

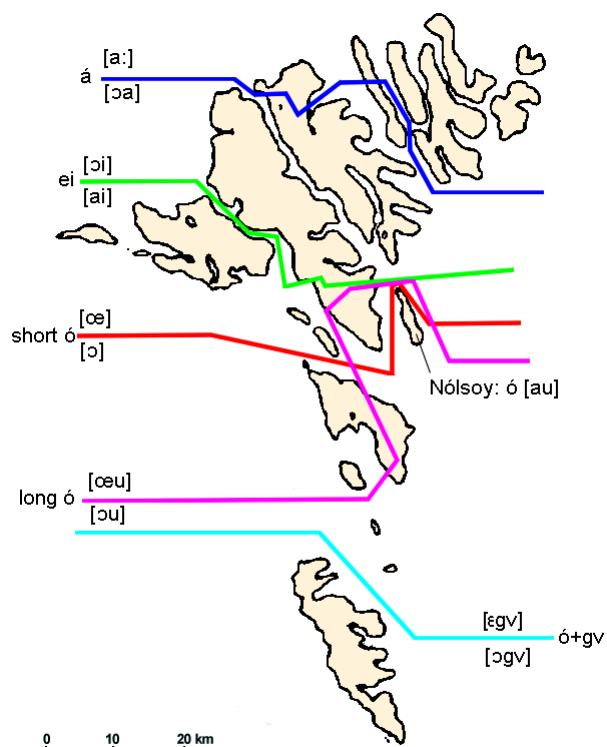
# Genealogy registry and dialect regions

It is well known that differences in language is closely connected to genetic differentiation [citation]. Usually, geographic barriers lead to stratification in populations that lead to both genetic and linguistic differences [citation].

We will create a discriminatory map of the Faroe Islands that define strict regions based on dialect. This map will then be the basis to examine geographical stratification of the Faroese population, both in terms of population structure seen in sequencing data, and familial clustering seen in the Faroese genealogy registry.

Why use language as a proxy for geography? This may seem like a somewhat circular process. But it is not directly obvious how one should define the regions. We could apply the principle of isolation by distance, but we would need to include the topology of the landscape. For example, two near villages that have a tall mountain chain between them could not be as connected as one might think. Similarly, while the sea might seem like a barrier, in most cases it connects villages. For example, if two relatively distant villages are in a long sound, travelling between the villages by boat will be relatively easy, increasing the connectivity between them. Therefore, *in the absence of a complicated model of isolation by distance* (which would be prone to overfitting), *it is ideal to divide the regions by dialect*.

The map below shows isoglosses that define boundries that descriminate some of the main dialect differences in the Faroe Islands. All the main differences in dialect in the Faroes, shown in the map, are differences in how certain vowels are pronounced.

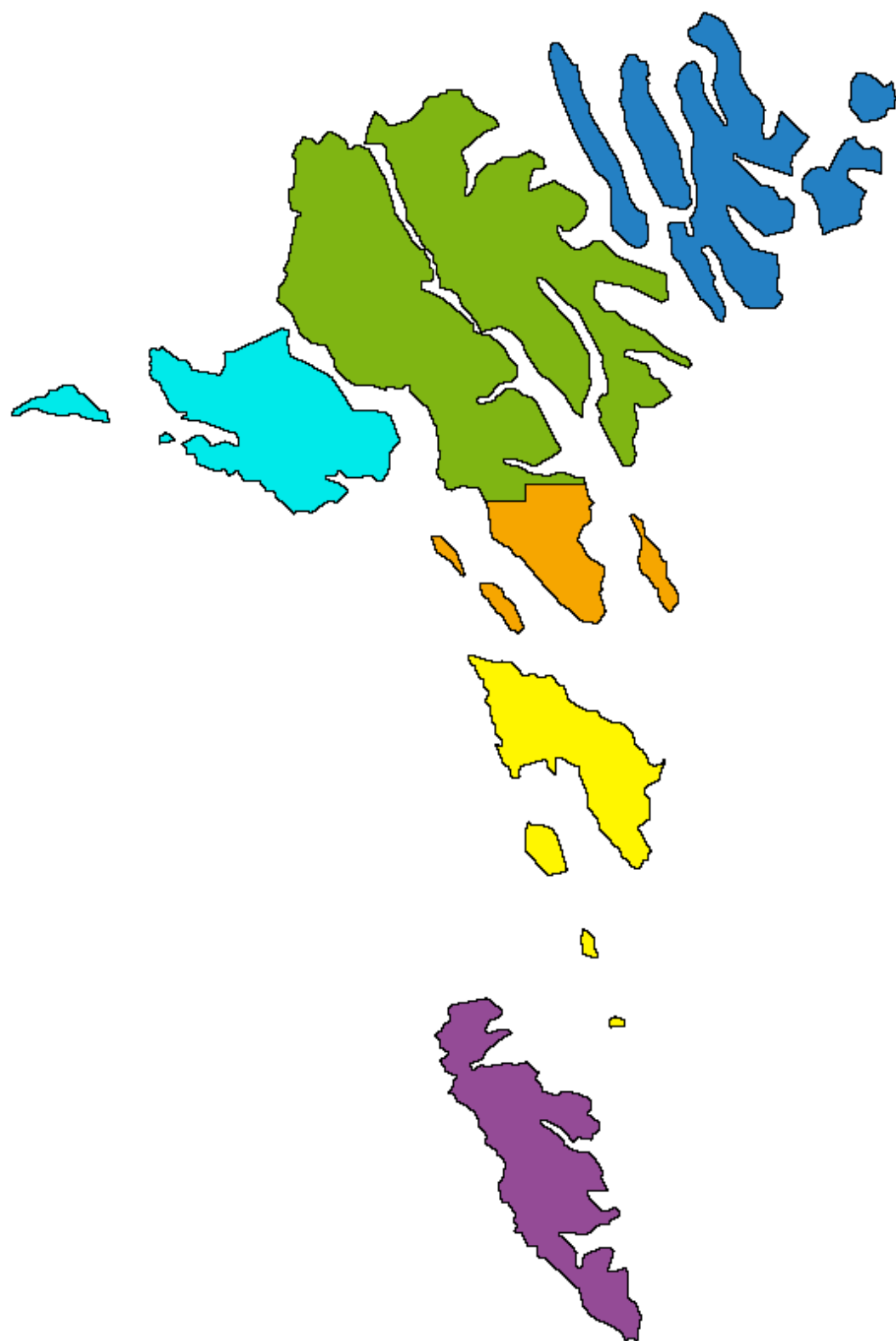


This map was drawn in a book by Thráinsson et al. (see below), based on work by Faroese linguist Eivind Weyhe.

*Faroese. An Overview and Reference Grammar* Tórshavn: Føroya Fróðskaparfelag 2004, ISBN 99918-41-85-7

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With the help of Faroese linguist Eivind Weyhe, we generated a list of six regions and the villages therein. I've illustrated this on a map below, and the names of the region(s) and the corresponding color are listed below.



Region number	Region name(s)	Color
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Region number	Region name(s)	Color
1	Norðoyggjar	Blue #157EBF
2	Eysturoy og Norðstreymoy	Green #78B430
3	Suðurstreymoy	Orange #FAA530
4	Vágar og Mykines	Teal #00E9E8
5	Sandoy, Skúvoy, Stóra Dímun	Yellow #FFF73F
6	Suðuroy	Purple #974C93

Note that there are some differences between the isoglosses in the first map and the regions in the second map. For example Gjógv, the northernmost village in Eysturoy, is placed together with the other villages in Eysturoy, despite being in the same “á” isoglossal group as Norðoyggjar.

In appendix 1, there is a list of place names (village names), their postcodes, and corresponding regions (using the region number from the list above). Using this list, we can easily translate the postcodes in the genealogy registry to region IDs.

## Appendix 1: postcodes and regions

Place name	Postcode	Region ID
Tórshavn	100	3
Argir	160	3
Kirkjubøur	175	3
Velbastaður	176	3
Syðradalur(Str.)	177	3
Norðradalur	178	2
Kaldbak	180	2
Kaldbaksbotnur	185	2
Sund	186	2
Hvítanæs	187	3
Hoyvík	188	3
Sandur	210	5
Skálavík	220	5
Húsavík	230	5

Place name	Postcode	Region ID
Dalur	235	5
Skarvanes	236	5
Skopun	240	5
Skúvoy	260	5
Nólsoy	270	3
Hestur	280	3
Koltur	285	3
StóraDímun	286	5
Stykkið	330	2
Leynar	335	2
Skælingur	336	2
Kvívík	340	2
Vestmanna	350	2
Válur	358	2
Sandavágur	360	4
Miðvágur	370	4
Sørvágur	380	4
Vatnsoyrar	385	4
Bøur	386	4
Gásadalur	387	4
Mykines	388	4
Oyrarbakki	400	2
Kollafjørður	410	2
Oyrareingir	415	2
Signabøur	416	2
Hósvík	420	2
Hvalvík	430	2
Streymnes	435	2

Place name	Postcode	Region ID
Saksun	436	2
Nesvík	437	2
Langasandur	438	2
Haldarsvík	440	2
Tjørnuvík	445	2
Oyri	450	2
Norðskáli	460	2
Svínáir	465	2
Ljósá	466	2
Eiði	470	2
Funningur	475	2
Gjógv	476	2
Funningsfjørður	477	2
Elduvík	478	2
Skáli	480	2
Skálabotnur	485	2
Strendur	490	2
InnanGlyvur	494	2
Kolbanargjógv	495	2
Morskranes	496	2
Selatrað	497	2
Gøta	510	2
Gøtugjógv	511	2
Norðragøta	512	2
Syðrugøta	513	2
Leirvík	520	2
Fuglafjørður	530	2
Saltangará	600	2

Place name	Postcode	Region ID
Runavík	620	2
Glyvrar	625	2
Lambareiði	626	2
Lambi	627	2
Rituvík	640	2
Æðuvík	645	2
Toftir	650	2
Nes(Eysturoy)	655	2
Saltnes	656	2
Søldarfjørður	660	2
Skipanes	665	2
Gøtueiði	666	2
Oyndarfjørður	690	2
Hellur	695	2
Klaksvík	700	1
Norðoyri	725	1
Ánir	726	1
Árnfjørður	727	1
Norðdepil	730	1
Depil	735	1
Norðtoftir	736	1
Múli	737	1
Hvannasund	740	1
Viðareiði	750	1
Svínoy	765	1
Kirkja	766	1
Hattarvík	767	1
Kunoy	780	1

Place name	Postcode	Region ID
Haraldssund	785	1
Syðradalur(Kal.)	795	1
Húsar	796	1
Mikladalur	797	1
Trøllanes	798	1
Tvøroyri	800	6
Froðba	825	6
Trongisvágur	826	6
Øravík	827	6
Hvalba	850	6
Sandvík	860	6
Fámjin	870	6
Vágur	900	6
Nes(Vágur)	925	6
Lopra	926	6
Akrar	927	6
Víkarbyrgi	928	6
Porkeri	950	6
Hov	960	6
Sumba	970	6