

# Mapping Dialectal Variation

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**Discovering Linguistics - Linguistic Discoveries** 

Gent university, 2020 October the 5th

 An overview of some of the trending topics in the field of dialectology



 An overview of some of the trending topics in the field of dialectology = linguistics involving cartography



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- Different problems
  - History (who, when, where)



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  - Data (digitalization, recordings)



source

- An overview of some of the trending topics in the field of dialectology = linguistics involving cartography
- Different problems
  - History (who, when, where)
  - Data (digitalization, recordings)
  - Mapping (methods, tools)





19	00	10	20	3 3	0 4	0 5	0 6	0 7	0 8	0 9	0 20	00

- Phase I: The pionneers
- Phase II: The legacy
- Phase III: The crowdsourcers
- Mapping linguistic data





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- Phase II: The legacy
- Phase III: The crowdsourcers
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# Phase I: The pioneers





• PhD student and librarian at the University of Marburg



Georg Wenker [1852-1911]

- Methods
  - Task: translate in local dialect +/-40 sentences written in Hochdeutsch



The Wenker phrases

#### Methods

- Task: translate in local dialect +/-40 sentences written in Hochdeutsch
- Answers are written and questionnaires are displayed/gathered by mail



#### • Methods

- Task: translate in local dialect +/-40 sentences written in Hochdeutsch
- Answers are written and questionnaires are displayed/gathered by mail
- Target: schoolmasters and students



- Timeline (1/2)
  - 1876 Northern Rhine province



- Timeline (1/2)
  - 1876 Northern Rhine province
  - 1877 extension to Westphalia



- Timeline (1/2)
  - 1876 Northern Rhine province
  - 1877 extension to Westphalia
  - 1881 extension to North and Center



#### • Timeline (1/2)

- 1876 Northern Rhine province
- 1877 extension to Westphalia
- 1881 extension to North and Center
- 1887 questionnaires are sent in all the remaining areas of the Reich



#### • Timeline (1/2)

- 1876 Northern Rhine province
- 1877 extension to Westphalia
- 1881 extension to North and Center
- 1887 questionnaires are sent in all the remaining areas of the Reich
- 1926-1933 extension to other regions outside the Reich



#### • Timeline (1/2)

- 1876 Northern Rhine province
- 1877 extension to Westphalia
- 1881 extension to North and Center
- 1887 questionnaires are sent in all the remaining areas of the Reich
- 1888 45.000 questionnaires are filled



- Timeline (2/2)
  - 1923 more than 1600 maps are produced <u>by hand</u>



Beispiel aus Wenker (1888–1923): Kt. Bäumchen

- Timeline (2/2)
  - 1923 more than 1600 maps are produced by hand
  - They cover 339 linguistic items



source

#### • Timeline (2/2)

- 1923 more than 1600 maps are produced by hand
- They cover 339 linguistic items
- After Wenker's death, work was continued by his assistants



Ferdinand Wrede

- Timeline (2/2)
  - 1923 more than 1600 maps a produced by hand
  - They cover 339 linguistic items
  - After Wenker's death, work wa continued by his assistants
  - Nowadays, most of it has been digitized and available online



**Digitaler Wenkeratlas (DiWA)** 

#### • Timeline (2/2)

- 1923 more than 1600 maps are produced by hand
- They cover 339 linguistic items
- After Wenker's death, work was continued by his assistants
- Nowadays, most of it has been digitized and available online
- A call to the crowd is made to transcribe Swiss material

PROJECT WENKER		TRANSCRIPTION	TRANSLATION	THE PROJECT	WENKER	FAQ	EN 👻
	Fräschets, Freiburg		Bie	e-L	- 22		
	1174 Fröschels 44828		loct :	Bri L	- 2	9	
	1. Im Winter fluge di trochene Hatter i de Left inne .	a12	l	ittis Alteris	M Bab		+
	Please transcribe the sentences from the picture above into th	e input field.	anger				
	No. 1 • Sentence No. 1			NEXT	SENTENCE		
	Modify last character: Enter special characters: β š š ſ θ æ ε σε ο	αe ØX					
	✓ Show Transcription Rules						
	https://wenker.citizenscience.c	h/en/	home	2			

• Swiss linguist, teaching in Paris (EPHE)



Jules Gilliéron (1854-1926)

#### • Methods

• Task: translate in local dialect between 1400 and 2000 sentences (from French)

Ordre de	Forme proposée à la traduction (stimulus)	Carnet d'enquête	numéro des cartes ALF où sont
assation lors		(page_colonne)	publiées les réponses
71	loir	1.3	1611
72	musaraigne	1.3	1642
73	taupinière	1.3	1718
74	taupe	1.3	1286
75	campagnol	1.3 (en note)	pas de carte
76	chauve-souris	1.3	260
77	fouine	1.3	601
78	putols	1.3	1686
79	genette	1.3	pas de carte
80	furet	1.3	1573
81	le hérisson	1.3	687
82	Voici / des bêtes / sauvages, / des animaux / qui habitent / les bois.	1.3	1406; 129; 1199; 43; 679; 145
83	sanglier	1.3	1188
84	loup, louve	1.3	783
85	ours	1.3	960
86	cerf	1.3	215
87	biche	1.3	1463
88	chevreuil	1.3	275
89	loutre	1.3	1614
90	scorpion	2.1	1707
91	chamois	2.1	1491
92	écureuil	2.1	450
93	lièvre	2.1	769
94	levraut	2.1	769
95	lapin	2.1	752
96	du gibier	2.1	644
97	olseau	2.1	1864
98	oisillon	2.1	1864
99	un moineau	2.1	866
100	hirondelle	2.1	697
101	alouette	2.1	36
102	loriot	2.1	1612
103	pinson	2.1	1018
104	coucou (oiseau)	2.1	1520
105	merie	2.1	843
106	rossignol	2.1	1168
107	mésange	2.1	844
108	roitelet	2.1	1697
109	fauvette	2.1	545
110	bouvreuil	2.1	1474
111	pie	2.1	1010
112	tourterelle	2.1	1729
113	En rentrant / de l'école / les garçons / sont allés / dénicher / des nids /	2.1	1151; 441; 624; 32; 389; 910; 939
114	Écoute / le chant / du rossignol.	2.1	444; 232; pas de carte (mais cf. 1168)
115	Je l'ai / déjà / entendu.	2.1	83; 383; 466



#### Methods

- Task: translate in local dialect between 1400 and 2000 sentences (from French)
- Answers are written by a single person





Edmond Edmont [1849-1926]

#### • Methods

- Task: translate in local dialect between 1400 and 2000 sentences (from French)
- Answers are written by a single person, Edmond Edmont, a retired gricer

	1	(
	971	mark (Se cef.) (CA
igrafina	margila	klouzura (22)
détayina	amperdja	lekarn de dri
ina à téta	kofri	lahara d' là dura
úa a morisa	bankal; mangor	manivela tan _
brula	4	brizzi de ple (D)
amado	Célegya and geneta	mità pe. (E)
i 4	boryo	la monta
ariba	bandja ; bandjana	nura
9	. 4 .	úbri
Berjeroneta	djure à ékendayéta (	A) ubear , ubearta
arpyn	tsarpyà	paysé
pepye	keinbyr pola varger y	(B) (päpyera
midja	dond	pene
rajna	kwana	pivo.
fà rairei	dila	rubá
1.4.1 (2)		

#### • Methods

- Task: translate in local dialect between 1400 and 2000 sentences (from French)
- Answers are written by a single person, Edmond Edmont, a retired gricer
- Participants:
  - 735 informants (incl. 102 women)
  - whoever is available (teachers, secretaries, farmers, etc.
  - 638 locations



• Timeline

• 1897-1901: material gathering



Source : Brun-Trigaud et al. 2005: 21

#### • Timeline

- 1897-1901: material gathering
- 1902-1910: publication



#### • Timeline

- 1897-1901: material gathering
- 1902-1910: publication
- 1918: Généalogie des mots qui désignent l'abeille (< Gilliéron)</li>



#### • Timeline

- 1897-1901: material gathering
- 1902-1910: publication
- 1918: Généalogie des mots qui désignent l'abeille (< Gilliéron)</li>
- 2005: Lectures de l'ALF




## Atlas Linguistique de la France (ALF)

#### • Timeline

- 1897-1901: material gathering
- 1902-1910: publication
- 1918: Généalogie des mots qui désignent l'abeille (< Gilliéron)</li>
- 2005: Lectures de l'ALF



Source : Brun-Trigaud et al. 2005: 300

## Atlas Linguistique de la France (ALF)

#### • Timeline

- 1897-1901: material gathering
- 1902-1910: publication
- 1918: Généalogie des mots qui désignent l'abeille (< Gilliéron)</li>
- 2005: Lectures de l'ALF
- 2015-2020: Maps are digitized, they can be processed and downloaded online



**CartoDialect** 

 Swiss linguists, students of Gilliéron



Karl Jaberg [1877-1958]





#### • Method

 Task: translate in local dialect between 2000 and 4000 sentences (from Italian) + picture naming

109 – IL DENTE MOLARE	•		
110 – LA GENGIVA; LE GENGIVE			
111 – L'UGOLA			
112 – PERCHÉ HAI			
113 LA GUANCIA			
113 – la guancia, le guance			
114 – GONFIA			
115 – IL MENTO			
116 – LA MASCELLA; LE MASCELLE			
117 – LA BARBA			
118 – IL COLLO			
119 – LA NUCA			
120 - FICO D'ADAMO			
121 – LA CANNA DELLA GOLLA	•		
Cenno	de hujardue Warne : skrame	Sjeun Roi	weite. che 90

- Task: translate in local dialect between 2000 and 4000 sentences (from Italian) + picture naming
- Method: 3 different persons in charge of the surveys



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- Task: translate in local dialect between 2000 and 4000 sentences (from Italian) + picture naming
- Method: 3 different persons in charge of the surveys
- Participants:
  - 407 locations
  - As many different speakers needed for each location, depending on the field (ethnographic)



- Timeline
  - 1919-1928: material gathering

part Spoliche Premerkingen un menen Presh relationagen a. "Erfahringen suit a" me Laste menor Anthealman This den ALSI 1323 -1924. ( Winder 24) 5.1-2 Talles mm 1-2 mourant, dans Such Jorfahren Lassen dovina do laster Eathlight Part alugall in Sinder reappy ater I nech Danner habe on des Sugal , nelled port ebran larsen. 4.3. Trendly der Mahrenvert murphes himligh The Sommer und Would" B. 11 Swil number die Worken hear endrähden alreal : to leverate ...





source

#### • Timeline

- 1919-1928: material gathering
- 1928-1940: publication



- Timeline
  - 1919-1928: material gathering
  - 1928-1940: publication



#### • Timeline

- 1919-1928: material gathering
- 1928-1940: publication
- 2009: naviAIS



#### • Timeline

- 1919-1928: material gathering
- 1928-1940: publication
- 2009: naviAIS



https://www3.pd.istc.cnr.it/navigais-web/

#### • Timeline

- 1919-1928: material gathering
- 1928-1940: publication
- 2009: naviAIS
- 2020: AIS reloaded



https://www.ais-reloaded.uzh.ch/

#### • Timeline

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- 1919-1928: material gathering
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- 2020: AIS reloaded



5 il báp

il b'a:p

il b'a:p

il b'a:p

IL PADRE VATER

IL PADRE VATER PÈRE

IL PADRE VATER 1 Brigels-Breil SRID=4326;POINT (9.061375935493 46.7695626207371

5 Ems-Domat SRID=4326:POINT (9.4473544909632 46.833635494332)

SRID=4326:POINT (9.216132710

https://www.ais-reloaded.uzh.ch/

- Three atlases, three different approaches
  - SDR: postal surveys, lots of points, mapping was complicated
  - ALF: a field survey, with a selected number of locations
  - AIS: survey has to take into account ethnologic aspects of everyday life

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## Phase II : The Legacy





 Several projects aiming at mapping language variation are launched in these countries where linguistic geography was born...

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Atlas Linguistique et Ethnographique de la France par Régions

 Several projects aiming at mapping language variation are launched in these countries where linguistic geography was born...



 Several projects aiming at mapping language variation are launched in these countries where linguistic geography was born...



#### Elsewhere

- Several projects aiming at mapping language variation are launched in these countries where linguistic geography was born...
- In parallel, other countries/areas are covered by linguistic atlases

#### Ibero-Romance

- Several projects aiming at mapping language variation are launched in these countries where linguistic geography was born...
- In parallel, other countries/areas are covered by linguistic atlases



Atlas Lingüístico de la Península Ibérica

#### Dutch



- Several projects aiming at mapping language variation are launched in these countries where linguistic geography was born...
- In parallel, other countries/areas are covered by linguistic atlases



Reeks Nederlandse Dialectatlassen

## English

- Several projects aiming at mapping language variation are launched in these countries where linguistic geography was born...
- In parallel, other countries/areas are covered by linguistic atlases



Survey of English Dialects

#### Gilliéron's legacy

- Smaller areas, not always super well comparable
- Such field surveys are time consuming, and expensive
- A lot of material are still not published
- Dialects are facing extinction in many regions...

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http://ala.u-strasbg.fr

Map 0805: Map from the *Atlas linguistique et ethnographique de l'Alsace* showing the distribution of terms for 'rooster' (*ALA*, vol. 2, map 97)

#### • Gilliéron's legacy

- Smaller areas, not always super well comparable
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#### Gilliéron's legacy

• Smaller areas, not always super well comparable

121

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No 2 Wambr 1482 Iné léné vy in sélé été Renseignements envoyés par M Jetus Segret demeurant à l'Ocole normal se Monthison (Line) Dans le patois de la commune de Chamlles canton de . Rambert département de la Sure Le mur; la force du mur; il enfonce un clou se disent : Ve muse ; le frie du mur, ne informe dans le mur, dans les murs; la force des murs; en che drient le meet, drient las meet, ils for les murs. Il a parlé au médecin, aux médecins. de lai mue, las mues, la printe ou medeche, L'âne, le dos de l'âne, les ânes, l'écurie des ânes, Il a parlé à l'autre homme, aux autres hommes. L'alfience. Du o piele à l'aouche homme, auf La maison, les maisons; la porte de la maison; le mosere, les missore; la porte de la moisse les toits des maisons; il entre dans la maison, lou cubac, de le ma dans les maisons. Il partie à la femme, aux femmes. Spun le minu. En parte i la fance de fine L'eau, la couleur de l'eau ; les ailes, la longueur L'aigo, le coulour de l'aigo ; les jare, le lourige des ailes. Il a dit à l'autre femme, aux autres fem- de le/s/ are. Ou i que à l'anche pine, o le/s/o Le cheval court, les chevaux courent. Le cheval te cheva cour, lou chovan courount 2 a du soin. Les chevaux ont du soin, ont de l'avoine, cheva à de fe. You chevaou en se fe, ou ont des fers, n'ont pas d'ailes. L'oiseau a de grandes lo chiwa , en de fer, n'en fra g'ail. L'adqu ailes. Pierre a de bon vin. Je n'ai pas de pain. Il se 'é de grande/s/arl. Pierre o'de bours m. Cu n prive de pain. par de pan. Ou se prese de pas La corde, les cordes; l'aiguille, les aiguilles; la lo corde, le corde, l'aguille, les fille, les filles; la manche, les manches; la porte, le fille; la fille; la manche; la finner lo pati, liporte; lo maire, le maire. les portes ; la mère, les mères.

#### • Gilliéron's legacy

- Smaller areas, not always super well comparable
- Such field surveys are time consuming, and expensive
- A lot of material are still not published
- Dialects are facing extinction in many regions...





Language and Space An International Handbook of Linguistic Variation Language Mapping Edited by Alfred Lameli **Roland Kehrein** Stefan Rabanus Maps HSK30.2 Handbooks of Engelstics and Communication Televis Nondhistor our lanach and the DE GRUYTER

Schmidt, Jürgen Erich (ed.), 2010. Language and Space – An International Handbook of Linguistic Variation. Berlin: De Gruyter.
# Phase III : The Crowdsourcers





• Launched by Bert Vaux, Harvard University, in 1999



https://en.wikipedia.org/wiki/Bert\_Vaux

- Launched by Bert Vaux, Harvard University, in 1999
- 122 questions



http://dialect.redlog.net/

- Launched by Bert Vaux, Harvard University, in 1999
- 122 questions
  - What word do you use for gawking at someone in a lustful way?
  - Do you say "expecially", or "especially"?



- Launched by Bert Vaux, Harvard University, in 1999
- 122 questions
- Results displayed on maps



http://dialect.redlog.net/

- Launched by Bert Vaux, Harvard University, in 1999
- 122 questions
- Results displayed on maps
- The survey was lately copied by a journalist from the NYT



- Launched by Bert Vaux, Harvard University, in 1999
- 122 questions
- Results displayed on maps
- The survey was lately copied by a journalist from the NYT and a book was published in 2016



• Launched by S. Elspass & R. Möller, in 2003



S. Elspass



R. Möller

- Launched by S. Elpass & R. Möller, in 2003
- 12 surveys \* +/- 35 questions





- 🗌 (Apfel-) Bitz /, Bitzgi /, Bütschgi (u.ä.)
- (Apfel-) Bur(t)z(en)
- 🔲 (Apfel-) Butzen
- (Apfel-) Kitsch(e)
- (Apfel-) Griebsch
- (Apfel-) Gri(e)bs
- 🔲 (Apfel-) Krebs
- 🔲 (Apfel-) Gröibschi / Gröitschi / Grübschi (u.ä.)
- 🔲 (Apfel-) Bätzgi / Bätzi (u.ä.)
- 🔲 (Apfel-) Knust
- 🔲 (Apfel-) Nüsel
- 🔲 (Apfel-) Kippe
- (Apfel-) Krotz(e(n))
- Kerngehäuse
- 🔲 Kernhaus

anders, und zwar:



- Launched by S. Elpass & R. Möller, in 2003
- 12 surveys \* +/- 35 questions
- Results displayed on maps



- Launched by S. Elpass & R. Möller, in 2003
- 12 surveys \* +/- 35 questions
- Results displayed on maps
- The surveys gave birth to a book in 2018



• Launched by Fabio Tosques & , Michele Castellarin, in 2013



- Launched by Fabio Tosques & , Michele Castellarin, in 2013
- 5 surveys \* 12 questions



1. Quale espressione si sente normalmente nella tua città o paese per la sensazione di sonnolenza che colpisce dopo i pasti?



2. Con quale nome viene denominato l'insetto raffigurato nella foto nella tua città o nel tuo paese?



3. Quale espressione si sente normalmente nella tua città o paese per denominare una persona eccessivamente parsimoniosa?



4. Quale espressione si sente normalmente nella tua città o paese per denominare la frutta secca raffigurata nella foto?



5. Quale espressione si sente normalmente nella tua città o paese per denominare la protuberanza sulla testa o sulla fronte provocata da un urto?

- Launched by Fabio Tosques & , Michele Castellarin, in 2013
- 5 surveys \* 12 questions

nella foto?

• Results displayed on maps



4. Quale espressione si sente normalmente nella tua città o nel tuo paese per il frutto raffigurato

- Launched by Fabio Tosques & , Michele Castellarin, in 2013
- 5 surveys \* 12 questions
- Results displayed on maps





4. Quale espressione si sente normalmente nella tua città o nel tuo paese per il frutto raffigurato nella foto?

 Launched by Mathieu Avanzi and André Thibault in 2015

### FRANÇAISDENOSRÉGIONS

### Quel français régional parlezvous?

Le français de nos régions vous intéresse ? Vous avez 10 minutes devant vous, et vous voulez nous aider à mieux comprendre comment voyagent les mots et expressions locales? Cliquez sur l'un des liens ci-dessous!

### Vous êtes originaires d'Europe?

Edition Europe (Belgique, France et Suisse) [11e
 édition, septembre 2019]

Vous avez passé la plus grande partie de votre jeunesse en Amérique?

Edition Canada [5e édition, janvier 2019]

Vous avez passé la plus grande partie dans des pays ou territoires d'outre-mer?

Edition français des Îles [1e édition, août 2019]

Vous avez passé la plus grande partie de votre jeunesse au Maghreb (Algérie, Tunisie ou Maroc)?

🗲 Edition Maghreb [1e édition, juillet 2019]

### 듣 🛤 Du blog à l'atlas!

Retrouvez les cartes commentées dans l'ouvrage Parlez-vous (les) français ? Atlas des expressions de nos régions (Paris, Armand Colin), parule 09 actebre 2010 (chest taua les base libraires elles

### Parlez-vous (les) français?

du temps qu'il fait ne sont pas toujours les mêmes

verbes pour exprimer « une chute due à l'action de

se prendre les pieds dans un obstacle »? Que veut

dire un Toulousain quand il s'exclame qu'il a la

demande s'il peut vous faire un schmutz ? Que

risquez-vous à vous prendre une rabasse en

ouelle? Que vous propose un Alsacien qui

Bourgogne?

La richesse du français de nos régions s'illustre

par de nombreuses et étonnantes formules.

Saviez-vous qu'il existe plus d'une dizaine de

un bout à l'autre de la

francophonie d'Europe

(Belgique, France et Suisse), les

expressions utilisées pour se

saluer, se réjouir, râler ou parler

Survivances des parlers francoprovençaux en français, épisode 2: le canton du Valais (CH)

ans ce deuxième épisode de notre série consacrée aux rapports entre les dialectes galloromans et le français que l'on parle de part et d'autre des Alpes franco-suisses (le

premier et at decie aux cenominations des animaux), nous présentons les résultats d'une enquête conduite entre 2017 et 2018 visant à documenter les particularités du français des districts de l'ouest du canton du Valais, en Suisse romande.



Figure 1. A gauche, le Valais romand à l'échelle de la francophonie d'Europe. A droite, zoom sur le Valais romand, où les frontières en grisé délimitent des districts francophone du Valais, celles en traits noirs pleins et fins les frontières entre les cantons de Romandie et celles en traits pointillés les frontières entre la Suisse, la France et l'Italie. La zone en grisé plus clair sur le bord droit de la carte correspond à la partie germanophone du Valais.

- Launched by Mathieu Avanzi and André Thibault in 2015
- +/- 20 surveys \* 40 questions



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- Comment appelez-vous cette pièce de tissu que l'on utilise pour nettoyer par terre ?
  - Chiffon
    Pièce à frotter
    - Cinse Toile
    - Lave-pont Torchon
  - Loque
    Serpillière

Panosse

- Wassingue
- Patte Autre (précisez)

- Launched by Mathieu Avanzi and André Thibault in 2015
- +/- 20 surveys \* 40 questions
- Results displayed on maps



- Launched by Mathieu Avanzi and André Thibault in 2015
- +/- 20 surveys \* 40 questions
- Results displayed on maps
- Several books were published in 2017, 2019, 2020





- Launched by Mathieu Avanzi and André Thibault in 2015
- +/- 20 surveys \* 40 questions
- Results displayed on maps
- Several books were published in 2017, 2019, 2020
- An app is coming soon (March 2021)



## The English Dialect App [2016-]

• Launched by Dave Britain, Adrian Leeman and colleagues

### **English Dialects**

### By Adrian Leemann Open iTunes to buy and download apps.

### Description



Do you pronounce the /r/ in 'arm'? Do you call a shelf a 'sheuf'? And what on earth is a 'hoddy-doddy'? There is extensive variation in English dialects: this is why your answers to such questions will allow this app to localize your broader dialect region on a map of England.

### English Dialects Support >

What's New in Version 1.1

Improved stability in the quiz process

### View in iTunes Free

Category: Education Updated: 12 January 2016 Version: 1.1 Size: 3.9 MB Language: English

iPhone Screenshot

No SIM 🐨

17:46 - 기 💼 No SIM 후 19:25 - 기

### View More by This Developer

...More

# The English Dialect App [2016-]

- Launched by Dave Britain, Adrian Leeman and colleagues
- A smartphone app: record and localize people (20 questions)

### **English Dialects**

View in iTunes

By Adrian Leemann Open iTunes to buy and download apps.

### Description



Do you pronounce the /r/ in 'arm'? Do you call a shelf a 'sheuf'? And what on earth is a 'hoddy-doddy'? There is extensive variation in English dialects: this is why your answers to such questions will allow this app to localize your broader dialect region on a map of England.

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## The English Dialect App [2016-]

- Launched by Dave Britain, Adrian Leeman and colleagues
- A smartphone app: record and localize people (20 questions)
- Results displayed on maps



### Dialectos del español [2019-]

 Launched by Miriam Bouzouita, Mónica Castillo Lluch and Enrique Pato



## Dialectos del español [2019-]

- Launched by Miriam Bouzouita, Mónica Castillo Lluch and Enrique Pato
- A web app: localize people (26 questions)



Por favor, elige la respuesta que te resulte más natural. Al final de las preguntas, intentaremos predecir de dónde eres.

«Manuel está enfrente»
mío / mía.
mía.
de mí / mío.
mío.
de mí.
de mí / mía.
de mí / mío / mía.
Atrás 24 de 26

## Dialectos del español [2019-]

- Launched by Miriam Bouzouita, Mónica Castillo Lluch and Enrique Pato
- A web app: localize people (26 questions)
- Results of the questions not publicly available yet



¿Cómo respondes al teléfono?

Source : Castillo Lluch, to app.

### Other similar projects

- Frisian
- Luxembourgish
- Gschmöis



http://stimmen.nl/

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- Luxembourgish
- Gschmöis



https://infolux.uni.lu/schnessen/

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# Mapping linguistic data



### Prerequisites

 Making a map = ploting objects (points, polygons or lines) on a 2-D space



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- Making a map = ploting objects (points, polygons or lines) on a 2-D space
- This 2D space is a Cartesian coordinate system



longitude, y, ordinates

latitude, x, abscissa

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- Making a map = ploting objects (points, polygons or lines) on a 2-D space
- This 2D space is a Cartesian coordinate system
- Objects are defined by two values: longitude and latitude



longitude, y, ordinates

latitude, x, abscissa

### Step 1 Gather you own data

 To launch an online survey, several tools are available on the web



https://www.qualtrics.com/fr/





https://www.google.com/forms

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  - Qualtrics [with subscription]



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  - Qualtrics [with subscription]
  - LimeSurvey [better with subscription]


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  - GoogleForms [free]



https://www.google.com/forms

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https://makeawebsitehub.com/best-online-survey-tools/

- To launch an online survey, several tools are available on the web
- Your survey should be...

- To launch an online survey, several tools are available on the web
- Your survey should be...
  - As short as possible
  - Anonymous
  - Attractive/Funny





- To launch an online survey, several tools are available on the web
- Your survey should be...
- Steps
  - Location, age, gender

16:38			<b>?</b>			
Schliessen	gschm	ois				
Ang	Angaben zu Ihrer Person					
Persönliche	Info					
Wo sind Sie aufgewachs	sen?	Paris	>			
Anrede		Herr	>			
Muttersprac	che(n)	Français	>			
Alter		35–44	>			
Weiteres						
Ausbildung		Universität	>			



- To launch an online survey, several tools are available on the web
- Your survey should be...
- Steps
  - Location, age, gender
  - How do you name/pronounce this or that

16:38	at 4	<b>?</b>	<sup>)</sup> 16	:40		.ul 🤋
Schliessen <b>gsc</b>	nmöis		<	g	schmöis	
Angaben zu	u Ihrer Person		١	Nelche Vari	ante(n) würdes	st du i
Persönliche Info			de A	einem Diale ussprache s	kt sagen? (Die spielt hier keine	gena e Roll
Wo sind Sie aufgewachsen?	Paris	>		Elias erklärt,	warum er zu spät	in die
Anrede	Herr	>		Vereinssitzi hat gerade a	ung gekommen is n der Haustür gek "	t: "Es dingelt
Muttersprache(n)	Français	>	0	woni ha we	lle gaa	
Alter	35–44	>	$\bigcirc$	woni ha gaa	a welle	
Weiteres				woni welle l	na gaa	
Ausbildung	Universität	>	0	woni welle g	gaa ha	
			$\bigcirc$	woni gaa ha	a welle	
			0	woni gaa w 	elle ha	
Se	nden				Senden	

- To launch an online survey, several tools are available on the web
- Your survey should be...
- Steps
  - Location, age, gender
  - How do you name/pronounce this or that
  - Acknowledgments and closure



• Your results are stored in a table with an answer and the location of the participant



nella foto?

4. Quale espressione si sente normalmente nella tua città o nel tuo paese per il frutto raffigurato

• Your results are stored in a table with an answer and the location of the participant

	А	В	С
1	locality	response	sex
2	CABRAS (ORISTANO)	altro	m
3	OROSEI	altro	f
4	SAN PANCRAZIO SALENTINO	altro	m
5	ABBIATEGRASSO	anguria	f
6	ACQUAVIVA DELLE FONTI	anguria	f
7	AIROLA	anguria	f
8	ALBA	anguria	f
9	ALBIATE	anguria	m
10	ALESSANDRIA	anguria	m
11	ALMENNO SAN BARTOLOMEO	anguria	m
12	APPIANO SULLA STRADA DEL VINO	anguria	f
13	arbizzano	anguria	m
14	ARBOREA	anguria	m
15	ARDESIO	anguria	m
16	ARSAGO SEPRIO	anguria	f
17	ASSEMINI	anguria	f
18	ASTI	anguria	m
19	AVELLINO	anguria	f
20	Avola	anguria	f
21	BARANELLO	anguria	m
22	BARLASSINA	anguria	f
23	barolo	anguria	f
24	BARZANÒ	anguria	m
25	BASSANO DEL GRAPPA	anguria	f
26	Belluno	anguria	m
27	BERGAMO	anguria	m
28	BERGAMO	anguria	m
29	BERGAMO	anguria	m
30	BERGAMO	anguria	f
31	BERGAMO	anguria	f
32	BERGAMO	anguria	m
33	BERGAMO	anguria	m
34	BERGAMO	anguria	f
35	BIELLA + TORINO	anguria	f



nella foto?

4. Quale espressione si sente normalmente nella tua città o n

- Your results are stored in a table with an answer and the location of the participant
- To get the long/lat coordinates of the location, several tools are available on the web

nella foto?

	A	В	С
1	locality	response	sex
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5	ABBIATEGRASSO	anguria	f
6	ACQUAVIVA DELLE FONTI	anguria	f
7	AIROLA	anguria	f
8	ALBA	anguria	f
9	ALBIATE	anguria	m
10	ALESSANDRIA	anguria	m
11	ALMENNO SAN BARTOLOMEO	anguria	m
12	APPIANO SULLA STRADA DEL VINO	anguria	f
13	arbizzano	anguria	m
14	ARBOREA	anguria	m
15	ARDESIO	anguria	m
16	ARSAGO SEPRIO	anguria	f
17	ASSEMINI	anguria	f
18	ASTI	anguria	m
19	AVELLINO	anguria	f
20	Avola	anguria	f
21	BARANELLO	anguria	m
22	BARLASSINA	anguria	f
23	barolo	anguria	f
24	BARZANÒ	anguria	m
25	BASSANO DEL GRAPPA	anguria	f
26	Belluno	anguria	m
27	BERGAMO	anguria	m
28	BERGAMO	anguria	m
29	BERGAMO	anguria	m
30	BERGAMO	anguria	f
31	BERGAMO	anguria	f
32	BERGAMO	anguria	m
33	BERGAMO	anguria	m
34	BERGAMO	anguria	f
35	BIELLA + TORINO	anguria	f



4. Quale espressione si sente normalmente nella tua città o n

- Your results are stored in a table with an answer and the location of the participant
- To get the long/lat coordinates of the location, several tools are available on the web
  - ezGeocode
  - GeoCode by Awesome table

+ = ezGeocode #3 https://gsuite.google.com/marketplace/app/ezgeocode/163876376905





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nella foto?

1	A	В	С	D	E
1	locality	response	sex	lat	long
2	CABRAS (ORISTANO)	altro	m	39.9290726	8.5305514
3	OROSEI	altro	f	40.3767849	9.6967464
4	SAN PANCRAZIO SALENTINO	altro	m	40.4185307	17.8402819
5	ABBIATEGRASSO	anguria	f	45.3990523	8.9165553
6	ACQUAVIVA DELLE FONTI	anguria	f	40.8971942	16.8454361
7	AIROLA	anguria	f	41.0655176	14.5577239
8	ALBA	anguria	f	44.6994475	8.0247005
9	ALBIATE	anguria	m	45.657223	9.249621
10	ALESSANDRIA	anguria	m	44.9072727	8.6116796
11	ALMENNO SAN BARTOLOMEO	anguria	m	45.7410006	9.5807014
12	APPIANO SULLA STRADA DEL VINO	anguria	f	46.4553288	11.2587133
13	arbizzano	anguria	m	45.4925037	10.9443457
14	ARBOREA	anguria	m	39.7734926	8.5823878
15	ARDESIO	anguria	m	45.9382001	9.9310051
16	ARSAGO SEPRIO	anguria	f	45.6893366	8.7359732
17	ASSEMINI	anguria	f	39.2915003	8.9977583
18	ASTI	anguria	m	44.9007512	8.2064257
19	AVELLINO	anguria	f	40.9143842	14.7902801
20	Avola	anguria	f	36.9095319	15.1348891
21	BARANELLO	anguria	m	41.526368	14.5581063
22	BARLASSINA	anguria	f	45.655892	9.130407
23	barolo	anguria	f	44.6088032	7.9403041
24	BARZANÒ	anguria	m	45.734094	9.315943
25	BASSANO DEL GRAPPA	anguria	f	45.7657286	11.7272747
26	Belluno	anguria	m	46.1424635	12.2167088
27	BERGAMO	anguria	m	45.6730658	9.666758
28	BERGAMO	anguria	m	45.6748647	9.72952
29	BERGAMO	anguria	m	45.6962642	9.6746666
30	BERGAMO	anguria	f	45.7044459	9.6602971
31	BERGAMO	anguria	f	45.7044459	9.6602971
32	BERGAMO	anguria	m	45.7044459	9.6602971
33	BERGAMO	anguria	m	45.7178879	9.6731585
34	BERGAMO	anguria	f	45.7341761	9.9818939
35	BIELLA + TORINO	anguria	f	45.0832059	7.6745068



4. Quale espressione si sente normalmente nella tua città o n  $\frac{33}{24}$ 

• Once your data is geocoded, it's pretty easy to plot it!

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  - The Carto software



https://carto.com/

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  - The Carto software
  - The R software [ggplot2, etc.]



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R

• Examples

Download data and code

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- Examples
  - *Watermelon* in Italian varieties [ALIQUOT]



• Once your data is geocoded, it's pretty easy to plot it!

#### • Examples

- *Watermelon* in Italian varieties [ALIQUOT]
- Thank you in Swiss German dialects [SDS]



DANKE :)

Download data and code

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#### • Examples

- *Watermelon* in Italian varieties [ALIQUOT]
- *Thank you* in Swiss German dialects [SDS]
- 70 in Gallo-Romance dialects [ALF]



Download data and code



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#### • Examples

- *Watermelon* in Italian varieties [ALIQUOT]
- *Thank you* in Swiss German dialects [SDS]
- 70 in Gallo-Romance dialects [ALF]
- Witloof in French varieties [FRR]





 Several methods to interpolate the empty space between the points

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- Several methods to interpolate the empty space between the points
  - Tessellation [<u>link</u>]



- Several methods to interpolate the empty space between the points
  - Tessellation [link]
  - Inverse Distance Interpolation
     [link]



- Several methods to interpolate the empty space between the points
  - Tessellation [link]
  - Inverse Distance Interpolation [link]
  - Kriging [<u>link</u>]



# How to lie with Maps?









# Mapping Dialectal Variation

Mathieu Avanzi

mathieu.avanzi@sorbonne-universite.fr

**Discovering Linguistics - Linguistic Discoveries** 

Gent university, 2020 October the 5th