Language learning in multilingual contexts and the role of languages spoken in the community

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The multilingual context of South Tyrol, Italy

- Brief history of South Tyrol
- Languages and education
- Population distribution
- Study 1: Italian L1 learners of English as an L3 (with German L2)
- Study 2: immigrant children attending Italian schools in Italian and German-speaking areas of South Tyrol
- Conclusions
South Tyrol/Alto Adige/Südtirol
Autonomous region of Italy
Current population of South Tyrol is **514,998** (Office of Statistics for the Province of Bolzano, 2013).

Most of the population lives in the Bolzano area and in the neighbouring valleys

Native languages

<table>
<thead>
<tr>
<th>Language</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>69%</td>
</tr>
<tr>
<td>Italian</td>
<td>26%</td>
</tr>
<tr>
<td>Ladin</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>

(South Tyrol Census, 2001, 2011)
Brief history

- The region became part of Italy at the end of World War I
- 1930's – agreement between Hitler and Mussolini
- Mass relocation of southern Italians into South Tyrol
- Those of *German heritage* relocated into areas of the Third Reich
- German-speaking schools were closed
- The use of German was banned in the region
# Source: Astat

<table>
<thead>
<tr>
<th>Year</th>
<th>Italian</th>
<th>German</th>
<th>Ladin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>4.1</td>
<td>91.7</td>
<td>4.1</td>
</tr>
<tr>
<td>1910</td>
<td>3</td>
<td>93</td>
<td>4</td>
</tr>
<tr>
<td>1921</td>
<td>11.7</td>
<td>84</td>
<td>4.3</td>
</tr>
<tr>
<td>1961</td>
<td>34.3</td>
<td>62.3</td>
<td>3.4</td>
</tr>
<tr>
<td>1971</td>
<td>33.3</td>
<td>63</td>
<td>3.7</td>
</tr>
<tr>
<td>1981</td>
<td>29.4</td>
<td>66.4</td>
<td>4.2</td>
</tr>
<tr>
<td>1991</td>
<td>27.7</td>
<td>68</td>
<td>4.3</td>
</tr>
</tbody>
</table>
Article 19, 1972 Statute of Provincial Autonomy

The right to instruction in the native language
An obstacle for bilingual education

“Nella provincia di Bolzano l’insegnamento nelle scuole materne, elementari e secondarie è impartito nella lingua materna italiana o tedesca degli alunni da docenti per i quali tale lingua sia ugualmente quella materna. Nelle scuole elementari, con inizio dalla seconda o dalla terza classe, […] è obbligatorio l’insegnamento della seconda lingua che è impartito da docenti per i quali tale lingua è quella materna”
In the Education sector we find three School Boards:

- Italian School Board
- German School Board
- Ladin School Board

German dialects are spoken across South Tyrol, standard German is taught at school.
Modern-day South Tyrol
Some changes ahead

- Large number of families are asking for bilingual Italian-German instruction

- The case of English and Content Language Integrated Learning (CLIL) in school

- Mixed marriages and families

- The highest percentage of immigrants (ca. 19%) within Italy
Comunità comprensoriali nell’Alto Adige
Bezirksgemeinschaften im Südtirol
<table>
<thead>
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<tbody>
<tr>
<td></td>
<td>German</td>
<td>Italian</td>
<td>Ladin</td>
<td>German</td>
<td>Italian</td>
<td>Ladin</td>
</tr>
<tr>
<td>1 Val Venosta</td>
<td>96,84</td>
<td>3,06</td>
<td>0,10</td>
<td>97,29</td>
<td>2,63</td>
<td>0,08</td>
</tr>
<tr>
<td>2 Burgraviato</td>
<td>78,66</td>
<td>21,06</td>
<td>0,28</td>
<td>78,54</td>
<td>21,15</td>
<td>0,32</td>
</tr>
<tr>
<td>3 Oltradige-Bassa Atesina</td>
<td>68,05</td>
<td>31,57</td>
<td>0,38</td>
<td>67,48</td>
<td>32,07</td>
<td>0,44</td>
</tr>
<tr>
<td>4 Bolzano</td>
<td>26,29</td>
<td>73,00</td>
<td>0,71</td>
<td>25,52</td>
<td>73,80</td>
<td>0,68</td>
</tr>
<tr>
<td>5 Salto-Sciliar</td>
<td>77,15</td>
<td>4,03</td>
<td>18,82</td>
<td>76,79</td>
<td>4,31</td>
<td>18,91</td>
</tr>
<tr>
<td>6 Valle Isarco</td>
<td>85,76</td>
<td>13,22</td>
<td>1,02</td>
<td>85,52</td>
<td>13,20</td>
<td>1,27</td>
</tr>
<tr>
<td>7 Alta Valle Isarco</td>
<td>85,31</td>
<td>14,32</td>
<td>0,37</td>
<td>85,29</td>
<td>14,35</td>
<td>0,35</td>
</tr>
<tr>
<td>8 Val Pusteria</td>
<td>80,96</td>
<td>5,64</td>
<td>13,40</td>
<td>80,48</td>
<td>5,97</td>
<td>13,54</td>
</tr>
</tbody>
</table>
Learning the language of “the other”

Those who experience a condition of language conflict seem to share a number of concerns that influence integration and assimilation processes.

With respect to the L1, contact with the L2 community is often perceived to result in a loss of some kind:

- a loss of culture
- a loss of the native language
- a loss of ethnic identity
Subtractive and additive bilingualism (Lambert, 1975)

Subtractive bilingualism - adding a second language may cause some damage or loss to the L1.

*Example*: immigrants who use the majority language at school at the expense of the L1 and become progressively weaker in the L1 as a result.

Additive bilingualism - the learning a second language does not imply a cost to the L1.
Learning a second language in additive learning contexts

contact and repeated exposure to the second language are widely believed to be beneficial for the learning process in additive learning contexts (Cenoz and Valencia, 1994; De Angelis, 2007; Lasagabaster, 2001; Sanz, 2000)
What is the role of languages spoken in the community?

Aim: to evaluate the association between the languages spoken in the community and school performance

Presence and absence of German and Italian speakers

Study 1: Mivas—large study with Italian, German and English data from 1966 to 2005
Participants: Italian L1 learners of German L2 and English L3 (De Angelis 2012; De Angelis and Jessner, 2012)

Study 2: Invalsi - Standardized testing in South Tyrol
Participants: Immigrant children, learning Italian as an L2 (De Angelis 2014)
Study 1 - MIVAS
Italian L1, German L2, English L3

Mivas is the Italian acronym for “Modelli Inferenziali per la Valutazione di Sistema” (Inferential Methods for System Evaluation)

A large amount of data were analysed diachronically and synchronically by several national and international teams

The data consisted of final exams written by 8th grade students enrolled in Italian language schools from the late 1960s to 2005/6

Prof. Ulrike Jessner (University of Innsbruck, Austria) and I devised a common research design for Italian L1, German L2 and English L3 and matched students whenever possible
English L3 (2005/6)
knowledge of the English L3 and the German L2

Participants:
Italian L1 learners of English L3 (with German L2) attending schools across South Tyrol (age 14)

Do students who live in German-speaking areas have a higher level of German L2 (and English L3) than students who live in Italian-speaking areas of South Tyrol?

What I expected to find in English L3 texts:
• positive influence between German L2 and English L3
• a higher level of competence in the German L2 (students living in German-speaking areas only)
English L3 (2005/6)
knowledge of the English L3 and the German L2

PARTICIPANTS (n=50)
8th grade Italian L1 students with German L2 and English L3
Proficiency in the German L2 assessed by native speakers: A1, A2, B1, B2

MATERIALS: final written national exams (compositions), 3 hrs

MEASURES
Fluency (No. of words; No. of T-Units)
Grammatical Complexity (Coordination, Subordination, Connectors)
Lexical Complexity (Adjectives – Variety of adj., Cognates)
(Wolfe-Quintero et al., 1998)
The higher the level of competence in the German L2, the longer the texts in the English L3.

**Word count in English L3**
- German L2, level A1: 230
- German L2, level A2: 350
- German L2, level B1: 526

**T-test**
- A1 (n=10) - A2 (n=25)
  \[ t(33) = -2.384, p = .023 \]
- A2 (n=25) - B1 (n=13)
  \[ t(36) = -2.991, p = .005 \]
Subordination in the English L3 and German L2 proficiency
The higher the level of German L2, the higher the number of subordinates in the English L3

No. of subordinates
Elementary (A1+A2): 3.57
Intermediate: (B1+B2) 12.07

T-test
Elementary (n=21)
Intermediate (n=15)
t(34) = -2.143, p = .04
Conclusions: the higher the level of German L2, the higher the level of English L3

Does living in a German-speaking area help students achieve a higher level of competence in the German L2?

Previous research – there is a known positive association between exposure to an L2 environment and language development

Part of the truth in the multilingual context of South Tyrol; Some examples from the German L2 data
Burgraviato %
German  78,66
Italian  21,06

Valle Isarco%
German  85,76
Italian  13,22
The lower the number of Italian speakers, the higher the level in the German L2 (longer texts)

Burgraviato (N=10)
Italian-speaking residents: 21.06%
(M=6.53; SD = 2.12)

Valle Isarco (N=10)
Italian-speaking residents: 13.22%
(M=12.29; SD 4.43)

Mann-Whitney
(U=9; N1 = 10, N2 = 10; 2-tailed p = .002)
Variety of Adjectives/Total Adjectives – German L2
The lower the number of Italian speakers, the higher the number of different adjectives used

**Burgraviato (N=10)**
Italian-speaking residents: 21.06%
(M=.53, SD=.13).

**Valle Isarco (N=10)**
Italian-speaking residents: 13.22%
(M=.66, SD=.24893)

Mann-Whitney
(U=21, N1 = 10, N2 = 10, 2-tailed p = .029).
German L2
Burgraviato vs Valle Isarco

<table>
<thead>
<tr>
<th>Type</th>
<th>U</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of words</td>
<td>18</td>
<td>.015*</td>
</tr>
<tr>
<td>Number of words per T-Units</td>
<td>9</td>
<td>.002*</td>
</tr>
<tr>
<td>Subordinates</td>
<td>43</td>
<td>.596</td>
</tr>
<tr>
<td>Coordinates</td>
<td>45</td>
<td>.705</td>
</tr>
<tr>
<td>Variety of adjectives</td>
<td>21</td>
<td>.029*</td>
</tr>
</tbody>
</table>

Students from Valle Isarco (low Italian-speaking population) wrote:

**FLUENCY**
- Longer texts
- Higher no. of words per T-unit

**LEXICAL COMPLEXITY**
- A higher number of different adjectives
What is the role of languages spoken in the community?

The ABSENCE of Italian speakers in German-speaking areas seem to influence language development to a significant extent.

Opportunities to communicate in the Italian L1 may be lacking.

Students who have less of an opportunity to communicate in the L1:
- are more likely to communicate in the German L2 outside of school hours (play with German-speaking friends, visit German-speaking families etc).
- display higher levels of German proficiency.

Knowledge of German L2 in turn seems to affect performance in the English L3.
Study 2

Immigrant children learning Italian as an L2 (or L3) at school

What we know: In national standardized tests (Invalsi, 2010), I and II generation immigrants in South Tyrol show similar performance. This result is not confirmed at nation level (II gen. immigrants outperform I gen. immigrants)

Do students who live in Italian-speaking areas show a higher level of competence in the Italian second language than those who live in German-speaking areas? Is there a difference between I and II generation immigrants?
The *Invalsi* national standardized test was introduced in Italy in 2008-9 by ministerial decree (art. 5, law 176/07)

Standardized tests are increasingly used around the world to:
- assess the overall effectiveness of national school systems
- identify possible areas of weakness and improvement at national and regional levels

The data is from tests administered in primary schools across Italy in 2009-10, including South Tyrol
In order to account for the many immigrant children attending school in the various regions of the country, the 2009/10 Invalsi test introduced a distinction between:

- **Italians** (born and raised in Italy from Italian-speaking parents),
- **I Generation immigrants** (immigrants born outside of Italy from non-Italian speaking parents)
- **II Generation immigrants** (immigrants born in Italy from non-Italian speaking parents)

The number of immigrants in South Tyrol is the highest of the country (approx. 19%)
National results, Italian (Invalsi, 2010)

2\textsuperscript{nd} grade school children – (7 year-old)
• Italian children outperform I and II Generation immigrants
• II Generation immigrants outperform I Generation immigrants

Results of this kind show a typical pattern where immigrants who are experiencing the most difficulties are those of most recent immigration
Regional results for South Tyrol

Italian-speaking children outperformed I and II Generation immigrants
(= national results)

no significant difference was found between the performance of I and II Generation immigrant children
(≠ national results)

This was an unexpected result which raised several questions and concerns among educators and policy makers in the area
Discussions about suitable remedial measures

Measures may include:

- **hiring second language teachers** to provide language support
- **introducing novel pedagogical practices** tailored to immigrants’ needs
- **organise additional training opportunities** for staff

These are important pedagogical decisions that carry substantial financial implications
A multilingual approach

Standardized test results were analysed in conjunction with information on the languages spoken in South Tyrol. The aim was to:

- provide educators and policy makers with additional insights about immigrant children’s school progress
- show the importance of using a multilingual approach to analysing standardized test results in the region

(De Angelis, 2014)
Many of the immigrant children attending Italian schools in German-speaking areas typically:

- hear (and often use) German in the living community
- learn the Italian language of instruction at school
- speak another language in the home

In contrast, immigrant children living in Italian-speaking areas are likely to develop their Italian language skills both within and beyond the school context.

Due to this difference, the Invalsi data for South Tyrol were reanalysed and reassessed, focusing on local language information.
PARTICIPANTS
Participants were I and II Generation immigrant children (n=225) attending Italian language schools in South Tyrol.

All children were enrolled in 2nd grade classes in the year 2009/10.

The children lived in different areas of South Tyrol where the dominant language within the community was either Italian or German.
MATERIALS (Invalsi tests)

The Italian test was based on a narrative text and a series of exercises which students were asked to complete during a 35-minute period.

The test contained a total of 22 questions and 26 items which were divided as follows: 17 questions with multiple choice and cloze answers, and a sentence reconstruction exercise with 5 questions.
The performance of I and II Generation immigrants was compared across the region, using the language predominantly spoken in the living community as an independent variable.

Results show some significant differences with respect to I Generation immigrants living in German-speaking areas of South Tyrol (i.e. where children do not hear much Italian outside of school).

When I and II Generation immigrants are compared, results show a pattern that is similar to the one found at national level, namely that II Generation immigrants perform significantly better than I Generation immigrants.
## Italian test results by dominant language

<table>
<thead>
<tr>
<th>Dominant language</th>
<th>I Generation</th>
<th>II Generation</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Italian (Bolzano)</td>
<td>45</td>
<td>.52</td>
<td>.25</td>
</tr>
<tr>
<td>German</td>
<td>37</td>
<td>.39</td>
<td>.21</td>
</tr>
</tbody>
</table>

II generation immigrants outperform I generation immigrants in German-speaking areas
## Italian test results by immigrant Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Italian-speaking area</th>
<th>German-speaking areas</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>I Gen</td>
<td>45</td>
<td>.52</td>
<td>.25</td>
</tr>
<tr>
<td>II Gen</td>
<td>72</td>
<td>.45</td>
<td>.23</td>
</tr>
</tbody>
</table>

I generation immigrants living in the Italian speaking-area outperform I generation immigrants living in German-speaking areas.
I Generation immigrant children living in German-speaking areas of South Tyrol experience more difficulties with Italian

These children have:
- fewer opportunities to communicate in Italian within their community
- have little access to afterschool activities organized in Italian

It may take longer for these children to develop literacy skills comparable to those of children who are also I Generation immigrants, but live in the Italian-speaking area of South Tyrol
The study shows that when multiple languages are involved standardized test results should be interpreted *in conjunction with* local language information to identify the groups of learners who are most in need of support.

Immigrant children face a number of additional difficulties when the language of instruction does not coincide with the language spoken in the community.

Underperforming schools will gain a better understanding of how the learners in their school and community compare with learners in other regions.
Children who live in multilingual contexts develop different needs and require a different type of intervention

A multilingual approach allows us to identify additional information on children’s progress

The information may be useful:
- for school administrators who manage and allocate financial resources
- for educators who need to devise effective remedial measures

*Opportunity to communicate* in the language of instruction is an external factor which is often overlooked (De Angelis, 2012)
Conclusions

Original question: Do languages spoken in the community play a role in language acquisition?

Both studies highlight the importance of ABSENCE rather than PRESENCE of speakers of Italian in the region for the acquisition of the German L2 (and in turn of the English L3) and the Italian L2 (for immigrant children)

Opportunities to communicate in Italian (the language of instruction) seems to be a crucial yet underestimated factor in language learning in multilingual contexts
References


