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AIS, reloaded: a digital dialect atlas of Italy and Southern Switzerland*

1. Introduction

In this paper we introduce to the scientific community, for the first time in printed form, the output of the research project “AIS, reloaded” (*AISr*), which yielded the following achievements:

- (1) a. a searchable digital version of half of the maps of the *Sprach- und Sachatlas Italiens und der Südschweiz* (*Atlante italo-svizzero, AIS*, 1928-1940), collected in 407 survey points in the two countries;
- b. a comparable corpus for the Italo-Romance and Romansh dialects of Southern Switzerland (18 points each), corresponding to the original datapoints, consisting of new data that have been collected using the same questionnaire in the same localities almost one hundred years later.

The paper is organized as follows. In §2, we provide basic information on the project which gave rise to the interactive database freely searchable at the website <https://www.ais-reloaded.uzh.ch>, and present the structure and the functionalities of the latter. In §3 we exemplify the ways in which the *AISr* database can be used in order to compare subsequent diachronic stages of the same dialects at one hundred years distance: specifically, we will address some changes – mostly leading towards standardization – which are seen to have occurred in western Surselva (§3.1), then move on to changes in the areal distribution of some kinship terms (§3.2), to change in the syntax of negation in Swiss Lombard dialects (§3.3) and

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finally to (the lexical diffusion of) a given sound change in Engadine (§3.4). By way of conclusion, §4 outlines prospects for further work along this line of research.

2. *From AIS to AISr*

The 1,705 *AIS* maps provide a comprehensive picture of 407 distinct dialects as they were spoken between 1919 and 1928, when fieldwork was carried out, under the supervision of Karl Jaberg (1877-1958), professor for Romance linguistics in Bern, and Jakob Jud (1882-1952), his homologous in Zurich, thanks to funding by the Stiftung für wissenschaftliche Forschung an der Universität Zürich. Fieldwork was run by Paul Scheuermeier (1888-1973), responsible for Switzerland as well as – from July 1920 on (cf. Kunz 2018, 32) – northern and central Italy, Gerhard Rohlfs (1892-1986), in charge of southern Italy, and Max Leopold Wagner (1880-1962), who surveyed Sardinia. The survey started in Ardez (Grisons, pt. 7) on 19-23 November 2019 to finish in Polistena (Calabria, pt. 783) on 17-19 October 1928 (Jaberg / Jud 1928, 40, 129).

In the framework of *AISr*, from 2016 to 2019, new data from the 36 *AIS* datapoints in Southern Switzerland (18 for the Lombard varieties in Canton Tessin and in the Italian-speaking part of the Canton of Grisons and 18 for the Romansh dialects in the Canton of Grisons) were collected, recorded and transcribed (about 61,000 entries in all, for a total of about 400 recording hours)¹. For each datapoint, an informant has been chosen and interviewed using a selection from the about 2000 entries of the *AIS* intermediate questionnaire (1728 in the Canton Tessin and the Italian part of Grisons, 1800 in Canton Grisons):

(2) *AISr* interviews (#36). Informants:

Age: 70 years (average) Oldest informant 89 y/o Youngest informant 36 y/o

Gender: 28 men 4 women

Contrary to the *AIS*, answers have been recorded digitally, the difference lying obviously not in the digital format but in the audio recording itself: recording techniques were in their

¹ The fieldwork was carried out by the co-authors (though ML and SS took part only for a few points), with the co-operation of Claudia Cathomas, Dominique Dosch, and Alberto Giudici for several Romansh datapoints, and Camilla Bernardasci for Olivone and Sonogno. The first point to be visited was Corticiasca, pt. 73 (by SN and GD *****QUALCUN ALTRO?***** on 15-16 February 2017), while the last round of fieldwork was carried out by SN and *****CHI ALTRO?***** in Dalin (pt. 4) on 22-23 July 2019.

infancy in the 1920s, and mounting a phonographic recording campaign would not have been feasible with the *AIS* time resources (3 days/1 transcriber per point)².

The recorded data have now been made available (both IPA-transcribed and as audio files) in a freely searchable database whose contents can be downloaded. This database also hosts a searchable version of 50% of the transcriptions contained in the *AIS* (maps 1-880; about 700,000 entries in all: see fn. 4 on the figures), which have been digitized in the original *AIS* transcriptions thanks to a co-operation with our research partner Dr. Graziano Tisato (Padua), who developed a customized OCR system to this effect, which was run on the digitized images already online at the *NavigAIS* website he realized in 2009 through a high-definition acquisition of the map images³. Furthermore, the transcribed materials from maps 1-880 have been converted automatically into IPA transcriptions that can be downloaded in parallel with the original ones⁴.

Limitation to 50% of the *AIS* maps ((1a)) and to southern Switzerland ((1b)) were imposed by resource and time limitation within the three-year funding period. For the same reasons, the digitization process targeted lemmas only, thus excluding the ethnographic information, which will be digitized in the continuation of the project (2021-2025; see §4).

² As a matter of fact, Jud was involved, as a supervisor on behalf of the Zurich Phonogram Archives, in phonographic dialect recordings of dialects of southern Switzerland which took place in Bellinzona on 14-17 October 1929, exactly one year after the conclusion of the *AIS* fieldwork. This was the second recording campaign ever in southern Switzerland, after Carlo Salvioni's one in 1913 (see Loporcaro 2008, 53 n. 34, 82 n. 129). In the early 20th century, however, such recordings put very high demands: for one thing, they required the presence of an expert in the phonographic technique. In the specific case involving Jud in 1929, the colleague operating the machine, Wilhelm Doegen, had to come from Berlin (where he directed the *Lautabteilung* of the *Preussische Staatsbibliothek*): cf. Bernardasci / Schwarzenbach (2016, 24), Loporcaro (2016, 559).

³ The quantum leap in the access to the *AIS* data, with respect to *NavigAIS* – where materials can be searched by map and datapoint, but not exported as text – is represented by the searchability of contents and their exportability under the form of phonetic transcriptions (see §2.2).

⁴ The attentive reader will have remarked an apparent contradiction between the figures just reported for the numbers of recorded items relative to the *AIS* and *AISr* data. The figure of about 61,000 entries for the latter corresponds to approx. 1600 entries per point on average: the difference with respect to the number of the questionnaire items (1700) is due to lexical decay, as some answers were not given by informants. As for the *AIS* data, the figure of about 700,000, giving on average 3440 entries per point, results from the fact that each item is available in the database in two different transcriptions (*AIS* vs. *IPA*), so that it is counted twice.

2.1. The AISr database

In what follows, we will introduce the *AISr* database, which allows users to compare and search directly the two corpora for content with the limitations already mentioned: for the *AIS* data, apart from the obvious non-availability of audio recordings, the corpus covers as of now 50% of the maps (though see (12a) below) but, contrary to the *AISr* data which – for Southern Switzerland – cover all maps, it covers also Italy. For Southern Switzerland the *AISr* data allow us to compare the two datasets collected at one hundred-year distance and hence to observe change which occurred in the elapsed century.

2.2. The search, retrieve and display options

The database offers multiple search options, which are commented on in §§2.2.1-2.2.6, with each heading corresponding to those appearing in the navigation bar.

2.2.1. Maps. – A first possibility is the search by map, typing its number or name (e.g. 5 or *padre* ‘father’) in the “search” field or by ticking one box in the corresponding drop-down menu. The selection of an interval of maps by ticking more than one box in the drop-down menu is also allowed. As an alternative, it is possible to type in the “search” field the numbers (e.g. 2; 6; 14) or the interval (e.g. 5:20) corresponding to the desired maps. In the drop-down menu, uppercase strings (e.g. IL PADRE ‘the father’) identify regular maps, lowercase strings (e.g. *la gioventù* ‘youth’ or *trovare* ‘to find’) identify further materials (legends at the edge of a map, verb conjugations in vol. 8, etc.). Visualization of the output data can be selected either in table or in map format, the latter only when one single map is selected (§2.2.6).

2.2.2. Locations. – A further possibility is to enquire the database selecting a locality. Once again, one can select a datapoint by typing its number or name (e.g. 1 or Brigels) in the “search” field or by ticking one box in the corresponding drop-down menu. One can also select all the datapoints by ticking the “select all” option in the drop-down menu. In addition, it is possible to select a subset of datapoints by ticking more than one box in the drop-down menu or by ticking the first and the last datapoint of a desired interval while holding down the “shift” key. As an alternative, it is possible to type into the “search” box the numbers (e.g. 3; 7; 14) or the interval (e.g. 5:20) corresponding to the desired datapoints.

2.2.3. Period. – The database also allows to query separately either the original *AIS* data by selecting the option “past” or the newly collected *AISr* data by selecting the option “present”. Selecting the option “all” results in querying both datasets at once. One can also visualise the *AIS* data only in their original transcription by selecting the “AIS” option or only in the current standard transcription by selecting the “IPA” option. By default, the two types of transcription are displayed synoptically in the downloadable table (but not on the map: see §2.2.6) that summarises the query results. As for the newly collected *AISr* data, only IPA phonetic transcriptions are available.

2.2.4. Phonetic. – After selecting the previous fields (“Maps”, “Locations”, “Period”), it is possible to further restrict one’s query to only those entries that contain a certain phone or a string of phones by specifying the context of occurrence of the desired phone/s in the entry by means of the symbol “_”: at the beginning of an entry (e.g. *la_* in *lana* ‘wool’), at the end of an entry (e.g. *_l*), in the body of an entry (e.g. *_l_*). It is worth noting that the level targeted

by the search programme is not the word level, but the questionnaire entry level (namely the whole phonetic string). Therefore, whenever the entry consists of a phrase, rather than a single word, a query like *l_* also returns entries such as *la mia cugina* ‘my (female) cousin’.

One can also specify the exact position occupied by a given phone in the entry by typing it preceded by as many symbols “#” as the elements that precede it (e.g. *#a* to retrieve all occurrences of the phone [a] whenever preceded by just another phone, or *##a* to retrieve all occurrences of the phone [a] when it is preceded by two phones, etc.). Note that this search targets all the elements that precede the searched phone and, therefore, not only other phones, but also diacritics such as the stress (´) and the length (:), as well as the space between words in case the entry is a phrase. For example, a query can target the tonic vowel /a/ in the second position by typing *##a* in the case of entries consisting of a single word such as /b'a:p/ ‘father’ or *#####a* in the case of entries made of a phrase such as /il b'a:p/.

2.2.5. Download Table. – Query results are immediately displayed, depending on the option chosen either as a table, as shown in Figure 1, or as a map (§2.2.6).

Figure 1. Results of the query “153 – IL DITO; LE DITA / 163 – IL PIEDE; I PIEDI / 165 – IL CALCAGNO / 167 – IL FIATO / 213 – IL FABBRO / 436 – IL TASSO / 455 – IL ROSPO / 485 – IL RAGNO; I RAGNI / 505 – IL CUCULO / 518 – IL CACCIATORE” for pt. “10 – CAMISCHOLAS (TAVETSCH)” (table display)

A1	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	id	ais	ipa	audio	period	map_id	map_map_id	map_page	map_positio	map_type	map_name	map_name	map_name	location_id	location_ais	location_nai	location_location				
2	4391	ai dɔjt	ia	153	153	12	4	M		IL DITO; LE D FINGER	DOGIT		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
3	4402	ai pɔp	ei pɔp	/service/mai/past	167	163	12	13	M	IL PIEDE; I PIFUSS; FUSSE PIED; PIEDS			6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
4	4404	ai kaɔkɔɲ	ei keɲ:ɲ	/service/mai/past	169	165	12	15	M	IL CALCAGN; FERSE	TALON		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
5	4406	ai fɔt	ei fɔt	/service/mai/past	171	167	9	14	M	IL FIATO	ATEM	HALEINE	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
6	4452	ai fɔk	ei fɔk	/service/mai/past	217	213	84	13	M	IL FABBRO	SCHMED	FORGERON	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
7	4682	ai tɔs	ei tɔs	/service/mai/past	456	436	53	12	M	IL TASSO	DACHS	BLAIREAU	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
8	4699	ai rɔsp	ei rɔp	/service/mai/past	476	455	54	8	M	IL ROSPO	KROTE	CRAPAUD	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
9	4724	ai fɔk	ei fɔk	/service/mai/past	507	485	55	9	M	IL RAGNO; I SPINNE	ARAGNÉE		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
10	4738	ai kɔk	ei kɔk	/service/mai/past	529	505	58	13	M	IL CUCULO	KUCUKX	COUCOU	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
11	4752	ai kaɔkɔɲ	ei keɲ:ɲ	/service/mai/past	544	518	52	12	M	IL CACCIATO; DER JÄGER	LE CHASSEUR		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
12	354619	il fɔt	/service/mai/present	171	167	9	14	M	IL FIATO	ATEM	HALEINE	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)					
13	355280	il dɔt	ei dɔt	/service/mai/present	156	153	12	4	M	IL DITO; LE D FINGER	DOGIT		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
14	355502	il pɔj	/service/mai/present	167	163	12	13	M	IL PIEDE; I PIFUSS; FUSSE PIED; PIEDS			6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)					
15	355535	il keɲ	ei keɲ	/service/mai/present	169	165	12	15	M	IL CALCAGN; FERSE	TALON		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
16	360993	il kɔk	ei kɔk	/service/mai/present	544	518	52	12	M	IL CACCIATO; DER JÄGER	LE CHASSEUR		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
17	363297	il tɔs	/service/mai/present	456	436	53	12	M	IL TASSO	DACHS	BLAIREAU	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)					
18	365484	il rɔk	/service/mai/present	476	455	54	8	M	IL ROSPO	KROTE	CRAPAUD	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)					
19	365733	il fɔk	ei fɔk	/service/mai/present	507	485	55	9	M	IL RAGNO; I SPINNE	ARAGNÉE		6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)				
20	366585	il kɔk	/service/mai/present	529	505	58	13	M	IL CUCULO	KUCUKX	COUCOU	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)					
21	373531	il fɔt	/service/mai/present	217	213	84	13	M	IL FABBRO	SCHMED	FORGERON	6	10	Camischolas	SRIID-4326:POINT	(8.765508276746219 46.6795379420134)					
22																					

A “%” symbol may appear at the end of a transcription of newly collected data. This indicates that the informant, while lacking active competence of the relevant word, nevertheless recognizes it as part of his/her dialect if the interviewer suggests it (as *extrema ratio*) based on the original AIS data collected *in loco*.

Figure 2. The “%” symbol indicating passive competence

AIS,r					
Switch to map view		198 maps selec...	71 – Breno	Period	_%
AIS	IPA	Period	Location	Map	Download table
—	or 'fegato %	present	71 – Breno	139 – IL FEGATO	▶ Play
—	la 'bile %	present	71 – Breno	140 – IL FIELE	▶ Play
—	l om'beliko %	present	71 – Breno	130 – L'OMBELLICO (BOTTONI)	▶ Play

Whenever an answer has been recorded, the corresponding audio files (.wav) are automatically included in the results and they can be listened to by clicking on the turquoise “play” symbol.

The searched results can be saved and exported by clicking on the “download table” option: a folder is generated containing both the audio files (.wav) and the transcriptions (.csv).

2.2.6. Switch to Map View. – Whenever a single map is selected, one can perform queries and then visualise the query hits also on a geo-referenced map by clicking on the top left “switch to map view” option. In this case, if the option “Period – all” is selected, the *AIS* data appear in black case on the right-hand side (in the transcription selected), while the *AISr* responses appear in turquoise, accompanied by the “play” button allowing the user to retrieve and hear the recording. In the geo-referenced map (a detail is shown in Figure 3), the string consisting of transcribed data is always preceded by a red number which identifies the corresponding datapoint (e.g. 1 = Brigels).

Figure 3. Map view of the query results



On the map, real data appear only if the user has zoomed in manually to a sufficient extent, whereas by default the map visualization starts out with the whole Italian peninsula and a series of turquoise circles on the different areas, each with a number in it indicating the sum total of points contained in the relevant area. Thus, at this default scale, southern Switzerland is lumped together with Lombardy and parts of the adjacent Alpine areas of Piedmont and Trentino, so that the corresponding circle bears the number “93” and no individual data are visualised. The latter appear, as said, when zooming in.

2.3. Behind the database: digitization and phonetic transcriptions

Digitizing the *AIS* transcriptions was all but an easy task, given their peculiarities. For one thing, they were completely handwritten, which implied per se some within-individual variability. Into the bargain, they were handwritten by different persons⁵. This inter- and intra-individual variation added to a related structural problem. In fact, on the original handwritten maps, the association between the numerical red code (i.e. the datapoint) and the linguistic data in black (i.e. informant's answer) is not so straightforward since the mutual positions on the map vary with respect to one another. As a consequence, during the digital acquisition of a map, it is well possible for the software to fail calculating the correct association either capturing linguistic data from nearby datapoints or, conversely, excluding parts of the relevant informant's answer. In the event of software's incorrect calculations, the polygon for data capturing had to be manually enlarged or restricted by a human assistant to restore the correct link. Even in this case, when necessary, a human assistant can modify the OCR output. All in all, this implied that the procedure could not be completely automatized and had to be supervised by the research team members.

Moving on now from the (decoding of) the performance of transcriptions to their structure, one has to mention that the peculiarities of the *AIS* transcription system imposed some conventions that would allow a unique digitization and subsequent automatic conversion into IPA characters:

- *AIS* characters written on top of other characters have been digitized as superscript characters in brackets (e.g. $\overset{u}{a}$ -> a^(u)); in the downloadable .csv file the overwritten and underwritten characters are marked respectively as ^{SYMBOL} and _{SYMBOL};
- the *AIS* symbol indicating weak nasalization (a curled tilde) was digitized using the diacritic $\tilde{~}$ overwritten to a character (e.g. $\overset{\tilde{~}}{a}$);
- palatal plosives transcribed in the *AIS* as $\overset{c}{c}$, $\overset{g}{g}$ have been digitized here as $\overset{c}{c}$, $\overset{g}{g}$;
- the underwritten diacritic "cc" that marked "very open" vowels in the *AIS* have been digitized by means of a double vertical stroke under the character (e.g. $\underset{cc}{e}$).

As said above, *AIS* data can be retrieved from the database also under the form of an automatically generated IPA transcription, which is the output of a conversion process whose design and implementation put a serious challenge on the research team. Again, the problem is in part one of structure, in part one of performance. As far as structure is concerned, it will

⁵ The scholars involved were helped by a number of further people. For instance, Jakob Jud was helped by his family: see the vivid description of copying work by the whole family on Sunday afternoons at Jakob Jud's home in Zollikon provided by Schorta (1952, 12).

come as no surprise that the two transcription systems are not perfectly isomorphic. In addition, they had to be applied on-line by different researchers, without the aid of sound recording that could help objectify the result. The output is an implementation which, while reasonably uniform, contains some variation and noise, as recognized by Jaberg / Jud (1928, 24-36) themselves, whose introduction to phonetic transcription contains a section entitled “Gelegenheits- und Verlegenheitszeichen” (pages 29-32), which can be translated as ‘(Transcription) signs employed occasionally and in case of embarrassment (= Verlegenheit)’, and a further one under the title “Inconsequenzen, Unsicherheiten und Irrtümer in der Transkription” (‘Inconsistencies, uncertainties and errors in the transcription’, pages 33-35)⁶.

These occasional uncertainty and variability forced us to make debatable choices, in order to proceed to conversion into IPA. These choices are made explicit under the form of a conversion table which can be consulted on the database website.

Among the limitations put by the automated conversion process, some are rather harmless. For instance, such conversion made it impossible to mark stress at the beginning of the stressed syllable, as required by the IPA standards. For this reason, stress is marked immediately before the stressed vowel in the IPA transcriptions resulting from conversion, in keeping with an alternative convention that is occasionally encountered in the literature⁷.

In general, in consulting the database one must always keep in mind that the IPA transcription is a service provided to the user, subject to limits imposed by the original transcription. In particular, the automatic conversion mechanism has made it impossible to intervene to selectively correct transcription imperfections which, tolerated in systems current in Romance dialectology such as the *AIS* one, stand out as real mistakes in IPA transcriptions instead. This is the case e.g. for the rendering of the palatal lateral with the symbol *ʎ*, which the *AIS* collectors have always written as singleton regardless of actual length, obviously applying the same principle of economy as in Italian spelling (since the palatal lateral approximant does not present any length contrast). This has the effect of obscuring the difference between singleton (in the North) and geminate realizations (from Tuscany southwards). Thus, on map 1.9 *mio figlio* ‘my son’ is transcribed *ɛ mi ʎiʎʎ* for pt. 511 (Campori, a hamlet of Castiglione Garfagnana), where the realization is actually non-geminate; the IPA version is therefore faithful to the actual pronunciation here: [ɛ m_i ʎiʎʎ]. A transcription with singleton *ʎ*, however, is also to be read for Florence (pt. 523: *i mmí ʎiʎʎ*), although here the realization is actually geminate, as in Standard Italian: for Florence the IPA counterpart is therefore

⁶ Alongside Jaberg / Jud (1928, 24-36), the reader is referred to Jaberg / Jud (1927) and Canepari (1978) for description and discussion of the *AIS* transcription system.

⁷ By contrast, in the newly transcribed *AISr* data the stress mark precedes the entire stressed syllable.

unfortunately incorrect [i m:'i fi'k'o:lɔ] (instead of [i 'm:i fi'k:ɔlo], as it should be), given the impossibility of intervening by selectively correcting consonant length only for the points that needed it. The same applies to other non-contrastive geminates: for the palatal nasal, for example, map 3.541 *il legno* ‘the wood’, displays *ñ* almost everywhere, in Tuscany – including Florence – or in Lazio as well as in the North: the symbol is therefore converted into IPA as [ɲ] throughout (e.g. [l'ɛɲɔ] in Incisa, province of Florence, pt. 534; [l'ɛɲɔ] in Radda in Chianti, province of Siena, pt. 543; [l'e:ɲɔ] in Vinci, province of Florence, pt. 522), thereby obscuring the distinction between Tuscan [l'ɛɲ:ɔ] and Veneto [l'e:ɲɔ]. As apparent from these examples, vowels too may be in need of some adjustment. In fact, the *AIS* uses symbols without diacritics for mid vowels of intermediate height, while for IPA low vs. high mid cardinal vowels are transcribed with different symbols, and diacritics must be added to indicate intermediate height. Thus, for *AIS e o* we have chosen arbitrarily a lowered mid high [ɔ ɛ̃], as seen for pt. 543, whose *AIS* transcription is *l'ɛ̃no*, whereas for pts. 534 and 522 Scheuermeier notated a lower mid vowel, with diacritic: *l'ɛ̃ɲɔ* and *il l'ɛ̃ɲɔ* respectively. The latter translation, furthermore, has a dubious macron which is respected in the IPA transliteration [e:] in spite of the fact that it is implausible for a stressed vowel to be allophonically lengthened before [ɲ:] in central Tuscany.

Such further adjustments of the IPA output, in these and similar cases, are left to the user.

3. What is the *AISr* database good for: a few examples

The *AISr* data allow one to observe the reshaping over time of the spatial distribution of competing variables in all structural components. The following subsections discuss a few selected examples.

3.1. Convergence and variation in western *Surselva*

Let us start by focusing on western *Surselva*, where pts. 10 (Camischolas, Val Tujetsch) and 11 (Surrhein/Sumvitg, Val Medel) represent the westernmost fringe of the Romansh speaking territory. The corresponding local dialects are the Sursilvan varieties that differ most from the literary standard (on Tuatschin cf. Maurer Cecchini, forthcoming, with previous references; on Medelin see Widmer 1962). The *AIS* data attest to their diverging from the rest of the *Surselva* in several lexical and grammatical features which, as shown by the *AISr* data, have since become at least partly homogenized. This becomes apparent for instance on map 3.480 *la farfalla* ‘the butterfly’ (Figure 2)⁸, where in the *AIS* one finds e.g. [lɐ 'tʃite] in Brigels-

⁸ *AIS* maps have a trilingual title (in this case *La farfalla – Schmetterling – Papillon*) which is meant to illustrate the concept corresponding to the questionnaire item in the three official and national languages of the Swiss Confederation at the time publication started. In what follows, we will cite only the Italian name, since it corresponds to the roofing languages of one of the

Breil (pt. 1) vs. [lɛ 'biwɐ] in Surrhein/Sumvitg (pt. 11) and [lɛ 'belɛ] in Camischolas (pt. 10), while the *AISr* informant for pt. 11 has changed to [lɛ 'tʃitʷɛ].

Figure 4. Results of the query “480 – LA FARFALLA” (map display, showing the 9 points in the Surselva and Sutselva)



Likewise, the form of the M.SG definite article [ɐl] (Figure 3), which is characteristic for the local dialect (being a stereotype in the Labovian sense) and used to appear at pts. 10-11 in the western Surselva on the *AIS* maps, is now competing with common Sursilvan [il] in the *AISr* data, whose answers display either forms: e.g. at pt. 10 [il 'bap] ‘the father’ 1.5, [il 'ciɣrp] ‘the body’ 1.87, as opposed to [ɐl] in the *AIS*, which however persists in other questionnaire answers such as [ɐl 'viɣntɐr] ‘the belly’ 1.128, [ɐl 'dir] ‘the liver’ 1.139 etc. There is widespread instability in the area, as for this article form, as at pt. 11 we collected e.g. [ɐl 'bap] as opposed to *AIS* [il 'bap].

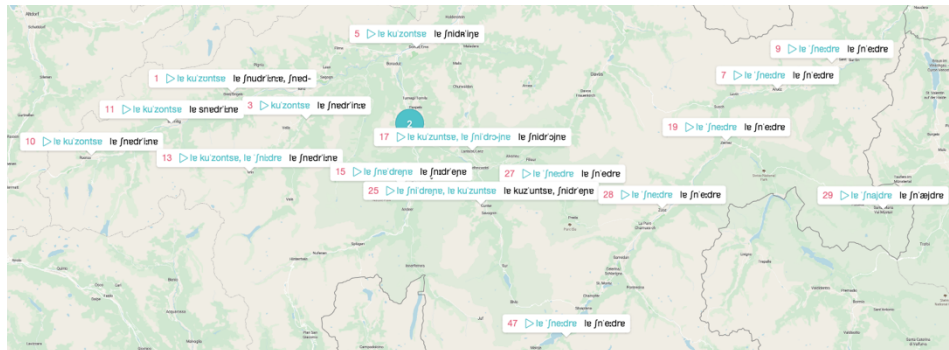
target dialect continua, though not the one relevant for the Grisons. (Recall that Romansh was declared a national language in 1938 – with a popular vote responding to Mussolini’s threat – and that the overarching standard for the five Romansh dialect subdivisions, viz. *Romansh Grischun*, was only established in the 1980s, by Schmid 1982).

Figure 5. Results of the query “5 – IL PADRE / 87 – IL CORPO / 128 – IL VENTRE / 139 – IL FEGATO” for pt. “10 – CAMISCHOLAS (TAVETSCH)” (table display)

AIS,r		Switch to map view	4 maps selected	10 – Camischolas (Ta...)	Period	Phonetic	
AIS	IPA	Period	Location	Map	Download table		
ai báp	ei b'ap	past	10 – Camischolas (Tavetsch)	5 – IL PADRE			
ai čiarp	ei c'ierp	past	10 – Camischolas (Tavetsch)	87 – IL CORPO			
ai viántar	ei vi'anter	past	10 – Camischolas (Tavetsch)	128 – IL VENTRE			
ai dír	ei d'ír	past	10 – Camischolas (Tavetsch)	139 – IL FEGATO			
—	il bap	present	10 – Camischolas (Tavetsch)	5 – IL PADRE			▶ Play
—	il ciarp	present	10 – Camischolas (Tavetsch)	87 – IL CORPO			▶ Play
—	ei `vígnter	present	10 – Camischolas (Tavetsch)	128 – IL VENTRE			▶ Play
—	ei dir	present	10 – Camischolas (Tavetsch)	139 – IL FEGATO			▶ Play

The *AISr* data also hold some surprises in store, relative to what is independently known from reference sources. Thus, map 2.264 *la sarta* ‘the (female) tailor’ shows the overwhelming prevalence of the Swiss German loanword [lɛ ʃnɛdr'i:nɐ] (the form is taken from Camischolas), with just one point in the whole Romansh area preserving the original Romance name as an alternative: [lɛ kuz'untɕə, ʃnidr'ɛnɐ] in Reams – Riom (pt. 25, in Oberhalbstein/Sursés). While the situation in Reams has not changed, the overall *AISr* picture shows a much broader diffusion of the Romance word ([lɛ ku'zuntɕə] in Brigels, [lɛ ku'zontɕə] in Camischolas, while in many other places the informants gave both answers).

Figure 6. Results of the query “264 – SARTA” (map display, showing 16 (of 18) points in the Rumantschia)



This allows one to correct the unfavourable diagnosis which is to be read in the *DRG* 4.606⁹:

cusunz, -a vermochte sich trotz Propagierung durch Wb. und Gramm. (Cahannes, *Gramm.* 180) insbesondere auch wegen seiner starken semantischen Bindung an 'Näher, -in' in der Bed[eutung] 'Schneider, -in' neben → *schneder*, -dra nicht durchzusetzen (cf. AIS. 2.259 und 264). [*cusunz*, -a was not able to assert itself alongside → *schneder*, -dra, despite propagation through dictionaries, especially because of its strong semantic link to the agent noun from 'to sew' in the meaning 'tailor' (cf. AIS 2.259 and 264)]

Of course, a caveat is in order here. Our comparison, in fact, is subject to the well-known limitations of any language atlas, which consists of a collection of *actes de parole* (Pop 1950, 131, 570-571): this means that, in principle, one might suspect that our informants' responses to the translation task may be due to normative prescription, favouring indigenous *cusunza* over the German loan competitor¹⁰. A one-informant dialect atlas is not in a position to solve such a doubt.

3.2. The reshaping of lexical areas for some kinship terms

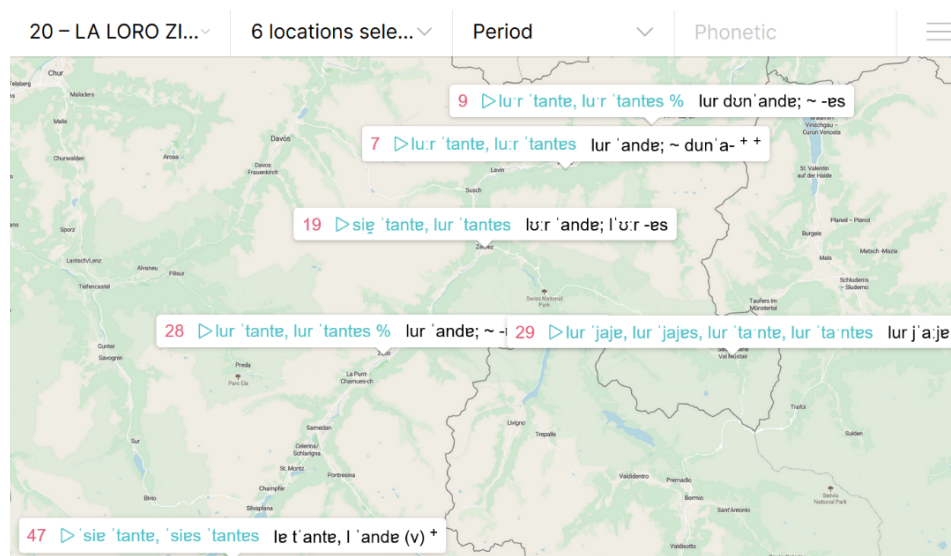
Noteworthy displacements in lexical distribution areas are also observable in core lexical domains, such as kinship terms. Moving from Surselva to Engadine one can see an interesting case of lexical substitution due to German pressure. In order to describe this, one first has to briefly retrace the history of the terms for 'aunt' in Lower Engadine. In a first stage the whole region probably shared the type of onomatopoeic or infantile origin *jaja*: the *DRG* 10.162 still reports it only for the marginal areas north of Scuol towards the Austrian border and in Val Müstair. In the central area of Lower Engadine, instead, *jaja* is flanked by the inherited type

⁹ This is included under the entry *cusir* written by Jachen Curdin Arquin for the fourth volume, which appeared in 1968.

¹⁰ As to this specific word (see Decurtins 1993, 212-216), we know that until the early 1930s the German loan was the most used: the dictionary by Pallioppi / Pallioppi (1895, 218) has the entry *cusunza*, an indigenous word documented as early as 1658, but is quick to add: "gewöhnlicher: *schnedra*" ['more usually: *schnedra*'], and Cahannes (1924, 180), discussing Germanisms, says: "Per «*schneder e schnadrina*» vein nus ils buns plaids: *cusunz e cusunza*" ['For tailor (male and female), we have got the good words *cusunz* and *cusunza*']. These prescribed "good words" gained momentum especially during the 1930s, when the political situation hinted to in fn. 8 prompted a reaction which also included a fight against non-indigenous words: see e.g. the schoolbook by Steier (1933, 118 and 162). Dictionary vacillate to this day: thus, the reader finds only *cusunz*, -a in Darms et al. (1989, 484) but both *cusunz* and *schneder******verificare la forma esatta***** in Decurtins (2001, ***).

anda (< Latin AMĪTAM) which is widespread, as shown by both *DRG* 1.263 and *AIS* 1.20 ‘their aunt, their aunts’, also in the rest of the Raeto-Romance territory. A more careful look at the *AIS* data (in black in the picture below) shows however that already in the early 1920s the Upper-Engadinian varieties (Fex-Platta pt. 47 and Zuoz. pt. 28) presented alongside *anda*, reported as archaic, also the German loan *tanta*.

Figure 7. Results of the query “20 – LA LORO ZIA; LE LORO ZIE” (map display, showing the 6 points in the Engadine)



Comparison with *AISr* data clearly shows that during the last century the Germanism *tanta* has expanded also in the low-Engadine area, supplanting *anda* in the whole region except, once again, the marginal area of Val Müstair (Santa Maria, point 29) where the onomatopoeic type *jaja* resists.

The example just illustrated for the Engadine region is interesting also because the same dynamics of change can also be observed in the Italo-Romance area. In fact, also for the Lombard dialects of the Canton Tessin and the Italian-speaking part of Grisons, the *AIS* map 2.20 *la loro zia; le loro zie* ‘their aunt; their aunts’ attests to the presence of two distinct types, inherited *anda* (< AMĪTAM) alongside the Italian loan *zia*. Some varieties had both lexical types:

(3) *AIS* 1.20 (1920s)

<i>anda</i>	both types	<i>zia</i>
pt. 22 Olivone	pt. 31 Osco	pt. 41 Caveragno
pt. 35 Bivio	pt. 32 Chironico	pt. 53 Prosito
pt. 42 Sonogno	pt. 44 Mesocco	pt. 58 Poschiavo
pt. 45 Soglio	pt. 52 Aurigeno	pt. 71 Breno
pt. 46 Coltura	pt. 70 Indemini	pt. 73 Corticiasca

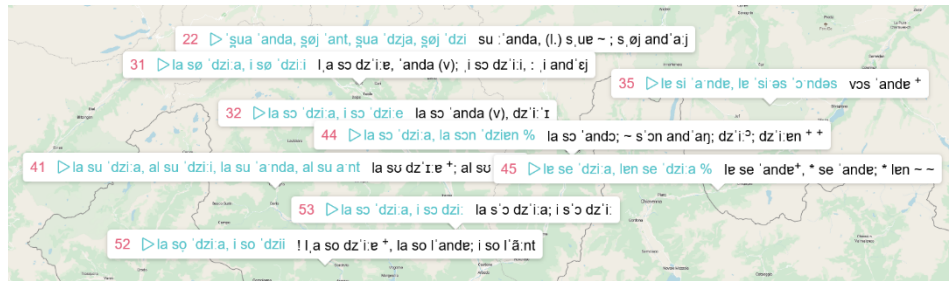
pt. 50 Campo pt. 51 Vergeletto		pt. 93 Ligornetto
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In this case too, comparison with *AISr* data shows a spread of borrowed *zia* to the detriment of autochthonous *anda*, now preserved only in isolated datapoints such as Bivio (pt. 35), Olivone (pt. 22) and Caveragno (pt. 41), as shown in (4) and in Figure 8:

(4) *AISr* 1.20 (late 2010s)

<i>anda</i>	both types	<i>zia</i>
pt. 35 Bivio	pt. 22 Olivone pt. 41 Caveragno	pt. 31 Osco pt. 32 Chironico pt. 42 Sonogno pt. 44 Mesocco pt. 45 Soglio pt. 46 Coltura pt. 50 Campo pt. 51 Vergeletto pt. 53 Prosito pt. 52 Aurigeno pt. 58 Poschiavo pt. 70 Indemini pt. 71 Breno pt. 93 Ligornetto

Figure 8. Results of the query “20 – LA LORO ZIA; LE LORO ZIE” (map display, showing a selection of 9 points in the Canton Tessin)



A further example of the influence of the roofing language is visible in the case of *génar* ‘son-in-law’. In fact, the *LSI* 2.650 entry *génar*² reports almost exclusively *gendar* < GĒNĒRUM (REW 3730), with epenthetic *-d-* introduced after the syncope of *-E-*: only the urban centres of Bellinzona and Locarno, the region of Centovalli and the localities of Rossa, Muggio, Palagnedra, Brissago and Rivera attest an ‘Italian’ form without the epenthesis of the dental consonant. According to the *LSI*, the *gendar* type is widespread in the rest of the territory of Canton Tessin and the Italian Grisons. A similar picture emerges if one considers the data in *AIS* 1.33 *il género* ‘the son-in-law’: among the 18 investigated varieties, 16 reported a

translation with epenthetic *-d-*, whereas only the informants from Ligornetto (pt. 93) in the extreme south of the Canton Tessin and Poschiavo (pt. 53), in the homonym valley, gave the forms [ul 'dʒe:nɐr] and [ɐl 'dʒe:nɐr] respectively. Once again, the surveys carried out for *AISr* have highlighted a clear change: as can be seen in the table below, the influence of the roofing language has turned the picture upside down, with as many as 13 varieties out of 17 which attest a result without epenthetic *-d-* (in Corticiasca, pt. 75, it was not possible to record this piece of data):

(5)

<i>genar</i>		<i>gendar</i>	
[ul 'ʒendra]	pt. 22 Olivone	[ul 'dʒe:ndru]	pt. 31 Osco
[ul 'dʒe:nɐr]	pt. 32 Chironico	[ɐl mɛ 'dʒendɐr]	pt. 44 Mesocco
[ɐl 'dʒe:nɐr]	pt. 35 Bivio	[ɐl 'ʒe:ndru]	pt. 51 Vergeletto
[lu 'dʒe:nɐr]	pt. 41 Caveragno	[ɐl 'ʒe:ndro]	pt. 53 Prosito
[ɐl 'dʒe:nɐr]	pt. 42 Sonogno		
[ɐl 'dʒe:nɐr]	pt. 45 Soglio		
[ɐl mɛ 'dʒe:nɐr]	pt. 46 Coltura		
[ɐl 'dʒe:nɐr]	pt. 50 Campo		
[al 'dʒe:nɐr]	pt. 52 Aurigeno		
[al 'dʒe:nɐr]	pt. 58 Poschiavo		
[u 'dʒe:nɐr]	pt. 70 Indemini		
[o 'dʒe:nɐr]	pt. 71 Breno		
[ul 'dʒe:nɐr]	pt. 93 Ligornetto		

3.3. The syntax of negation in Swiss Lombard dialects

Syntactic change can also be investigated by means of the database, thanks to the fact that, contrary to other dialect atlases such as *ALI*, the *AIS* questionnaire featured also a number of whole sentences rather than just words and phrases. Among these, 29 included a sentential negation and thus lend themselves to the study of this topic, which has been investigated for the Italo-Romance dialects of Switzerland comparing the two datasets by Pescarini/Donzelli (2017) and Donzelli (2020, ch. 5). As is well known, Northern Italian dialects show all the three stages of Jespersen's (1917) negation cycle (see Manzini / Savoia 2005, 1.128-143 and, on specific areas, Zeli 1968 for the Lombard dialects of Switzerland, Vai 1996 on Milanese, Zanuttini 1987 on Piedmontese, Parry 1998 on Ligurian).

Historically, sentential negation starts out with a preverbal negative marker (stage I) that in a second step becomes discontinuous, with the addition of a negative element after the verb (stage II), to end up as the postverbal, as the original preverbal marker becomes optional and is eventually dropped (stage III).

It is commonly assumed that in Lombard dialects sentential negation involves the postverbal negative marker *mia/miga/minga* (on *'mica'* see Pescarini 2005, Penello / Pescarini

2008). Indeed, Western and Alpine Lombard dialects spoken in Canton Ticino and Grisons, investigated in the framework of *AISr*, usually show a postverbal negative marker, as expected, but in a few cases discontinuous or even preverbal negation (the latter in the dialects of Soglio, pt. 45, and Coltura, pt. 46; Grisons) ~~still occurs~~.

Comparison with the *AIS* data reveals a trend according to which dialects which used to display preverbal or discontinuous negation in the 1920s generally show postverbal negation nowadays, as exemplified for Coltura in (6a-b) and Sonogno (pt. 42) in (6c-d):

- (6) a. *šta dōnna nɯ m plěš _ AIS 8.1678, pt. 46*
 this woman NEG 1SG.DAT like.PRS.3SG
- b. *'kwiʃtə 'don:a ɐ m= plɛʃ 'mi:a AISr*
 this woman CL= 1 SG.DAT= like.PRS.3SG NEG
 'I don't like this woman'
- c. *lɛ(ɑ) nɛ= g= vó šta mĩa AIS 8.1594, pt. 42*
 3SG.F NEG= LOC= want.PRS.3SG stay NEG
 'she doesn't want to stay'
- d. *ɯ vo 'mi:a ʃta:k AISr*
 CL3SG.M=want.PRS.3SG NEG stay
 'he doesn't want to stay'

Scheuermaier recorded preverbal negation (stage I, (6a)) in Coltura, and discontinuous negation (stage II, (6c)) in Sonogno, while our informants replied with postverbal negation in both cases.

Interestingly, some datapoints show the coexistence of the three stages to this day, as illustrated with the dialect of Caveragno (pt. 41) in (7):

- (7) a. *nu 'mɔ:vɛt stage I AISr 8.1647, pt. 41*
 NEG move.PRS.2SG=REFL
- b. *nu 'mɔ:vɛt 'mi:a stage II*
 NEG move.PRS.2SG=REFL NEG
- c. *'mɔ:vɛt 'mia stage III*
 move.PRS.2SG=REFL NEG
 'do not move'

Thus, based on *AISr* data, the present-day distribution of sentential negation in Swiss Lombard dialects, can be summarized as follow:

- (8) a. Stage I: Soglio e Coltura (pts. 45, 46)
 b. Stage II: Sonogno, Aurigeno, Indemini e Ligornetto (pts. 42, 52, 70, 93)

- c. Stage III: Breno, Corticiasca, Olivone, Osco, Chironico, Bivio, Mesocco, Cimalmotto, Vergeletto, Prosito, Poschiavo (pts. 71, 73, 22, 31, 32, 35, 44, 50, 52, 53, 58)
- d. Stages I to III: Caveragno (pt. 41).

Cases of negative agreement deserve separate discussion. Firstly, in the areas where the preverbal negative marker is still used, the postverbal element can co-occur with it in the same sentence without affecting the overall negative meaning. Secondly, the preverbal negative element can co-occur with negative aspectual adverbs ('(n)ever' and 'anymore') and negative quantifiers ('nobody' and 'nothing'), which occur in complementary distribution with the postverbal negative element 'mica', as exemplified from the dialect of Coltura in (9):

- (9) a. lú nu kúr mǎy AISr 8.1605, pt. 46
 3SG NEG run.PRS.3SG never
- b. ly e= l= kor ma'j AISr
 3SG CL= CL3SG.M= run.PRS.3SG never
 'he never runs'

However, a clear asymmetry between arguments and adjuncts can be detected. With the former, negative agreement tended to disappear in Lombard as early as the earliest medieval texts (cf. Vai 1996 on Old Lombard) while in present-day varieties indefinite negative quantifiers never co-occur with postverbal negation. Conversely, a strong incidence of preverbal negation is found with adjuncts. In the varieties showing usually postverbal negation, cases of coexistence between the negation (*mica*) and the negative quantifier (anywhere) can be observed:

- (10) a. à= n= trɔv mígα da neʃúna párt AIS 8.1597, pt. 73
 CL= NEG= find.PRS.1SG NEG at no_one place (Corticiasca)
- b. a= l= trɔ'vía míngα i násun sít AIS 8.1597, pt. 22
 CL= 3SG.ACC= find.PRS.1SG NEG in no_one place (Olivone)
 'I cannot find him anywhere'

In Swiss Lombard dialects negative quantifiers do not work in the same way: arguments tend to disfavour negative agreement, while adjuncts tend to preserve it even in contexts and/or varieties with postverbal negation.

3.4. Sound change

While we have so far provided examples in the areas of morphology, syntax and the lexicon, the possibility offered by the *AISr* database to set up an immediate comparison between parallel datasets at one century distance can obviously be instrumental also to investigate sound change. As an example, we will consider the outcomes of Latin *c^{ei}*-, drawing on Negrinelli (in preparation). Table (11) compares the *AIS* and *AISr* datasets for pt. 19 Zernez, on the border between the Puter and the Vallader linguistic areas (the greyed-out cells show

the cases in which change has occurred):

(11)	<i>AIS</i> map	<i>AIS</i> / 1920s	<i>AISr</i> / late 2010s	
a.	[ʃ] / [tʃ] > [tʃ]	5.945 ‘dopo cena’	[ʃɛ̃ɪnə] / [tʃɛ̃ɪnə]	[tʃaj̃nə]
		5.909 ‘la cera’	[ʃairə] / [tʃairə]	[tʃairə]
		7.1282 ‘la ciliegia’	[ʃiˈre:ʒə] / [tʃiˈre:ʒə]	[tʃeˈre:ʒə]
		1.94 ‘il cervello’	[ʃerˈvɛ] / [tʃerˈvɛ]	[tʃerˈvɛ]
b.	[ʃ] > [tʃ]	5.930 ‘la cenere’	[ʃɛndrə]	[tʃɛndrə]
		7.1368 ‘la cipolla’	[ʃiˈguɔlə]	[tʃiˈguɔlə]
		6.1219 ‘la ricotta’	[ʃiˈgrun]	[tʃiˈgrun]
		3.507 ‘la civetta’	[ʃuˈɛtə]	[tʃuˈwɛtə]
		8.1564 ‘la cintura’	[ʃintə]	[tʃintə]
		3.636 ‘andare a cercare’	[ʃerˈtʃɛr]	[tʃərˈtʃɛr]
c.	[ʃ]	1.102 ‘le ciglia’	[ʃaj̃ʎs]	[ʃaj̃əs]
		2.365 ‘la nebbia’	[ʃiˈɛ:rə]	[ʃiˈɔ:rə]
d.	[tʃ]	2.286 ‘cinque; sei’	[tʃinc]	[tʃẽnc]
		2.304 ‘cento’	[tʃiɔ̃nt]	[tʃjɛ̃nt]
		2.310 ‘cinquanta’	[tʃiɔ̃ˈkwantə]	[tʃiɔ̃ˈkwantə]

The situation recorded in the 1920s (third column) was more variegated, with free variation between word-initial [tʃ] and [ʃ] reported for a few lexical types (*tscheina* ‘dinner’, *tschera* ‘wax’, *tscherescha* ‘cherry’ and *tschurvi* ‘brain’), while on the whole the vast majority of lexemes was recorded with [ʃ] (from earlier *[tʃ] < c^{el/}). The same situation is widely described

in the literature with reference to the first half of the 20th century¹¹. Consider for example the following remarks by Walberg (1907, §107):

Davanti a *e, i* C si riduce a *fj* [...] In *flaríña*, anticamente *Tschlari(g)na* (*CELLARINA?), il gruppo consonantico, di pronunzia difficile, [...] Del resto la esplosiva iniziale è anche negli altri casi poco energica e sta per dileguarsi completamente. Ho sentito più di una volta forme come *fartçer, fintç, fijkænta* QUINQUAGINTA, *fiənt, fiént* CENTUM, *fúrma* »ciurma«, accanto a quelle con *fj*. [‘Before *e, i* C changes to *fj* [...] In *flaríña*, formerly *Tschlari(g)na* (*CELLARINA?), the hard-to-pronounce consonant cluster [...] After all, the initial plosive is also in other cases not very energetic and is about to disappear completely. I have heard more than once forms like *fartçer, fintç, fijkænta* QUINQUAGINTA, *fiənt, fiént* CENTUM, *fúrma* “crew”, alongside those with *fj*.’]

The situation displayed in the 4th column in (6) contradicts Walberg’s speculation: the *AISr* data show that over time the palate-alveolar affricate [tʃ] has gained ground among the lexemes which showed variation in the 1920s ((11a)), and further spread also to many words which Scheuermeier recorded only with initial [ʃ] in the *AIS* survey ((11b)), such as *tschendra* ‘ash’, *tschaguola* ‘onion’, *tschigrun* ‘ricotta cheese’, *tschuetta* ‘owl’, *tschenta* ‘belt’ and *tschercar* ‘to search’. This development is one out of many which are probably due to the normalizing pressure of official spelling, which presents the <tsch> (= [tʃ]) grapheme in all the cases mentioned: over time, adherence to these spellings may have eradicated free variation between the two pronunciations in (11a) and directed the change in the others. In fact, the spelling is the same also for the words in (11c-d): *tschagl* ‘eyebrow’, *tschiera* ‘fog’, *tschinch* ‘five’, *tschient* ‘hundred’, *tschinqua(u)nta* ‘fifty’.

4. Conclusion and further prospects

To conclude, the same limitations addressed above in §2, imposed by reasons of feasibility in the three-year funding period, also indicate two paths for further development:

- (12) a. digitization of the remaining 50% of the *AIS* maps in searchable form using the same technique;
- b. extension of fieldwork to Italy, Slovenia and Croatia, to cover the rest of the territory on which the *AIS* datapoints are scattered.

¹¹ Cf. Eichenhofer (1999, §281 n. 1), who reviews earlier descriptions: Luzi (1904, §87) for Sutsilvan; Lutta (1928 ***VERIF DATA***, §128) and Grisch (1939, §17) for Surmiran; Pult (1898 ***VERIF DATA***, §179) for the Lower-Engadine dialect of Sent.

As of now (autumn 2020), a sequel four-year project has been funded by SNSF, which will consist in the implementation of the objective (12a). As for (12b), the project foresees a fieldwork campaign in Lombardy, programmed to start in spring 2021, under harder circumstances than expected in the planning stage due to the Covid-19 pandemia¹². Once this is completed, *deo iuvante et nos viventibus*, the database will include present-day data for about 1/5 of the 407 *AIS* datapoints¹³. This will be a good starting point for further extension, with the ultimate goal of covering the remaining territory, region after region, possibly in cooperation with local teams¹⁴.

Should we succeed in the enterprise, history will repeat itself: Jaberg and Jud, too, started in Switzerland and first planned an extension to Northern Italy only (cf. Jaberg / Jud 1928, 12-16), to eventually end up with a monumental atlas covering all of the Romance varieties of Southern Switzerland and the whole of Italy.

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¹² In the hope that the situation will have somehow normalized by then, one has to take notice of the fact that the very high lethality rate in Lombardy during spring 2020 massively impacted on the population of eligible informants, since, as seen in (2), the overwhelming majority of them were aged people. This is due to the character of the original *AIS* questionnaire, with its focus on rural life and related traditional activities and practices which, in the early 21th century, implies selecting elderly people as informants.

¹³ Further, smaller-scale campaigns are being planned presently at the University of Zurich: the six Gallo-Italic points in Sicily will be surveyed by Salvi (in preparation), while the six datapoints in Istria and Dalmatia are the focus of Giudici / Negrinelli (in preparation). In addition, the *Atlante Multimediale dei Dialetti Veneti (AMDV)* already includes modern data from Veneto, recorded with a comparable procedure (and indeed served as a source of inspiration for the *AISr* project). However, full comparability is hindered by the fact that, due to funding limitations, *AMDV* covers only about one third (i.e. 430 lexical entries) of the original *AIS* questionnaire (cf. Tisato / Vigolo 2011, 109).

¹⁴ While, for comparability, it is essential that the new survey be completed within a reasonable time lapse, the issue of uniformity in transcription has lost some importance, given that users are now able to check transcriptions themselves against the sound input.

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