will be stated.

1.1 Children, a geography's study object

A lot of water has passed under the bridge since Sara James asked if there was any interest and support to investigate children in some of the current geographic traditions [1]. As Robert M. Vanderbeck stated, this question sought the same inclusionary goals that had originated the geographies of gender, feminists, and other related currents in previous decades; The same author recognizes that children's geographies are currently a subfield of geographic research whose production has experienced different levels of development and diffusion, still insufficient [2]

In terms of lines of work, this trend is divided between studies referring to the regulation of the public space of children by adults, social perceptions about children and young people, the exercise of adult authority in public space and in schools. Children's spaces, the production of public space as "adult space", the nature of adult authority, distribution and geographical differentiation of the state of relationships between adults, children and the State, the socially constructed nature of childhood and youth, childhood history, among other topics. The list suggests that geography, from its possibilities of distributional, comparative, descriptive analysis, has methodological and conceptual weapons to address, either in its pure state or through hybridizations, the world of children. To the above, we add the contribution of Susan Holloway, who reflected on the incorporation of new social studies into geography that revealed the consideration of children's voices to study their positioning regarding power logics [3].

1.2 Aymara world

The 2017 Chilean National Population Census registered 2,185,792 inhabitants. Belonging to indigenous peoples, it highlights the Mapuche ethnic group (representing 79.8% of the total indigenous population), Aymara (7.2% of the total), among others. The total registered indigenous population was 17,574,003 people [4].

The Arica and Parinacota Region is part of the space inhabited by the Aymara population; 2.72% of Chile's total indigenous population is located in this region, and the Aymara representing 75.34% of the original ethnic groups in the region, and being the sector with the largest population of this group in the entire country (76,771 inhabitants, 27% of the total regional population) [5].

This ethnic group is originally from the high Andes, where they still practice their traditional activities, such as camelid grazing and small-scale farming, live in traditional homes, wear their typical dresses, and speak the Aymara language.

The Aymara ethnic group was integrated into three countries after the configuration of borders, dividing its population between the north of Chile, Bolivia and the south of Peru; notwithstanding the above, the presence of this ethnic group in Chilean territory was increased by active migrations during the nitrate cycle of the 19th century [6], [7]. After the War of the Pacific (1879–1883), due to the signing of the Treaty of Ancón (1883), which established a plebiscite in Tacna and Arica for the population to pronounce on the country to which they would definitively join [7]. In addition to the above, during the beginning of the last century, skirmishes, various forms of violence, a step in the forms of property, from ancestral collective formulas to private property. Education was also used as a tool for nationalization and uprooting; As early as 1925, the most important highland and regional towns had an educational center from which it was possible to spread the Chilean ethos, and in support, local communities practiced patriotic festivals and commemorations for the same purpose [7]. In conclusion, since 1925 the Andean Plateau schools were used as cores from which the Aymara ethnic group was made invisible and their integration into Chilean society was sought. In the first decade of this century, there were approximately 3.5 million Aymara language speakers in Latin America [8].

Over the last years, most Aymara population in northern Chile has migrated to big cities located on the coast, leaving out their traditions and ways of living and adopting a western way of life. Moreover, Aymara children who are born in cities or move at a young age don't speak the language. In this matter, the education system has been one of the main Aymara migration triggers: children and their families have no option but moving to the city because schools in the high Andes don't offer upper secondary education. Schools in these cities don't consider their students' culture, causing a cultural shock for Aymara children, exposing them to a process of cultural hybridism and identity uprooting.

The settlements visited during the study were very small, some with no more than ten inhabitants. They were very quiet, people kept mostly to themselves, and most people were seen around Catholic-Andean churches or working the land: grazing their llamas and alpacas or farming. All adults were seen with their traditional dresses, with a type of fabric called *Aguayo*.

Regarding schools, the architecture and setting was like any other public school in Chile, with the same textbooks and implements. Students wore western clothes and had Anglo-Saxon cartoons accessories, such as Disney princesses' backpacks. When I asked them what kind of music they liked, they mentioned *wayno* (a typical Andean genre) and *reggaetón*, and when I asked them what they liked to do in their free time, they said playing with dolls, bike riding and running with their llamas and alpacas. Also, when I asked children which festivities they celebrated (thinking they would mention Aymara festivities), they only said "Christmas" and "Chile's national holiday. Also, most children were very affectionate between each other and with me.

Most teachers were also affectionate with their students, referring to them as "my children" -but when interviewing them, I could note their lack of interest and knowledge about the Aymara culture. At one school, a teacher would silence their students all the time while they were drawing and tell them to remain on their seats and not "mess around". She wouldn't let them laugh or talk with each other. This is striking, since the Aymara culture is not individualistic, people share a lot with each other, so a school system which doesn't let children socialize and makes them stay quiet and still is striking.

In the city (Arica), on the other hand, the environment was like in any western city: loud, crowded, and with a wide diversity of people. The schools were also like any other public school in Chile, but there were mostly non-indigenous students, and the few Aymara students blended in with the rest: they dressed the same way, shared the same interests, etc. During the drawing activities I got the chance to speak with students, and the biggest concern to them (both Aymara and non-Aymara) was going to university, getting a job in Arica and traveling the world. If the teachers hadn't told me which students were Aymara, I wouldn't have known so easily.

Most teachers in Arica treated all students the same, and told me they thought it wasn't necessary to teach Aymara children about their culture and language at school, that they should learn about other subjects first.

2. Methodology

All the field work was carried out during the month of July 2019 in five multigrade educational establishments oriented to the preschool and primary levels of the Andean municipalities of General Lagos and Putre. Also, there were three secondary schools located in Arica that were included in the study, which receive Aymara children when they finish their primary studies in the schools near their residences.

Educational establishments on the Andean Plateau are characterized by operating under a single teacher regime and an enrollment of two to five students per level. Therefore, we worked with the entire universe of children; Teachers and directors of the selected schools, both in the Andean municipalities and in the regional capital, were also interviewed in order to find out their perceptions about the Aymara children who were their students, what they thought about their respective families and culture, in order to obtain evidence regarding the degree of consideration of the original culture in the educational process and the ways in which children are performed through the application of a state-centered educational model. In Arica, we worked with secondary school students from scientific-humanist establishments whose enrollment is distributed among urban and Aymara children, who migrate in order to continue with their studies. To obtain the voices of children, their daily practices were observed, both in the educational space directed by adults, and in the quasi-horizontal and democratic space that they manage themselves during recess. We hoped to obtain information about the processes of negotiation and exchange between the majority (and probably dominant) culture and the Aymara worldview, in order to identify evolutionary milestones in the performativity process [9], [10], [11], [12], [13]

In addition, a resource from psychology was applied, the graphic projective test house - tree - person (hereinafter, HTP), elaborated by Emmanuel F. Hammer in 1969, which is used to evaluate the internal image that the person who draws has of itself and their environment, to identify the aspects of their reality that are most important to them and which ones they discard. Like any representation, this exercise allows the analysis of the symbolic aspects constructed from the emotional and ideational experiences since these, when projected, "saturate the drawings" [14]. In the case of children, this instrument enables the identification of their worldviews because they "draw elements that they consider essential, leaving aside others that may not concern them" [15].

In addition, in terms of the "children's topophilia expression" test (hereinafter, CTE), students were asked to draw elements of the environment whose knowledge derives from their direct experience and which present variations by virtue of the socio-spatial context in which it develops the existence, and that they will provide evidence about possible changes in the spatiality of the children during the development of their state-centric educational process. Therefore, they were asked to draw *a place*; It was expected to identify the infantile topophilies expressed in the locus that most marked their existence, which will allow us to compare the contents of the drawing with the concrete reality in which they develop.

Assuming that spatiality and its possible variations are related to the free game between *where I am* and *where I want to be*, and that there is a connectivity between *what I want to be* and the space where that potential existence should unfold, the children were asked a third drawing in which they represented *how they imagined themselves once they finished school*, which will be called Self-perception of the possible future, hereinafter SPF. It is precisely in this drawing where we believed that the question referring to detachment could be answered by evidencing the trajectory of children from the edge of Aymara identity to another where they are invisible and anomic subjects, in an evolutionary process diametrically opposed to what we define as intergenerational cultural assimilation [16], [17]. It was interesting for us that the drawing gave us signals about the place in which the child thought he was to function as an adult and the possibilities that can arise from a drawing in terms of representing the trade or profession, the position of the individual in the spatial context that he/she draws, if his/her future contemplates redeveloping the life of his/her parents and other components of the future. This drawing should show the perception that infants have of themselves in the present and with respect to the medium and long term, the expectations of the parents, the school culture, the worldview, and education.

To analyze the drawings, a modified Matan Matrix [18], [19] was used, which distinguished different elements present (or absent) in them. The matrix was applied to each illustration, the results of which were quantified and synthesized in a content analysis table, to later obtain a general idea about the information obtained through the drawings, that is, how much has the spatial worldview of Aymara children at each school stage been transformed (see Table 3).

The three drawings are inputs for the elaboration of a graphic projective test or "State-centric Education Impact Inquiry Test" (hereinafter, SEIIT), whose purpose is to know and record the components of the worldview and spatiality of Aymara children in different stages of school.

In summary, through the application of various instruments in this qualitative research, it is expected to identify the aspects that constitute the children's worldview and the future vision of themselves. Once the most significant aspects for infants have been identified, the elements that make up their spatiality and worldview will be determined, and how these are transformed with state-centric education deployed in normative and/or normalizing schools.

Regarding the instances of participant observation, which included recess times, the drawing activity, and classes, two aspects were addressed: (1) the speeches of the infants while they carried out the requested activity during the moments of observation, to which content analysis was applied in order to determine meaningful words that evidence some existential state that shed light on what was happening with the children and with their identity and (2) the exchange of linguistic codes, representational or of another type that occurs both horizontally and vertically during the school experience and what are the discursive packages that are effectively transferred between the various components of the educational process (curriculum, textbooks, teachers, students, educational community). The concepts were tabulated and those with the highest frequency were isolated for analysis (see Table 1). In addition, a total of 229 drawings were obtained, of which the most representative ones were selected according to the school levels addressed.

3. Results

This section exposes the results obtained during the interviews, participant observation and drawings made by students, systematizing them into tables and relating them to the main concepts used for this research work, based on content analysis.

3.1 Interviews

Once the teachers' interviews were completed, a content analysis was applied [20] to identify seven concepts derived from them. All the findings that referred to the children's practices in their most immediate context, that reflected a component from their communities' worldview, would be associated with 'Aymara culture'. Elements which derived from the education they receive at school and which are part of the state-centric education system, where considered as 'normative schools' -schools that impose certain norms and values, ways of acting and thinking, and a rigid curriculum that is equal for everyone, ignoring cultural and social differences within a society, which leads to homogenization.

In replacement of the socio-spatial legacy and the worldview of this ethnic group, a set of normative practices were noticed, modeled by textbooks, the teachers' speech, the models of thought and other elements involved in communication during children's stay in educational establishments. One striking aspect was the teachers' ignorance regarding their students' original culture, which was expressed in terms of preconceptions or unfounded judgments, explicit and implicit prejudices in the linguistic code; All these elements were grouped under the category 'prejudices'. If, conversely, the teachers or another member of the school manifested some consideration of the children's identity, the concept 'interculturality' was used – when everyone is recognized in terms of culture, ethnicity, context, abilities and needs. In this matter, diversity is promoted and seen as a positive attribute, which enriches everyone's learning process through dialog [21], [22].

When some component of the community daily life of the children was reinterpreted in the context of school culture, the category of 'cultural hybridism' -a process where one or more cultures are joined together, forming a new one, leading to the loss of some elements and the acquisition of others - was applied [23], [24], [25].

On the other hand, we will refer to the guidelines of critical pedagogy to refer to some of these concepts [26], [27], [28], [29], [30]. Critical pedagogy is an alternative way of education, which breaks traditional schemes, where students are thought to think by themselves, empowering them and teaching them relevant contents [29]. An educational system that does not meet this criterion is considered normative, which forces students to learn certain content which oppress them and transforms them into passive social agents [26]. Also, critical pedagogy identifies forms of subordination, domination, exclusion, and cultural and ethnic differences in traditional school systems [29].

Following these guidelines, 'racism' and 'didactic transposition' were incorporated as operating categories. 'Hidden curriculum' was part of the mentality and practices of the teachers, responsible for placing the educational fact in the reality of their students. It is assumed that the fundamental duty of every educational center is to transmit certain knowledge defined by someone (the State, a religious congregation, academies, technocrats, among others) as contents to be taught, which are generally explicitly declared in the curriculum. This knowledge, which are teaching objects, demand the occurrence of adaptive processes or strategies that integrate them into the school culture; Such adaptive strategies, which in most cases correspond to the actions of pedagogues, were brought together by Chevalard under the generic concept of didactic transpositions [31], mediators between scientific knowledge, or wise knowledge, and its subsequent transformation to a knowledge capable of being taught (scholarly knowledge).

In this transfer, teachers' ideologies, prejudices, preconceptions, and their convictions about what is important to teach and how, a teaching object should be made explicit in an educational community. Pedagogical deliberation has nuances, levels, and even, in some circumstances, it does not exist, so that wise knowledge ends up being institutionalized without there being a reason to justify it, rather than the repetition of what has always been done. Therefore, in many circumstances, the only thing that validates the presence of a teaching object in school is the tradition or permanence in different processes of

innovation or curricular renewal, leaving in doubt its social value or effective contribution to the training of students, a student of "that" educational level, at "that" time and in "that" context or place. For this reason, in Chile, teachers can teach students belonging to pre-Columbian ethnic groups, the value and importance of the process of conquest, miscegenation and socio-political subordination of their own families and ancestors.

Finally, in terms of the effects of the normalizing and homogenizing educational process, discursive components were determined, which produced in children 'uprooting' -detachment from a culture due to migration processes or unstable lives, where a person has suffered several losses regarding social relationships and cultural environments [32], [33] - and 're-spatialization' - which implies the disappearance of the conceptions of reality and the world of Aymara culture and the emergence of anomic and performative keys [34]. Re-spatialization is the final stage of the transformation of spatiality, where a person abandons certain spatial elements in its worldview and acquires new ones. This process implies a change in the way someone perceives and relates with the environment, with other people and with oneself, since it also transforms identity and values [35], [36].

One can say that all social change is also a spatial change [37]. In the case of the Aymara children this is demonstrated by the emergence of judgments, representations and images different from those that corresponded to their ethnicity and were instead associated with productive roles or interactions within new cultural patterns.

The teachers interviewed in the communes of Putre and General Lagos carry out their duties in a work regime that forces them to reside in the place where the school is located. Those who belong to families that don't live on the Andean Plateau, 'go down' (to the city of Arica) during weekends, vacations or whenever the school calendar allows it. The situation described gives teachers the status of witnesses to the daily lives of their students and their respective communities. As such, they are first-hand sources to unravel the relationships established between school culture and the Aymara world.

In order to maintain the criterion of focusing on the voices of children rather than adults, it is imperative to point out that the results of the semi-structured interviews don't differ from what was expected to find. Among the findings, the following stand out: inconsistencies between the ways that they declare to assess the children's culture and the inclusion and/or consideration this has in teaching. The predominance of negative prejudices regarding the skills of Aymara children, in the sense that they fail to acquire knowledge, skills and the values of the dominant national culture during their educational process, as if these challenges were the only possible and necessary ones, without considering the needs nor the skills that characterize these children, and pessimism about the opportunities for Aymara families and children in terms of the impact that education can have on the improvement of standards and quality of life.

The teachers expressed low expectations in their role as mediators for achieving greater inclusion of the Aymara ethnic group in regional and national socioeconomic development; this situation acted as a hidden curriculum made up of perceptions and attributions which influence learning processes and the conditions in which the didactic contract is deployed in the classroom.

3.2 Participant observation

Participation in the educational communities also considered the development of participant observation (during previously mentioned instances). Table 1 below shows the frequency of the concepts noticed during participant observation.

Table 1
Frequency of each identified concept during participant observations of each stage/grade

Stage/ noticed concept	Aymara culture	Hidden curriculum	Normative schools	Cultural hybridism	Prejudices	Didactic transposition	Uprooting	Interculturality	Racism	Re- espacialization
Primary school	11	3	11	14	13	5	-	8	-	-
Secondary school Andes	51	8	47	30	54	32	20	25	-	-
Secondary school Arica	28	-	53	-	66	18	12	-	6	55
Source: Own elaboration, 2020										

At primary level (educational level aimed at girls and boys whose ages range from five to eleven years, but for this case study only five-and-six-year-olds participated), behaviors which evidenced the legacy of their families and their social and cultural environment predominated, which is explained by the recent integration into the educational community, which had direct connection with their surroundings. However, this situational context didn't prevent teachers from revealing expressions of prejudice. Also, aspects of reality that children discover at school appear, which are represented in codes specific to their culture, which has been defined as *cultural hybridism*. This also means that, even at a young age, Aymara children are already exposed to two cultures. This way, the spatial worldview of these children is already under transformation, due to the normative school system they are exposed to and the lack of interculturality.

It is important to highlight the fact that participant observation has verified actions that Aymara children defined as prejudices, which makes it possible to conclude that these are expressions of competent social agencies, which various works in the context of children's geography define as children's social agency [38], [39], [40]

Regarding children from secondary school in the Andean Plateau, prejudices become more relevant and the influence of state-centric -and normative - education is verified. The problem of prejudice is repeated in Aymara students who study in secondary schools in Arica, as shown in the table above.

On this second school stage, Aymara culture still prevails, but accompanied by a stronger cultural hybridism and appearance of uprooting, showing that children don't feel attached to their origins. This is explained by the fact that here, schools are still normative, where students have to follow the national curriculum, and most teachers did not appear to be interested in their pupil's reality. However, some elements of interculturality appeared, as a few teachers tried their best to respect the Aymara culture -but most times under a lot of prejudices.

During secondary school in Arica (where only seventeen and eighteen year-olds participated, because the study wanted to aim students who have already been living in Arica for at least two years), there was a smaller proportion of identified elements related to Aymara culture, and twice as much elements related to re-espacialization, meaning that at this age, children have already gone through the process of cultural hybridism, reaching a stage where they have left behind their Aymara origins, feeling uprooted and with a teared identity. There are even more identified elements related to racism coming from teachers, and a lot of prejudices towards the Aymara culture. It is also interesting to point out that there are no elements related to interculturality or hidden curriculum, meaning that schools in the city don't make a minimum effort to integrate the Aymara culture, even if there is a significant percentage of students belonging to this ethnicity, which reinforces and boosts the re-espacialization process and identity uprooting.

3.3 Drawings as expressions of competent social agencies

For the application of the projective drawing interpretation test, each student was asked three drawings, the HTP, the CTE and the SPF (detailed in the methodology). Table 2 below shows the number of drawings obtained according to educational stage and type of drawing.

Table 2
Aymara children's drawings distribution

Drawing/ Stage	Primary school	Secondary school (Andes)	Secondary school (Arica)
House-tree-person	13	33	37
Children's topophilia expression	9	29	36
Self-perception of the possible future	13	26	33
TOTAL DRAWINGS: 229			
Source: Own elaboration, 2020			

In the drawings, two types of analysis were carried out, the first referring to the content (type of house, colours, landscape represented, and meaning of all that) and the second by applying the Matan analytical matrix originally conceived for the analysis of landscape photography but capable of being applied in other forms of representation [41]. The use of this analytical matrix made it possible to identify the frequency of three types of elements in children's drawings: internal cultural components, defined as the presence of landscape, socio-cultural spatial elements of the Aymara world from which these children come; external cultural components, referred to represented elements whose knowledge comes from indirect communication planes, different from the capture of the represented object through a situated interaction process that supposes geographic and cultural proximity. Elements outside the Aymara world or that children recognized as not belonging to their culture correspond to this category. A third type corresponds to the mixed cultural components, which express processes of hybridism, an object from the external world is intervened by local factors. It is important to mention the fact that the drawings to some degree express the spatial perception of infants.

In approximately 76% of the total drawings, regardless of educational level, external cultural components predominated. To demonstrate and characterize this predominance to later relate it to the process of evolutionary change in children's worldviews and spatiality (re-spatialization), some of the drawings are presented below.

This drawing corresponds to an example of topophilia of Aymara children. The strength of the imaginary Arica is evident in the perception of the world of infants, both in terms of the type of landscape (the coast) and the activity represented (fishing industry, one of the engines of the regional economy based in that city). From the perspective of children's geography, the world of children incorporates both material aspects and, for example, those installed from the stories and/or narratives of adults and other children, and by media. There is a person on a boat at sea with a pirate flag with a red background. Shark fins can be distinguished, which appear on the surface and a green background, which is difficult to determine if it corresponds to the mainland, an island, mountains, the sky, etc., but it clearly shows it doesn't correspond to the Andean landscape. Therefore, the existence of this type of drawings shows that the transformation of the identity magma is prior to the schooling of children [41]. Therefore, the worldview transformation and the Aymara identity is not completely attributable to the school, which increases it rather than provoke it.

The elements in this drawing show the beginning of a detachment of the child from his/her physical world, representing a foreign landscape and context, which might have been acquired by the child through mass media, school, or both.

Since only one drawing is represented here, we mention some elements found in some of the other drawings of primary school students, to make results more representative. A student illustrated people sitting in a class on individual desks and a person speaking up front, just like on a normative school system. In this case, the child attributed the same characteristics to the communication process, under other conditions, of the education they receive, which lacks dialog and interculturality, and is full of prejudices, crushing over Ayamra culture, where everyone interacts with each other. These kind of drawings (there were similar ones) show the children's expectations of continuity of students and desired lifestyle. Other drawings showed western houses, cars, trees with foliage and fruits foreign to the Andes, grounds represented with green colors, people with western clothing, the sun with a smiling face (typical from western cartoons). All this shows that children, even at a young age, represent other material elements external from their culture, from a virtual, imaginary world, reflecting the process of cultural hybridism.

The continuity situation seen in the drawings between primary and secondary school in the Andes is replicated in the CTE drawings. For example, one drawing (from a secondary school student in the Andes) shows two multi-story buildings and a car. It is an urban landscape reminiscent of the child's world, since a chimney emits smoke from the tallest building, an element that characterizes rural landscapes where wood is burnt, as is the case of the Chilean Andean Plateau, reflecting the child is undergoing the process of cultural hybridism. Probably this urban idealization is explained in the effect of the teachers' speech and the contents of the textbooks they use to support their learning, which associate quality of life with organized cities, as expressions of personal and social progress and development. Therefore, questions remain: why don't they represent their own reality? Is it not worthy of being represented? This shows that the uprooting of identity precedes school education and doesn't depend on the space in which students live.

Figure 2 expresses external cultural components only; a girl in modern clothing next to an exotic tree, a camera, and under a South Korean insignia. In representational terms, this figure integrates a world with the characteristic signs of globalization and manifests its condition of world citizenship and global foreigner in an ancestral ethnic group. Their expectations, as indicated, were fueled by elements outside their habitus and cultural space. Cultural hybridism occurs here, understood as the transformation of the spatiality of a subject through the operation of the described components and which supposes the replacement of certain axial values to the original culture [42].

This drawing shows a house, next to a couple of trees, one of them being a palm tree. The teenager drew SpongeBob, a famous character from a television series, and finished the landscape with the sun. The sky is nuanced with the presence of birds, apparently seagulls, and then a body of water, a scarce resource in the region. This drawing shows external cultural components only, which evidences that children in Arica have transformed their spatiality and left their roots behind, entering the process of re-spatialization. Daily elements, such as houses, persons and trees, have a completely different meaning than the one of the Aymara culture. In fact, children represent elements that they unconsciously desire, which are promoted by mass media and education, such as a western house, a "pretty" landscape (with a palm tree, grass and a pond, considering that the whole Arica region is a desert). In contrast, the Andean Plateau and the Aymara world do not look attractive for these children, when they are educated to follow other ideals, causing a loss of identity in them.

Other drawings from children this age illustrated physical objects and places that imply urban activities, such as fashionable girls with make-up, pink pets, shoes, and U.S. dollar bills. In addition, there were drawings that showed a desk with a computer, for example, which not only represent a place that is physically foreign from the Aymara world, but also a virtual spatiality, the gate to a world that doesn't exist in physical form, where children desire to be. The aspirations represented in most of drawings have nothing to do with the Aymara communities' values and the redistributive economy that characterizes them. The elements shown in these illustrations do not differ from a representation that any teenager in other places of the world could make. Through these drawings, the idea that Aymara children are exposed to a normative school system is reinforced, as methods (and the fact that they cannot finish their scholar stage in the Andean Plateau and are forced to migrate to the city), the teachers' speech and behavior, and materials used are totally external to the students' culture.

4. Discussion

The SEII test has been used to reveal the paradigm from which the research has been undertaken. This test synthesizes the analysis of the drawings made by Aymara children, in order to make their voice visible in the subjects that this research was concerned with.

The first element to be highlighted is the occurrence of a phenomenon that has been called 're-spatialization'. This concept is about the possibility that the geographical space, which is essentially human space, mutates and transforms, on the one hand, and on the other, decreases the distances with other material spaces, virtual or imagined, at the same time the proximity could be increased as well as the connectivities between these spaces. The drawings express the occurrence of re-specializations in a different way from what was originally envisioned. It was stated that the school was the factor that explained the transformation of cosmologies due to the implementation of the normative and homogenizing educational model of a central-state character, as proposed by critical pedagogy. However, it was found out that educational institutions reinforce a process that has been taking place even before Aymara children are integrated into formal education. This is evidenced by the existence of re-spatializations and cultural hybridism from pre-school education verified in the three types of drawings that the students performed, showing mostly external cultural components. The results obtained in this research should therefore be compared with others that investigate the level and magnitude of penetration of other informal media, such as mass media, family and community stories about the fate of adults and young people who leave their ancestral territories in search of opportunities for education and work.

In another order of things, for re-spatializations to exist, it is necessary for a person to selflessly acquire some knowledge about the spatial relationships between objects and their geometric characters. One can therefore say that the re-spatializations represented in the drawings depend on the spatial perception of children, which is what generally enables human beings, regardless of their age, to acquire identity inheritance [43]. The use of the senses is essential for the development of the complex cognitive process that includes perception; the predilection of some with respect to others and the association that is made between their functioning and knowledge is an aspect that is rooted in culture [44]. For example, western culture has privileged vision as the path to truth; in fact, the situation that links the risen Jesus with Saint Thomas Didymus expresses the association *seeing is believing*.

Table 3 below shows an analysis of SEII test of students from all stages, dividing elements found in each drawing into three categories, using the Modified Matan Matrix.

Table 3
Content analysis of SEII test. Frequency and percentage that each cultural component appears in each stage

Cultural component/Stage	Primary school	Secondary school (Andes)	Secondary school (Arica)
Internal	7 (10%)	26 (16%)	13 (6%)
External	45 (66%)	101 (63%)	196 (89%)
Mixed	16 (24%)	34 (21%)	12 (5%)
Total	68 (100%)	161 (100%)	221 (100%)
Source: Own elaboration, 2020			

Primary school students are part of Aymara communities and are just entering the educational process. Their drawings, however, manifest a spatiality altered by external cultural components. This raises some questions surrounding the apparent inability of the founding ethnic group to adequately carry out the process of intergenerational cultural transmission and the early identity tear of children, which may even precede the beginning of school life. As such, the school would only reinforce a process that already occurs, mediated through other processes.

The situation described may also be caused by the presence of the cybernetic component in the life and identity of children and teenagers, which is probably the trait that most differentiates them from the Aymara generations that precede them. Various studies show that children currently populate two spaces, one real or offline and one virtual or online [45]. In both worlds, interpersonal relationships are carried out differentially; Children declare that it is easier and less demanding for them to relate to people within the online world, that they can show a different image than the authentic one, they can pretend more, depending on what they want to show to the outside. Additionally,, this world is more private, of which their parents have no idea whatsoever and do not 'meddle'.

The drawings presented by children can be clearly associated with the production of distant and divergent images of the real world. Also, interpersonal relationships that occur in the offline world result from a 'geographical coincidence', that is, because two people were in the same place at the same time, but not necessarily because they have something in common, so they aren't always the most attractive relationships for children. Also, the world that reaches children through the networks is a welcoming space, which doesn't discriminate and doesn't set limits for who they want to be and what they want to do [46]. This situation is radically opposed to the judgments of their teachers, who in general relativize their possibilities of success and integration to the modern world due to their ethnic affiliation.

Children therefore live between two worlds, one real, related to physical space, and another one which is virtual, related to imaginary and abstract space, apparently more aspired than the first one. Both worlds complement each other to produce a hybrid identity in children. This is reflected in the following ways: in the different identities and personalities that children have in both worlds; in the way that their everyday material reality limits their activities in the virtual world; in the way virtual world activities maintain and produce distant and weak relationships with the real world; in how information acquired in the online world is incorporated into the life of the offline world and how virtual world activities can transform the context of real-world identities. In many cases, this causes children to disconnect from their environment because the relationships and activities they carry out virtually do not involve their families and/or communities. In fact, it can be said that children can 'escape' from their reality through the virtual world [47].

Based on these ideas, it can be stated that Aymara children also live among the real world, which would become their physical spatiality, the Andean Plateau (in the case of primary and secondary school children) and Arica (in the case of secondary school children), and the virtual world, whose access has been facilitated in the context of state-centric education and media. Therefore, external cultural components would be related to the virtual world and internal cultural components, with the real world. By the co-existence of these two, children transform their spatiality and their way of relating to the environment, since the elements of the virtual and real world influence each other. This forms children's identity in a particular way, often weak and uprooted, since they do not manage to have close relations with their environment, because the virtual world, given by education, imposes certain values and worldviews, which contradict the values of their original culture/the real world. This would probably be the engine of the continuous re-spatialization process that affects these Aymara children.

Children therefore end up appreciating what they have learned through the virtual world more, which is not even tangible, as shown in the drawings, the interviews with teachers and the participant observation. This creates in them a greater aspiration to achieve these ideals, transforming the way in which they relate with their space (physical). An example of this is that during the research, in one establishment in Arica, the Aymara children, who were in their last year of secondary school, asked me which were the shortest (in terms of time) higher education careers, the easiest ones, and the ones with less requirements to be admitted into, but they didn't ask for the most interesting ones, or for any specific careers. This shows that Aymara children only want to enter higher education because society says so and because they want to have an idealized western lifestyle, not because they really want to continue with their studies; they were not interested in any careers, they had no aspirations for the future, they just wanted to follow the social patterns that have been imposed on them without being able to question anything. They are only treated as one more number within the homogeneous mass that schools create, and therefore, end up aspiring to the same as the rest.

Consequently, children end up uprooting themselves from their space and their original culture, creating vulnerable identities. This is because children leave behind their original culture, but they also fail to insert themselves inclusively in the western world, as they are marginalized and excluded from it. This takes away their identity and also excludes them from the globalized world, leaving children with a weakened, uprooted, transformed spatiality and lacking significant components of their identity to function in their lives and relate to their environment and with themselves.

The drawings show images and representations that children extract from indirect socializing modalities, such as communication media or their preconceived ideas about what their environment should be [48], [49], [50]. Therefore, it can be concluded that Aymara children younger than the age of six are already going through an idealized spatiality, and that they understand the world from keys that are not provided by their ethnic group, which is reinforced with the drawings of children from primary school (see Table 3).

Through the interpretation of the drawings of secondary school children in Arica expressed in the SEII test, it can be assumed that there is a process of cultural change in Aymara children that is a construct where schooling is only one aspect to which other influences are added. The impact is most remarkable because of the instantaneous nature of communications and global interconnection, which lead to an alternative of homogenization whose strength is increased with curricular models oriented by supranational organizations that ignore the local. The problem is that in the case of children, the reality that is constructed from this situation is the production of total anti-beings, utopias, idealized alterities composed of a set of subjects and objects valued from the global culture, but unable of integrating into a compact and possible reality that animates sensations and feelings, but that clearly detaches reasons from the imagination of the future.

It can be seen from Table 3 that the state-centric education model reinforces the identity uprooting, which was corroborated by participant observations (see Table 1). Children interact with school textbooks and content that has no connection to their parents' world. It was observed that teachers strive to accompany the explanations of various topics with examples taken from the lives of children, but not with the purpose of placing value in their culture, but as a didactic strategy to improve learning, which lead to prejudices. The referred trend is maintained throughout the school years, according to the drawings of secondary school children in Arica, a port city whose productive and landscape structure has no relation with the Andean Plateau.

It can be concluded that uprooting and re-spatialization are the fundamental characteristics of the teenage children who attend secondary school in the city, in educational centers whose student population as well as some of the teachers come from the most vulnerable socioeconomic strata. Now it is socioeconomic and labor variables that act as identity factors, such as the neighborhoods in which families and adolescents who migrate to the city reside, the type of establishment and its educational results, income level, jobs to which they have access, among other factors.

Having discussed the drawings of primary and secondary school students, it can be said, based on Table 3, that although all children represent predominantly external cultural components, secondary school children living in Arica have the lowest proportion of cultural components typical of their original culture, and the highest proportion of external ones.

The difference between children living in the Andes and secondary school children living in Arica is that the first ones are in a process of cultural hybridism, where Aymara elements (their physical world) mix with western/external elements, transforming their spatiality. On the other hand, students who live in Arica have matured and reinforced their re-spatialization process, as there are practically no elements from the Andean world in their spatiality (physical or imaginary), since most of them have been transformed. Also, in the urban world, elements typical of globalization predominate, which devastates ethnic minorities and their customs. Therefore, Aymara children in Arica, in addition to being subjected to a state-centric education that imposes western ideals on them –which could be called abstract spatiality –operate day by day in the city.

5. Conclusions

From the results obtained in the field, it can be stated that Aymara children are indeed going through a process of cultural hybridization and re-spatialization, which must be, mostly, due to the Chilean state-centric educational system.

It was evident that primary school children already manifest cultural hybridism, since they live between two worlds: their physical-concrete space, where they carry out their daily life with their community, and the abstract space that contains images and symbols external to their culture. To exemplify this, it was observed that these students had to wear school uniform, which was the same as any other Chilean educational establishment. The school structure also appears as the implantation of territorialities and state-centered socializations; There was a Chilean flag in the playground, a music room with European instruments, and the classrooms were decorated with Anglo-Saxon cartoons. Therefore, despite the fact that children see volcanoes and their alpacas every day, they are also exposed to these ideals of the modern world, which was clearly evidenced in their drawings and behavior. In addition, the teachers had a big number of prejudices about the Aymara culture, which led to the imposition of Western culture in most cases, believing that it was the 'best for the children'.

Due to this, it is evident that children, even those who have just entered the formal educational system, are already in the process of cultural hybridism, since they live between two spaces, one concrete and the other abstract, however, apparently, the abstract one has more relevance and strength.

As for secondary school children in the Andes, they are in the middle of the cultural hybridism process, since they have already been inserted in the state-centric education system for several years, and therefore the abstract space is already part of their worldview, even though their physical world is still related to the Aymara culture.

This was clearly evidenced on the drawings, since most of the children, although they represented some cultural components typical of the Andean world, were projecting themselves into the future in a totally western and urban lifestyle, alien to their original culture. Therefore, they are aware of the physical space in which they live, they know it and are capable of representing it, but they don't feel rooted to it, and if they do, it is in a weak and superficial way. Additionally, the teachers were not interested in preserving their students' culture, since they affirmed that 'life on the Andean Plateau is hard, children have to get out of here, move forward, become professionals', which proved the little appreciation that teachers had of the Andean world. Although some teachers applied some didactic transposition, that rarely happened, since the concepts which were most identified were elements related to normative schools. Furthermore, as with primary school children, the schools were totally Western, including some Aymara elements in a 'folkloric' way.

Regarding Aymara children from secondary school living in Arica, it can be said that they are already in a process of re-spatialization, since there are practically no Aymara ancestral (internal) elements left in their worldview, as most of them have been transformed into western components. In addition, it must be considered that these children already inhabit the urban world, so both their physical and abstract spaces are related to globalization, and all Andean elements which remain (if any) exist only in their memories.

The drawings showed that children are completely uprooted from their place and culture of origin before entering formal education, they have no attachment to them, and they aspire the western lifestyle that state-centric education promotes, the promises of 'promotion and social recognition'. It should be borne in mind that these ideals imposed through education are totally contradictory and incompatible with the Aymara culture. In fact, normative schools make these ideals and the Aymara culture seem mutually exclusive, so if children want to 'be someone in society', they must leave behind their original culture, and even deny it.

Teachers also made it clear that they are not interested in recognizing or maintaining the Aymara culture through education, in addition to having an enormous number of prejudices regarding it. They stated that if a child returns to the Andean Plateau, they would not be able to accomplish anything in life, since it is an unwanted hard-to-live-in place, which nobody knows or wants to get to know. Regarding this, the observations also made it possible to realize that the schools were totally western, without any Andean elements. Furthermore, the school environment was totally urban; all children were on their smartphones, some with earphones, and doing activities identical to those of any other establishment in the country.

Regarding the previous ideas, one can say that education has an important role on children's worldview (and its transformation). Schools are normative both on the Andean Plateau and in Arica, with the only difference being the physical space and the school culture; In both areas, Western ideals are imposed on children, such as having to study at university to carry on with their lives, and with the idea that one must aspire to have a lifestyle full of material comforts in the city. That, finally, ends up creating a homogeneous culture, without identity, making Aymara children vulnerable and marginalized.

Infants, therefore, transform their spatiality into an increasingly homogeneous one, destroying their values to create and incorporate new ones; they become razed minorities, acquiring elements of modern cultures. Furthermore, it is important to mention that this process occurs thanks to power relations, where the State seeks to homogenize the Aymara, taking away their original spatiality, leaving them without their own identity [51]. Along with all this, it was possible to verify the presence of vulnerable identities in transit, that is, a movement of children from their referential culture to the domains of state-centric education in and with educational establishments.

Therefore, if Chilean education continues despising and making invisible the Aymara culture as it has done so far, it will be lost, even in those who effectively belong to this ethnic group. In this regard, it is essential that formal education goes to the aid of the valorization of cultural diversity that parents and previous generations were not able to transmit to current generations and which will probably not have any impact on the future Andean world.

Declarations

Data availability statement

The data collected for this investigation is available at Universidad Catolica's thesis repository, where it can be downloaded:
<https://repositorio.lib.uc.cl/xmlui/handle/11534/27570>

Financial statement

There was no financing/funding for this investigation

Ethical statement

The ethical criteria for data collection was safeguarded, according to Universidad Catolica's Ethics protocols. All participants were explicitly informed of the purpose of the information collected so that they agreed to voluntarily participate in the investigation. Regarding children, a communication note was sent from their school to their parents or guardians asking for their consent to participate in the investigation.

Conflict of interest and copyright statement

The authors declare they have no conflicts of interest. Also, the authors declare that this article has not been published elsewhere nor submitted to another journal.

Author contribution statement

This article is based in Victoria Rivera's bachelor's thesis. She focused on the data collection and development of all work, while doctor and professor Abraham Paulsen contributed in the theoretical framework and in the direction of the investigative process. Both authors read and approved the final manuscript.

References

1. James S (1990). *Is there a "place" for children in geography?" Area*. <https://doi.org/10.2307/20002871>
2. Vanderbeck R M (2008). *Reaching critical mass? Theory, politics, and the culture of debate in children's geographies*. *Area*. <https://doi.org/10.1111/j.1475-4762.2008.00812.x>

3. Holloway S L (2014). *Changing children's geographies*. *Children's Geographies*, 12(4), 377–392. <https://doi.org/10.1080/14733285.2014.930414>
4. INE (2018) *Síntesis Resultados Censo 2017*. Instituto Nacional de Estadísticas. Chile.
5. González, S (1997) "Los Aymaras de Tarapacá En El Ciclo Del Salitre," *Camanchaca*, no. 5. Pp. 39–44.
6. González, S (2009) "La Presencia Boliviana En La Sociedad Del Salitre y La Nueva Definición de La Frontera: Auge y Caída de Una Dinámica Transfronteriza (Tarapacá 1880–1930)," *Chungara, Revista de Antropología Chilena* 41, no. 1 (2009). Pp. 71–82.
7. FUCOA (2013) *Aymara. Serie de Introducción Histórica y Relatos de Los Pueblos Originarios de Chile*. Santiago: Imprenta Ograma.
8. Butler J (1990). *Actos performativos y constitución del género: un ensayo sobre fenomenología y teoría feminista*. In *Performing Feminisms: Feminist Critical Theory and Theatre*. <https://doi.org/10.1017/CBO9781107415324.00>
9. Butler J (1997). *Excitable speech: a politics of the performative*. In *Excitable speech: a politics of the performative*. <https://doi.org/10.1353/tj.1999.0055>
10. Butler J (2004). *Precarious life: the powers of mourning and violence*. In *New York*. <https://doi.org/10.1177/107780040100700405>
11. Butler J (2016). *Gender trouble*. In *Social Theory Re-Wired: New Connections to Classical and Contemporary Perspectives: Second Edition*. <https://doi.org/10.4324/97813157753>
12. *What Was Performance? Criticism*. <https://doi.org/10.1353/crt.2001.0013>
13. Hammer E F (2008). *Test Proyectivos Gráficos*. Paidós. Pp. 115
14. Hammer E F (2008). *Test Proyectivos Gráficos*. Paidós. Pp. 33
15. Course M (2013). *The Clown Within: Becoming White and Mapuche Ritual Clowns*. *Comparative Studies in Society and History*, 55(4), 771–799. <https://doi.org/10.1017/S00104175>
16. Morelli C (2017). *The river echoes with laughter: a child-centred analysis of social change in Amazonia*. *Journal of the Royal Anthropological Institute*, 23(1), 137–154. <https://doi.org/10.1111/1467-9655.12548>
17. Paulsen A, Rubio R (2017). *Propuesta metodológica para el trabajo con fotografías de paisajes*. *Rev. Geogr. Valpo.* (En Línea), 54, 01–19. <http://www.revistageografica.cl/index.php/revgeo/article/view/16/15>
18. 9., [41] Paulsen A (2017). La matriz MATAN, una propuesta de análisis paisajístico, mediante el uso de fotografías documentales, históricas y/o patrimoniales de los Andes Patagónicos Chilenos de principios del siglo XX. *Revista de Geografía Espacios*, 7(13), 72–98. <http://revistas.academia.cl/index.php/esp/article/view/706>
19. Krippendorff K (1980). *Metodología de análisis de contenido. Teoría y práctica*. In *Education*. <https://doi.org/10.2307/2288384>
20. Stefoni, C., Stang, F. & Riedemann, A. (2016). Educación e interculturalidad en Chile: Un marco para el análisis. 13 de Diciembre de 2018. In *Estudios Internacionales. Website*: https://scielo.conicyt.cl/scielo.php?script=sci_arttext&pid=S0719-37692016000300008
21. Webb, A., Canales, A. & Becerra, R. (2016). *Las desigualdades invisibilizadas: población indígena y segregación escolar*. 13 de Diciembre de 2018. From Centro UC de Políticas Públicas. Website: <https://politicaspUBLICAS.uc.cl/wp-content/uploads/2017/04/CAP-9.pdf>
22. Berdichewsky, B. (1987). Del indigenismo a la indianidad y el surgimiento de una ideología indígena en Andinoamérica. *Canadian journal of Latin American and Caribbean studies*, 12(24), 25–43. <https://doi.org/10.1080/08263663.1987.10816592>
23. García Canclini, N. (1999). *Culturas híbridas: estrategias para entrar y salir de la modernidad*. Barcelona: Grijalbo.
24. García Canclini N (2003). Noticias recientes sobre la hibridación *Trans. Revista Transcultural de Música*, núm. 7, diciembre, 2003, p. 0 Sociedad de Etnomusicología Barcelona, España <https://www.redalyc.org/pdf/822/82200702.pdf>
25. Freire P (1992). Pedagogía de la esperanza: un reencuentro con la pedagogía del oprimido. *Educación*. <https://doi.org/10.1017/CBO9781107415324.004>
26. Giroux. (1990). *Los profesores como intelectuales: hacia una pedagogía crítica del aprendizaje*. Barcelona: Paidós.
27. Giroux, H.A. (1997). *Pedagogy and the Politics of Hope: Theory, Culture, and Schooling: A Critical Reader* (1st ed.). New York: Routledge. <https://doi.org/10.4324/9780429498428>
28. Giroux, H. A., & McLaren, P. (1989). Schooling, cultural politics, and the struggle for democracy. In *Critical pedagogy, the state, and cultural struggle*, 12–97.
29. Freeman, & Zajda, J. I. (2009). *Race, ethnicity and gender in education cross-cultural understandings*. Springer. <https://doi.org/10.1007/978-1-4020-9739-3>
30. Chevalard, Y. (1991). *La Transposición Didáctica. Del saber sabio al saber enseñad*. Buenos Aires: Aique. Grupo Editor.
31. Selley, E. C. (1942). UPROOTED PEOPLE. *Social Work (1939–1970)*, 2(6), 259–265.
32. Eisenbruch, M. (1992). The Ritual Space of Patients and Traditional Healers in Cambodia. *Bulletin de l'École Française d'Extrême-Orient*, 79(2), 283–316. <http://www.jstor.org/stable/43731385>
33. Infante, M., Matus, C., Paulsen, A., Salazar, A., & Vizcarra, R. (2013). Narrando la vulnerabilidad escolar: Performatividad, espacio y territorio. *Literatura y lingüística*, (27), 281–308.
34. Oslender, U. (2003). "DISCURSOS OCULTOS DE RESISTENCIA": tradición oral y cultura política en comunidades negras de la costa pacífica colombiana. *Revista colombiana de antropología*, 39, 203–235.
35. Haesbaert, R. (2013). Del mito de la desterritorialización a la multiterritorialidad. *Cultura y representaciones sociales*, 8(15), 9–42.
36. Lefebvre H (2016). *La producción del espacio*. Madrid: Capitán Swing.

37. Horton J, Kraftl P, & Tucker F (2008). *The challenges of 'Children's Geographies': a reaffirmation*. *Children's Geographies*, 6(4), 335–348. <https://doi.org/10.1080/14733280802338049>
38. Nigel, T., Pile, S., Thrift, N. J., & Thrift, V. C. N. (Eds.). (1995). *Mapping the subject: geographies of cultural transformation*. Psychology Press.
39. 40., [45], [46], [47] Valentine G, Holloway S L (2002). *Cyberkids? Exploring Children's Identities and Social Networks in On-line and Off-line Worlds*. *Annals of the Association of American Geographers*, 92(2), 302–319. <https://doi.org/10.1111/1467-8306.00292>
40. Castoriadis C (2010). *La institución imaginaria de la realidad*. Barcelona: Tusquets.
41. 42., [51] Agnew J, Oslender U (2010). Territorialidades superpuestas, soberanía en disputa: lecciones empíricas desde América Latina. *Tabula Rasa* (13) 191–213.
42. McClelland J L, Foucault M, Clark A (1978). Phenomenology of perception. *Science (New York, N.Y.)*. <https://doi.org/10.1126/science.201.4359.899-a>
43. Tuan Y F (2007). *Topofilia*. Madrid: Editorial Melusina S.L.
44. Biceaga V (2012). *Phenomenological Epistemology. Symposium*. <https://doi.org/10.5840/symposium20059110>
45. Merleau-Ponty M (1994). *Fenomenología de la percepción*. Barelona: Planeta - Grijalbo.
46. Merleau-Ponty M, Landes D A (2013). Phenomenology of perception. In *Phenomenology of Perception*. <https://doi.org/10.4324/9780203720714>

Figures



Figure 1

CTE Drawing of a primary school student



Figure 2

SPF Drawing of a secondary school student in the Andes



Figure 3

HTP Drawing of a secondary school student in Arica