

Eurovision DNA (VIII) The Islamic tessellation

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In our fifth anniversary in eurovision-spain we recover the eighth part of this section, where we describe the voting patterns in Eurovision. We will update the data of past deliveries and we will put the focus on the Islamic voting pattern. Also come back to our calculator to find out if you too follow a voting pattern. Finally, a handy app to improve suspect juror estimates.

EUROVISION VOTING PATTERNS

It has been 14 years since the last edition of Eurovision held entirely with televoting. Those editions in which commentators and ourselves were able to accurately predict the votes in each country. The arrival of the jury and the mixed systems, as well as the delivery of the block televote since 2016 has mitigated its effect on the screen, but it is still there. In fact, many jurors continue to remind us of televoting.

Throughout the 7 previous blogs of this section we have broken down what are the most important voting patterns of Eurovision. Soviets, Yugoslavs, Nordics and others less showy but that contribute to the wealth of European society reflected in televoting.

The years have passed and the data has evolved. For this reason, and to update the previous entries, we are going to review the voting patterns that we have already commented on in the 5 years of this blog and we are going to explain a new one. A voting pattern that was already looming in previous years but is beginning to take shape: the Islamic voting pattern.

TO KNOW MORE... WHERE DO THE VOTING PATTERNS COME FROM?

Principal Component Analysis (PCA) is a statistical technique that, on a set of variables and data, reveals underlying behaviors and relationships between variables. For example, if we take the grades of a group of students, it will surely show that those who get better grades in subjects of letters obtain worse grades in subjects of numbers and vice versa. Unlike other techniques, this one is characterized by taking into account all the variables at the same time (in our case, country votes) and not one against one, which gives it a global vision.

The PCA reveals two concepts for each pattern detected:

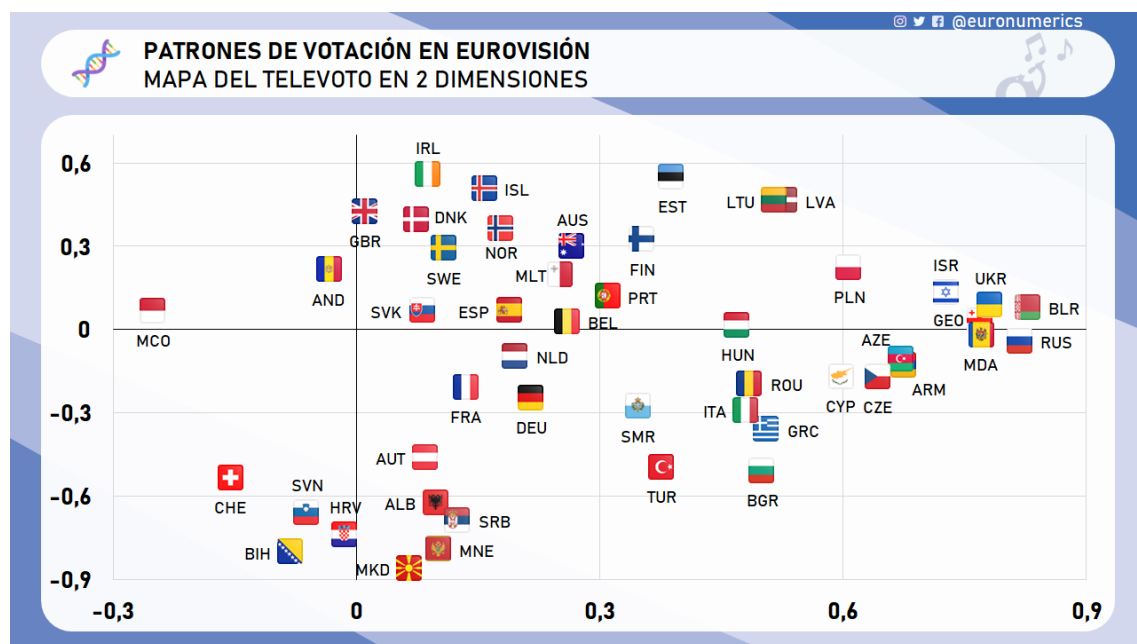
1. Who follows that pattern? That is, it discovers a pattern and tells us how each country is related to it, so we can measure whether or not a country follows that pattern and to what extent.
2. Who do you vote for? It is the direction, what does that pattern consist of, which countries are benefited or harmed by that conduct.

EUROVISION IN 2 DIMENSIONS: A SIMPLIFIED MODEL

We currently have more than 40 countries involved in the Eurovision sphere. Trying to represent the votes of all of them accurately seems impossible. We are prepared for a 3-dimensional reality (height, width and depth), so imagine one with 40 dimensions...

In order to tackle the problem, dimensions must be reduced. Don't you think Lithuania and Latvia vote very similar? We could just as well summarize them in one and thus reduce one dimension. With Norway and Sweden we could think the same, and with Greece and Cyprus, and so on until we could reduce the problem to two dimensions. The process consists of sacrificing the less significant information to retain the important and be able to visualize it.

This simplification gives us the following graph, the Eurovision votes summarized in 2 dimensions to be able to distribute the countries on a plane, a map:



Observe the correspondence between the cardinal points and the groups that are observed: to the North are the Nordics, to the East the Soviets and to the south the Yugoslavs. The westerners are dragged to the center by the immigration received and only Switzerland and Monaco resist to the West, in the right part of the cloud of points.

In addition, there are transition conglomerates such as the Baltics (between the Nordics and the Orientals) and Southeast Europe (halfway between the Yugoslavs and the Orientals).

At a lower level of detail, behaviors between groups are observed. For example, within the Yugoslavs, there is a separation between the westernmost (Slovenia, Croatia, and Bosnia and Herzegovina) and the easternmost (Serbia, Montenegro, and North Macedonia); and this same scheme is followed by Switzerland, Austria and Albania. In the Nordic block, Finland appears distanced and closer to the Baltics, specifically Estonia with whom it shares a linguistic family. It is a graph that the more you look at it, the more information it reveals.

However, as we said, it is a very simplified graph and it does not reflect well other minor realities. This is the case of the Iberian countries, Spain, Portugal and Andorra, which despite their obvious

relationship, are dispersed among themselves. Therefore, we are going to delve into the most significant patterns individually.

However, the model has been able, only with the Eurovision televote, to locate the countries on a plane in a very similar way to how they are actually located on a map.

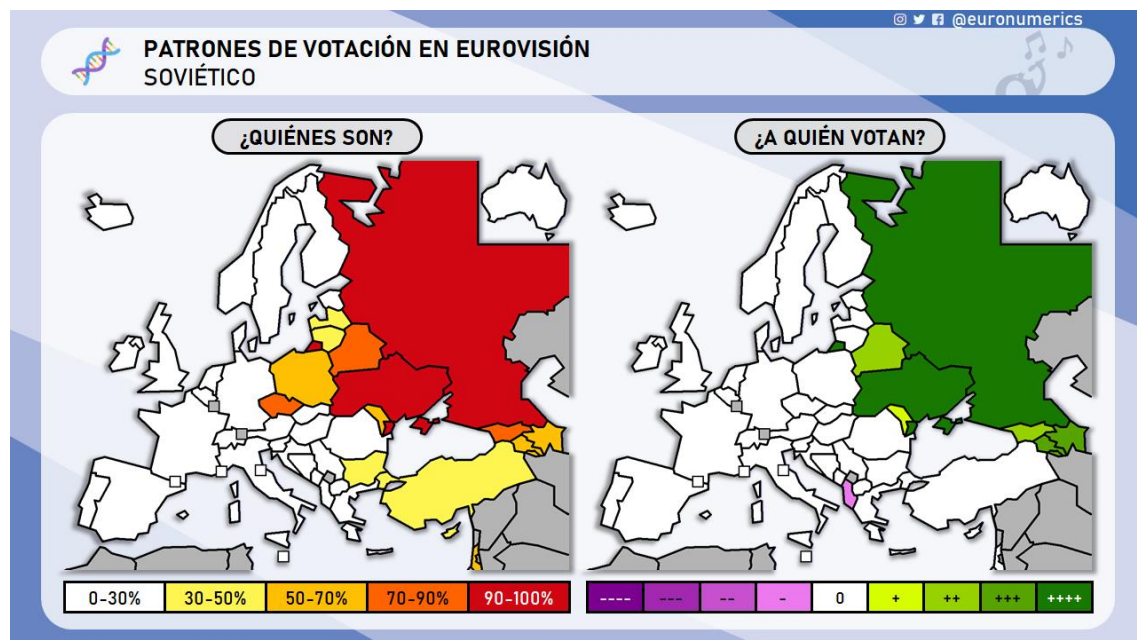
EUROVISION VOTING PATTERNS

We have done the previous reduction for two dimensions. It is a simple model but, as we have seen, it sacrifices relevant information. The most optimal situation is found in some 13 dimensions or voting patterns that we are going to break down now.

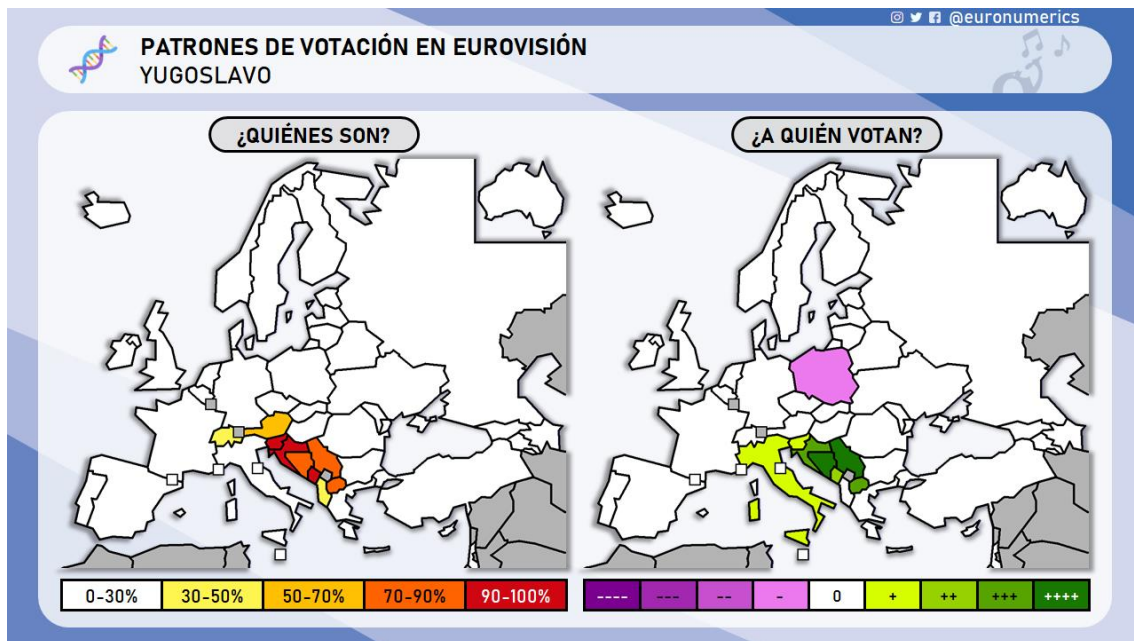
Next we will describe each voting pattern with two maps.

The left indicates which countries follow this pattern and the intensity with which they do so. The right map indicates with green colors which countries receive the points while in purple tones it is shown if some countries are marginalized by this voting trend.

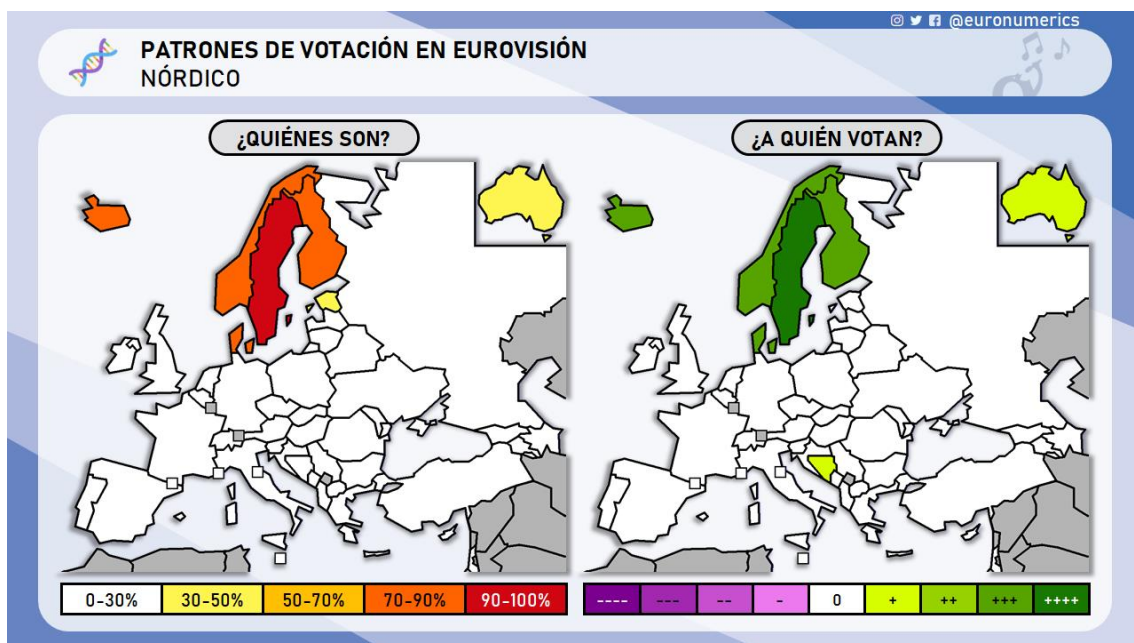
The pattern with the most weight in Eurovision is the Soviet one. On the left map we see that this trend is followed by not only Soviet countries, but Eastern countries in general. Instead, the right map reveals that only the Soviets profit from these countries. We can summarize this pattern as "Eastern countries voting for Soviet countries." A real bargain for them: a great booty to be divided among a few.



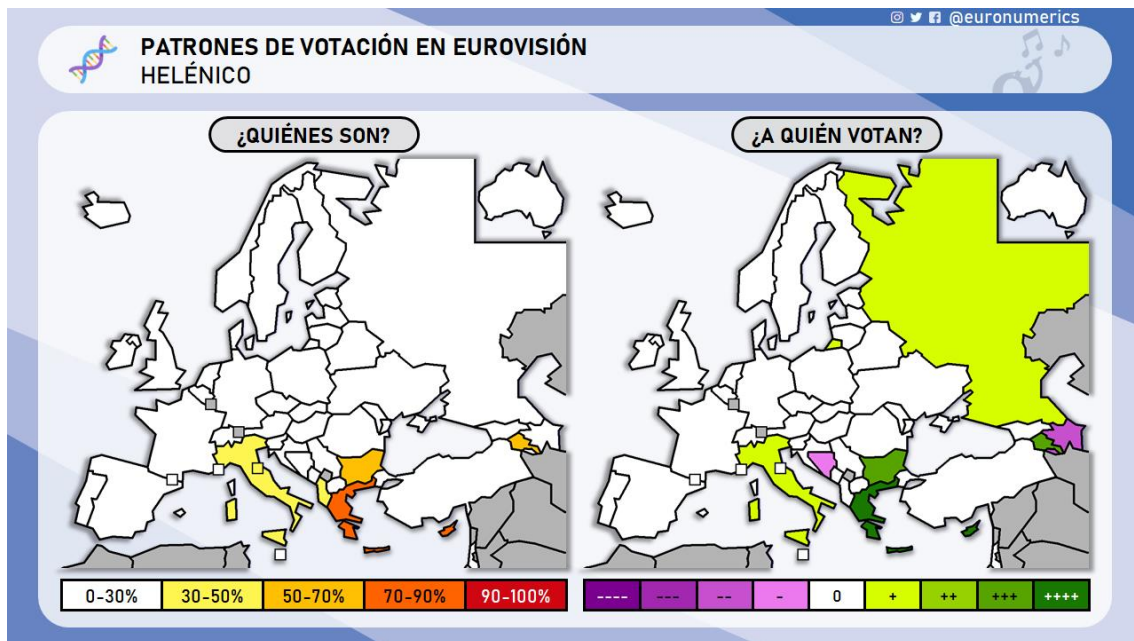
Next in importance is the Yugoslav. Apparently they are countries of the former Yugoslavia voting for each other, but Switzerland and Austria vote for them, as well as Albania. In addition, differences are revealed when it comes to distributing the points: Serbia and Bosnia are the most benefited while Slovenia is the one that gets the least performance.



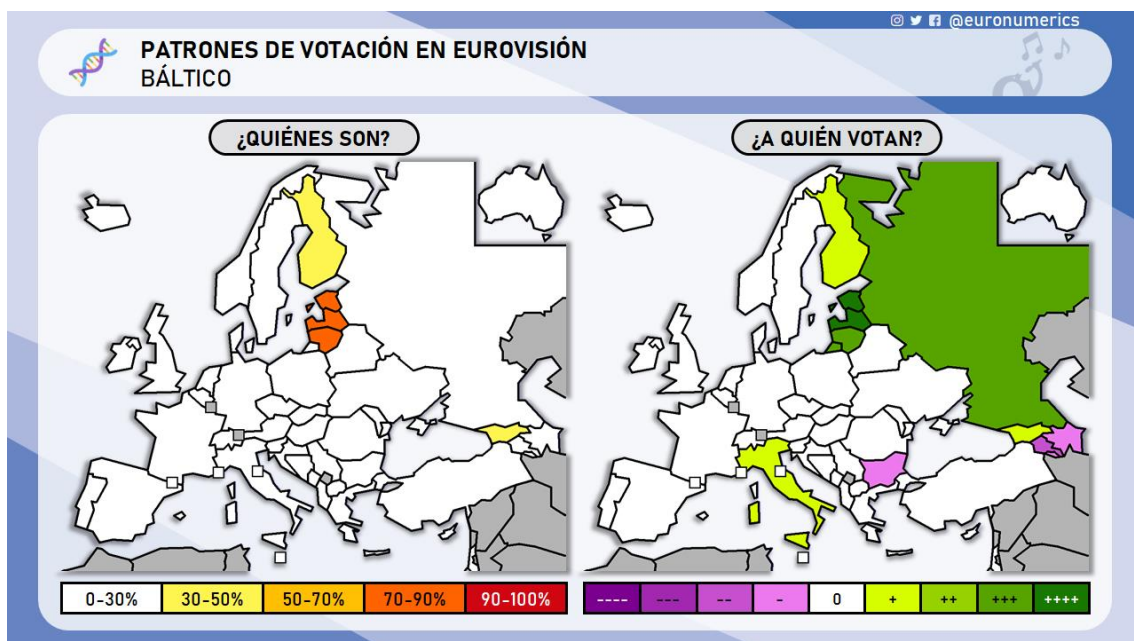
The Nordic pattern is much more compact, revolving around the five typical Nordic countries, also reflecting Estonia's Nordic aspiration. The most benefited of them is Sweden, but in general it is balanced and Finland has come out of the marginalization. Bosnian immigration and the link of this group with Australia is observed.



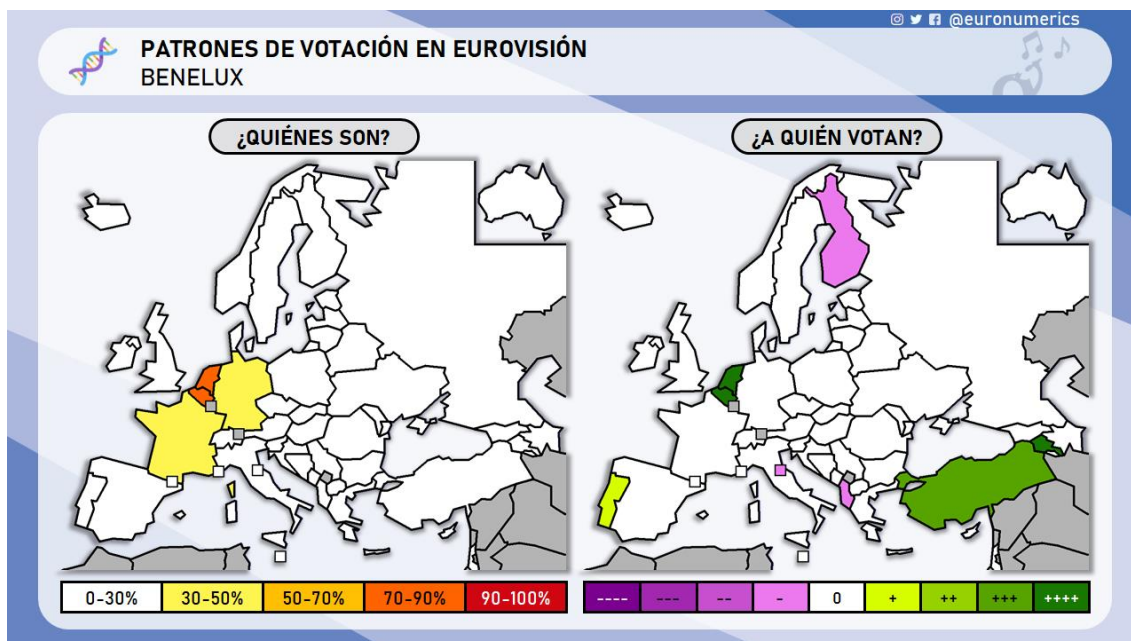
The exchanges between Greece and Cyprus have a Hellenic trail that extends to Bulgaria and Armenia involving Turkey, with which the Hellenic country is vying for control of Cyprus. The Italian peninsula has recently been joining this trend, evoking those times of Magna Graecia.



The Baltic is a pseudo-independent voting pattern. It consists of Baltic countries voting for themselves, but they also have a tendency to vote for other Soviets and Nordics. Let's say that it is a pattern halfway between the Nordic and the Soviet that we saw before.



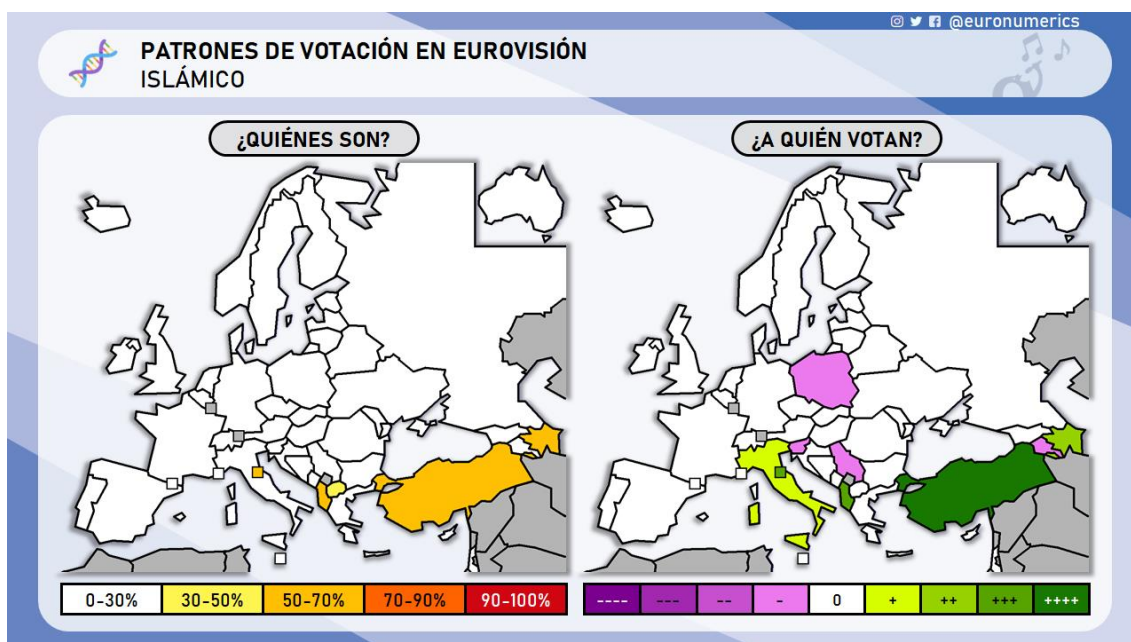
The Benelux or union of Belgium, the Netherlands and, as the models predict, also Luxembourg if it participated in Eurovision. France and Germany also have this pattern to a lesser extent and Austria and Switzerland have stopped having it. The beneficiaries, apart from the Belgians and the Dutch, are Armenia and Turkey, a mirror of migration to the West.



THE ISLAMIC VOTING PATTERN

In this blog we are going to debut the description of a new pattern that is very striking. In short, 4 countries have it: Albania (69%), Turkey (61%), Azerbaijan (60%) and San Marino (56%); in addition to North Macedonia to a lesser extent (37%). These countries tend to vote among themselves and harm Armenia, Slovenia, Poland and Serbia.

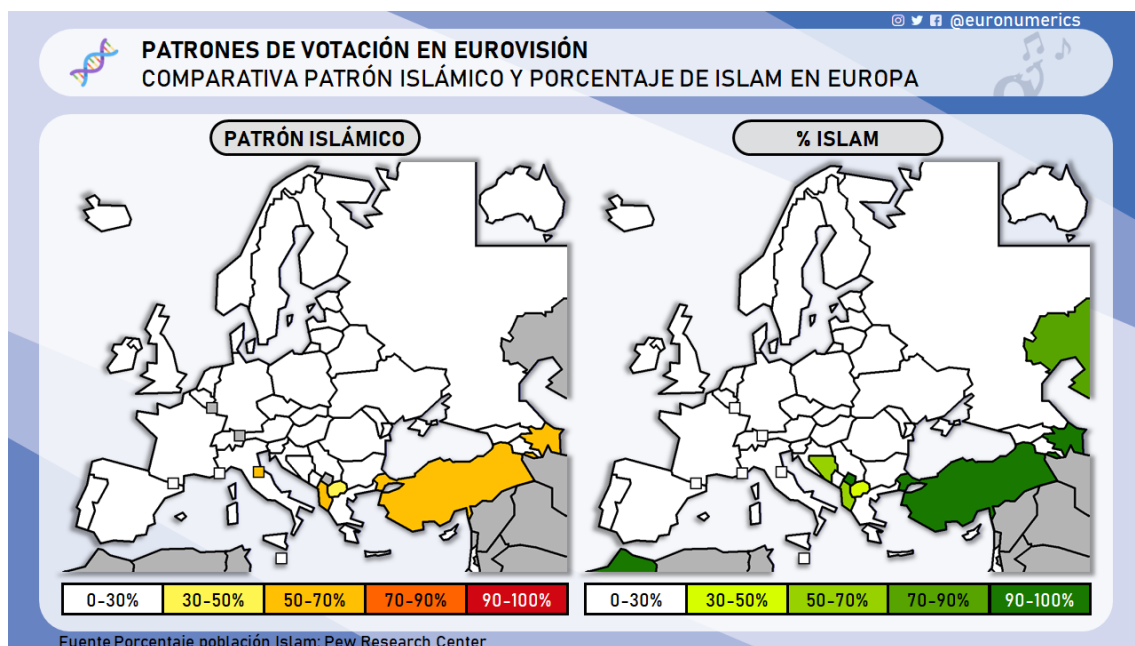
In both Albania and Turkey and San Marino, this pattern is the one most followed by these countries. In the case of Azerbaijan, the Soviet one is a little more important (62%).



If we focus on the countries that have this pattern, it coincides that Albania, Turkey and Azerbaijan are among the countries with the highest percentage of Muslim population in Europe. In fact, the following are North Macedonia, which also appears highlighted, and Bosnia

Herzegovina, which would be the next to appear, with a value of 23%, but which surely loses representation because it is very involved in the Yugoslav bloc (86%), as it already happens to the Macedonians.

In the following comparison you can see the correspondence between the countries that we say follow this pattern (left) and the percentage of the Muslim population in Europe (right). Although they have not participated in Eurovision, Kazakhstan and Kosovo also have a high percentage and would surely fall into this pattern. Another one that could do so would be Morocco, which already participated in 1980. In that year, of all these countries, only Turkey was present. The Turks gave the North African country no points, while the latter gave their 12 points to Turkey, more than half of what it received that night.



San Marino does not fit into this Islamic group but it is surely due to its links with them through Serhat, a native of Turkey.

What in previous years seemed like a group of random countries in the southeast, or a Turkic axis between Azerbaijan and Turkey, has finally evolved into an Islamic axis, which is the most palpable manifestation of religious culture at Eurovision.

The countries harmed by this bloc are largely explained by enmities with these Islamic members: Armenia with Azerbaijan and Turkey, and Serbia with Albania. Less reasonable is the rejection of Slovenia and Poland. In the latter, the Catholic religion is more deeply rooted and could be the reflection of a certain confrontation.

In fact, as we have recalled, with the data from last year there was a pattern that included the Visegrad countries (Poland, the Czech Republic, Slovakia and Hungary). These four are also those with a high degree of Islamophobia in Europe. Therefore, it is possible that this is one of the reasons why this pattern does not appear with this year's data, because it opposes the Islamic axis that is reflected this year.

We can deduce that there is a kind of relationship between Islamophilia and Islamophobia, although the first is more palpable than the second. Let's remember that in Eurovision only points are given to the favourites, not to the less like-minded, so it is easier for philias to come to light than phobias.

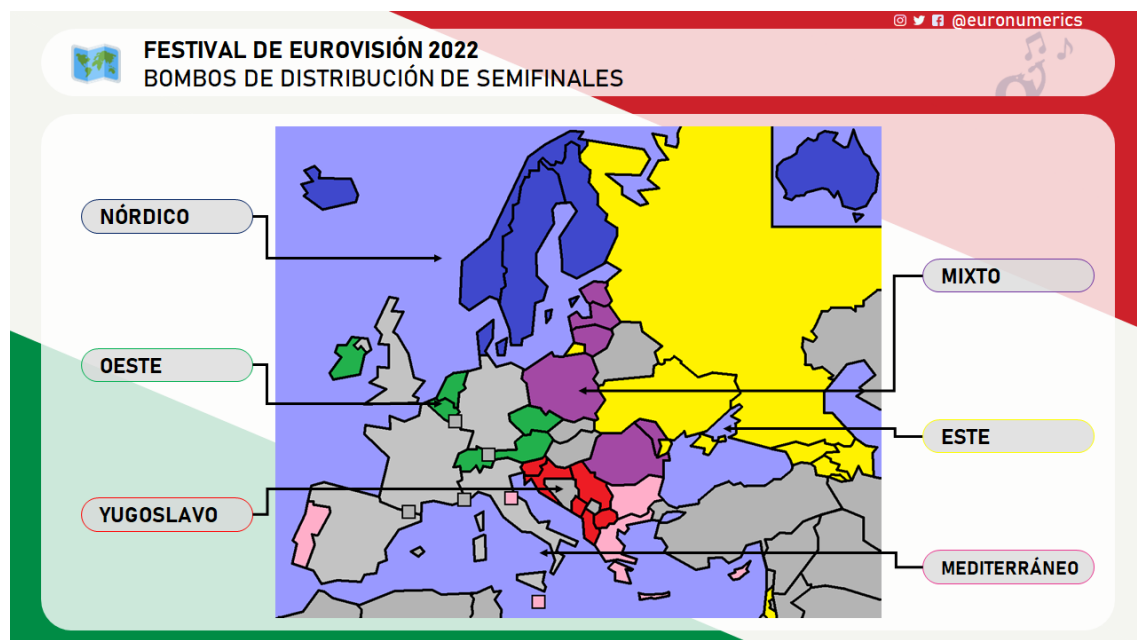
As for Israel, where a third religion, Judaism, predominates, no relationship with this axis is observed, so it seems to be left out. Last year it is true that it was slightly closer to the Visegrad countries.

In short, the Eurovision votes also reflect this component that links countries with an Islamic tradition, be it by religion, culture or their past; and that it differs from the others because it is more dispersed, less concentrated.

POTS vs PROXIMITIES: HOW IS THE VOTE OF A COUNTRY BEST ESTIMATED?

In the previous blog The 6 cheating jurors: a graph to expose them all, we raised the possibility that the semifinal pots were not the best estimator of the votes of a country in case they were invalidated. The estimate would be good if the pots includes homogeneous countries such as the Yugoslavs, but very doubtful if the pot includes countries with different tendencies.

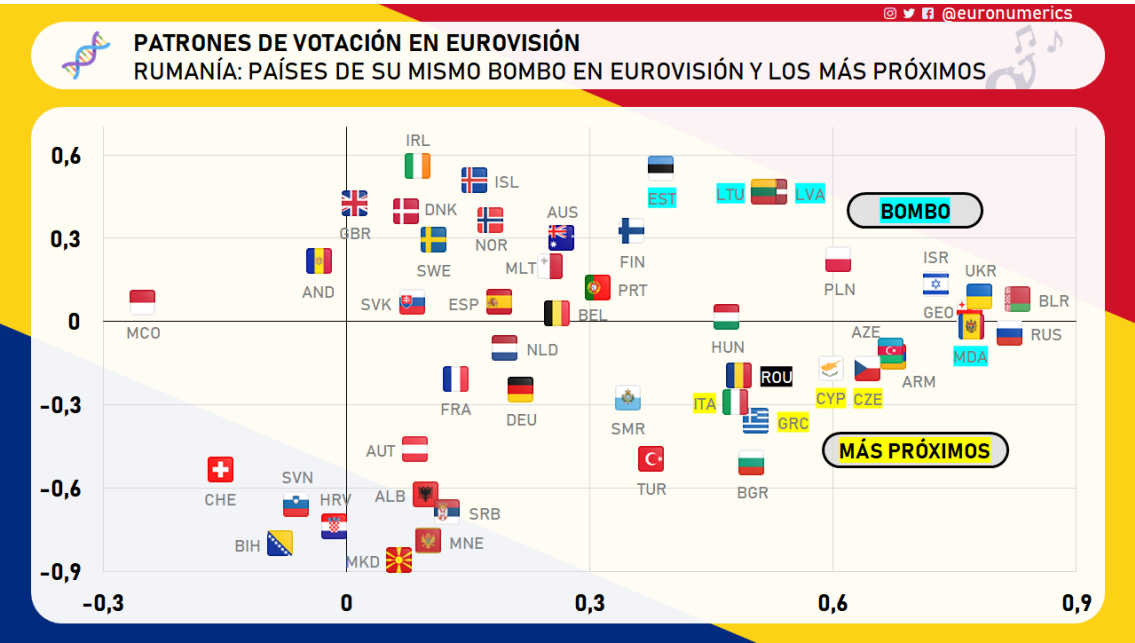
Of the cheating juries of the 2022 edition, the Romanian estimate is undoubtedly the most complex. In the same pot were the three Baltic countries, which are quite far from Romania; Moldova and Poland, which was also in the hunted group. In short, the distant Baltics accounted for 75% of the vote in Romania. The following map reveals the composition of the Eurovision 2022 pots, in purple the countries of the Romanian pot.



The use of pots is an egalitarian criterion for all countries and simple, however very rigid, insofar as it does not allow to take into account the real countries that are really close to Romania. Note

that none of the other three countries that Romania borders (Ukraine, Serbia and Bulgaria) were in the same pot.

If we look at the two-dimensional graph above, it becomes clear how far away, not only from the three Baltic countries and Poland, but also from Moldova (in blue). The distribution reveals that the closest to Romania would be Italy, Greece, Cyprus and the Czech Republic (in yellow).



The following table shows the actual estimate with the pot (left), the votes that Romanian television published as valid (center) and the estimates with the neighboring countries (right).

REEMPLAZO DE LA VOTACIÓN DE RUMANÍA
SUPUESTO ORIGINAL, REMPLAZO CON BOMBO Y REMPLAZO CON SIMILARES

REEMPLAZO CON BOMBO	VOTOS ORIGINALES	REEMPLAZO CON SIMILARES
Media exponencial de los jurados individuales de los países incluidos en el mismo bombo del sorteo de semifinales (EE, LV, LT y MD)	Fuente TVR	Media exponencial de los jurados individuales de los países más próximos a su patrón de votación (IT, GR, CY y CZ)
12 Ucrania	Moldavia	Grecia
10 Suecia	Grecia	Azerbaiyán
8 Reino Unido	Polonia	Reino Unido
7 Portugal	Países Bajos	Australia
6 Australia	Azerbaiyán	Suecia
5 Suiza	Australia	España
4 Italia	Italia	Países Bajos
3 Países Bajos	España	Polonia
2 Grecia	Finlandia	Ucrania
1 España	Lituania	Bélgica

In red we have highlighted those countries that were not in the vote accredited by Romania. It is noted that no country in the top 4 estimated with the pot by the organization was really in the vote for Romania, equivalent to 37 points out of the 58 that it delivered. On the other hand, the

estimation with proximities fails in 4 countries, two of them being the countries 1 and 2 points, which are the most difficult to estimate.

Countries where one estimate is correct while the other is not are highlighted in green. For example, according to the hype pot receives points as indicated by the actual vote. In contrast, the model with proximities hits one more country, Azerbaijan and Poland.

Neither of the two models was able to guess the presence of Moldova in the Romanian vote because it is a characteristic very typical of this country and that could only appear taking into account its history. Another point in favor of using similar countries is that with them Moldova would have been 13th in the ranking, while with the pot, Moldova was last classified. Nor were they able to guess that Finland or Lithuania would be scored, although, as we say, getting the minor points right is more complex.

All of this, together with the success in the score of Greece by proximities, show that there are better methods for estimating country votes. And if you rush me, with Bulgaria instead of the Czech Republic, which would make more geographical sense, the estimate is even better. Hungary would also have served, but did not participate this year. Will the organization rethink the way of estimating votes?

EUROVISION DNA v22 OUR EXCEL IS BACK!

Yes, Excel returns to the blog of *Si los números cantaran!* We present you a renewed version of Eurovision v22 DNA that will allow you to locate yourself on the 2-dimensional map that we saw before and discover your DNA, that is, what voting patterns you resemble.

Download Eurovision DNA v22 by clicking [here](#)

It is available in Spanish and English and these are its sections:

1 Enter your data. We have changed the system of your data for a more precise one. Now you will have to enter your top10 of the last 10 editions of the Festival. You don't have to fill them all in at first, but the more you fill in, the more accurate your result will be. The right column reflects your top 10 favorite countries.

ADN EUROVISION v22

Idioma / Language:

Español

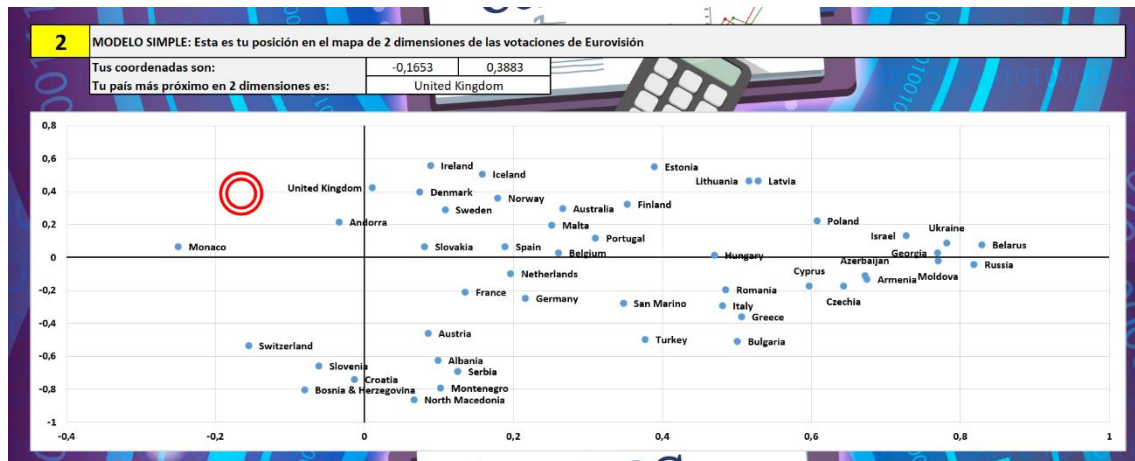
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Completa los tops 10 de las últimas 10 ediciones de Eurovisión (cuanto más completo, más exactos serán los datos)

	2012	2013	2014	2015	2016	2017	2018	2019	2021	2022		TOP
1º	Netherlands	Netherlands	Spain	Slovenia	Iceland	Portugal	Ireland	Netherlands	Switzerland	Armenia	1º	Spain
2º	Finland	Hungary	Finland	Ireland	Latvia	Belgium	Australia	Iceland	Ireland	Spain	2º	Netherlands
3º	Spain	Spain	Estonia	Estonia	Ukraine	Finland	United Kingdom	Germany	France	United Kingdom	3º	Ireland
4º	Slovenia	Denmark	Austria	Italy	Czechia	Hungary	Finland	Latvia	Lithuania	Sweden	4º	Finland
5º	Cyprus	Israel	Israel	Portugal	Spain	North Macedonia	Israel	Italy	Bulgaria	Italy	5º	Italy
6º	Italy	San Marino	Armenia	Albania	Australia	France	Azerbaijan	Greece	Ukraine	Netherlands	6º	Latvia
7º	Sweden	Belgium	Netherlands	Latvia	Bulgaria	Romania	Czechia	Ireland	Germany	Estonia	7º	Hungary
8º	Denmark	Ireland	Sweden	Norway	Malta	Latvia	Belarus	Spain	Serbia	Norway	8º	Portugal
9º	North Macedonia	Moldova	Azerbaijan	Lithuania	Austria	Belarus	Hungary	Switzerland	Italy	Greece	9º	Estonia
10º	Romania	Italy	Portugal	Georgia	France	Moldova	Albania	Malta	Malta	Germany	10º	Australia

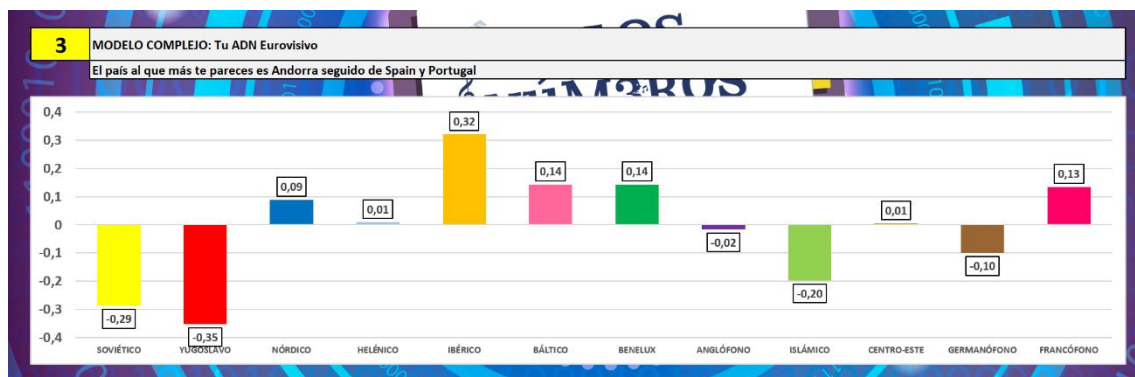
As I indicate at the end of the Excel, Bosnia and H., Turkey and Slovakia have participated little in this period and could distort your result. Therefore, you can try removing them from your top to see how your result changes.

2 Simple model. Once you have entered your tops, Excel will indicate your position on the map (red circle area) as well as the coordinates and the closest country on the map. This is a simple model, not very precise, but it allows you to visualize yourself.



In this simple model, the country this example most closely resembles is the United Kingdom. However, the most important thing here is that it is framed in the western and northern zone.

3 Complex model. This model is more accurate but does not allow you to visualize yourself. Based on your data, it will tell you which countries you are most similar to based on your tops. The lower graph indicates your DNA: the higher a value, the more you have of that pattern. The lower the value, the more contrary you will be to that trait.



For example, in this example, this individual has a similar voting pattern to Iberian with Baltic, Benelux, and French-speaking hints; and very different from the Soviet or Yugoslav. These characteristics, as it says in the image, are typical of or closer to those of Andorra, Spain and Portugal.

TO KNOW MORE... YOUR DNA

Specifically, DNA values begin to be significant when they exceed 0.3 in absolute value. For example, in the previous image there are two patterns that exceed 0.3: on the positive side, the Iberian; and on the negative side, the Yugoslav. Therefore, we will say of this person that he tends to vote for Iberian countries and that he has a certain aversion towards the Yugoslavs. This agrees with the TOP column of the first part: Spain and Portugal are in the top 10, while no Yugoslav reaches it.

In the event that you do not get any value close to 0.3, it is that your style is very free and you are not approaching any voting pattern.

You are already taking time to download it, enter your tops and see what your data is. What has come of you? Do you have a gene that you did not count on? Share your results and compare them with your friends. We couldn't think of a better way to celebrate these 5 years with you. We hope that there will continue to be many more because the numbers still have a lot to sing!