

Demography today: Europe's dwindling population

Posted on July 27, 2015 by [europebynumbers](#)

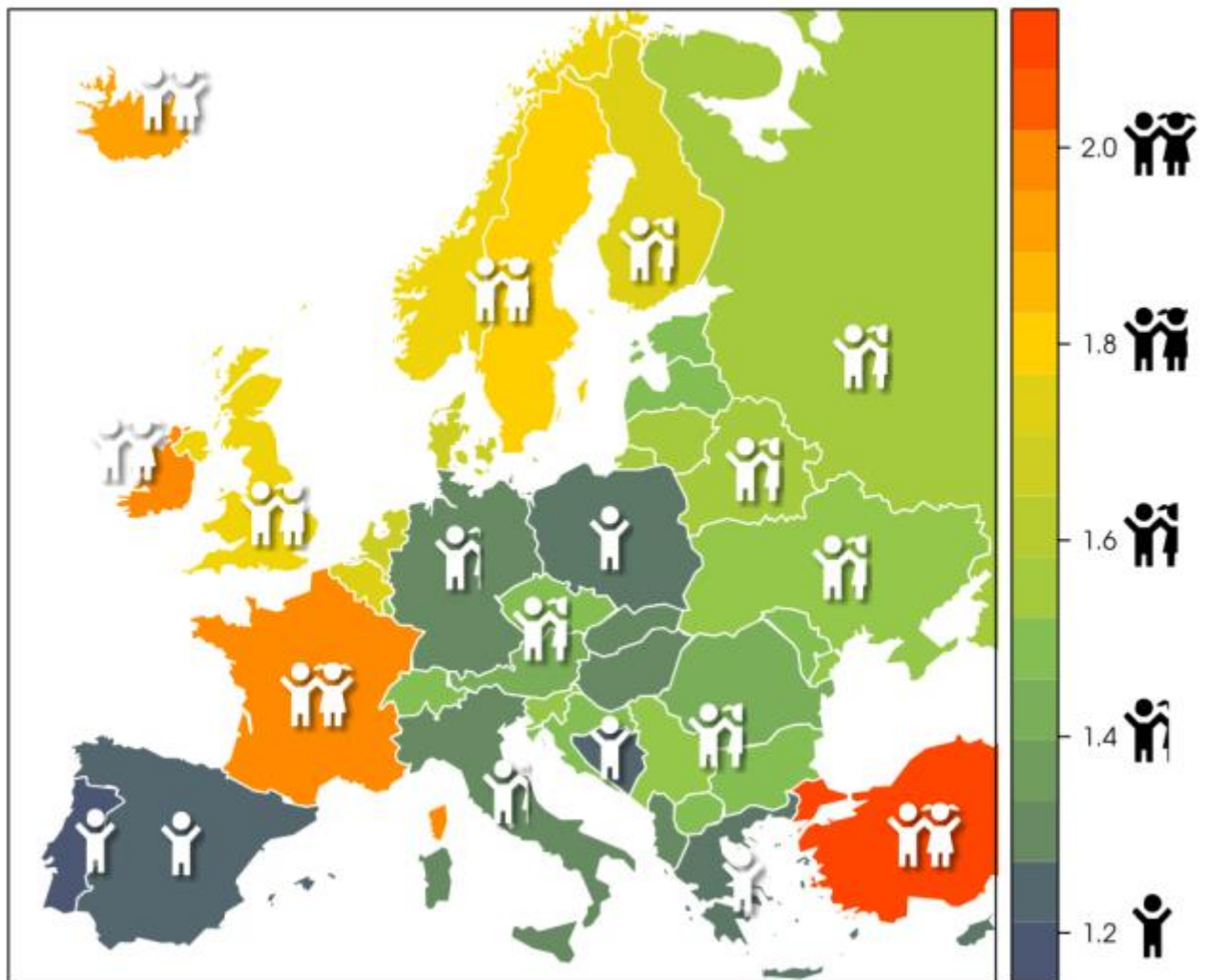
During the past 60 years, a dramatic change has slowly struck European societies. People are becoming ever older, while the birth rate has dropped dramatically, politicians and researchers warn. However, is the situation really that serious?

Going for a walk in the park in the boiling heat of Leipzig, Germany, means you must constantly dodge buggies and toddlers to find your way. Long queues line up before swings and slides and the sandboxes are filled by myriads of plastic shovels. Nowadays, you can get the impression that kids are a hot topic again, after the troubling years of insecurity in the early Nineties. Just becoming a father, I wondered if the feeling of rising numbers of children is only a personal impression, or if it's backed by the numbers. And does the country you are living in or your cultural background has an impact on the birth rate?

Mapping fertility in Europe

Well, nothing is easier to do than that, because [Eurostat](#) has it all. You can e.g. evaluate the birth rate (the total number of birth per year), but much more meaningful is the *fertility rate*: The average number of births per woman, telling you intuitively how many siblings a kid will have. Not surprisingly, the numbers are fairly low for European countries.

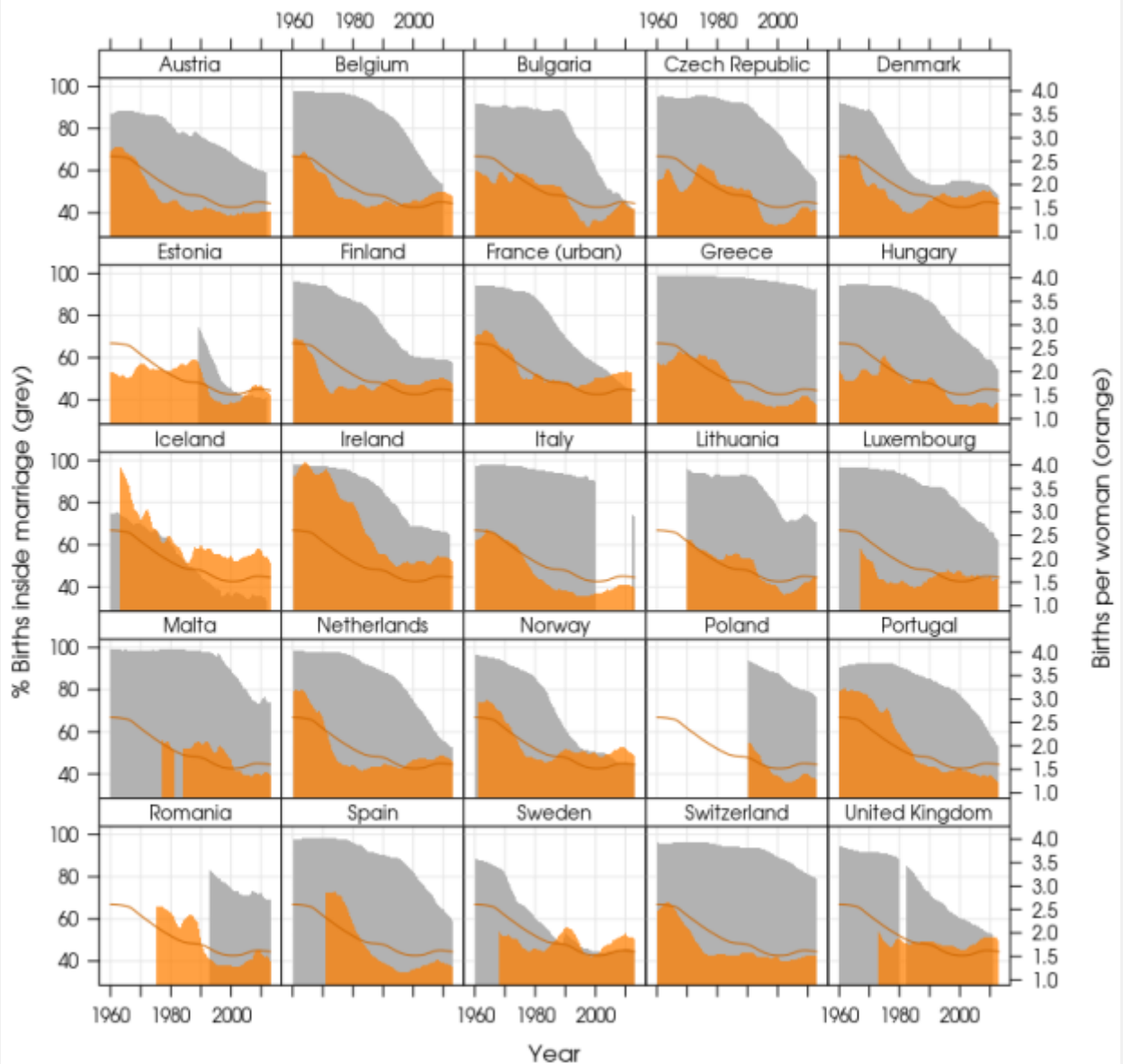
Number of births per woman



What you can see is that there is no correlation to the point of the compass. There are low fertility rates in both Southern, Eastern and Central Europe, and low fertility is rather the rule, not the exception. So which factors do actually influence the will to have offspring? Scandinavian countries may provide economic stability and traditionally a high level of public child care. But what is the difference between France and Germany? Well, kids are thought to be better integrated with the life of working mothers in France in contrast to Germany, where working and raising kids at once does sometimes raise suspicions by your fellow beings. Moreover, the French government strongly reduces tax paying for families with more than one kid.

It wasn't always like that

Is a low fertility rate problematic? Well, a birth rate lower than 2 is by definition not sustainable for a society, the population will shrink. It was not always like that, as you can see in the charts below showing the drop of fertility rate since 1960 (orange). And just as interesting, you can see how the percentage of *births inside marriage* is going down as well, a clear sign for a deep change in moral beliefs.



Fertility rate and births outside marriage in selected European countries.

Fertility rates dropped in all countries, however, you can see an earlier turning point for Western countries in the 70s due to the introduction of contraceptives, and a later point in the 90s for Eastern countries due to the fall of the Soviet system.

Will European societies die out?

Definitely not. First of all, fertility rates were rising again for the last 10 years, and second, migration compensates the loss of original inhabitants fairly well. Probably a topic for the post.

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Xe-no-pho-bia: Fear or hatred of strangers or foreigners

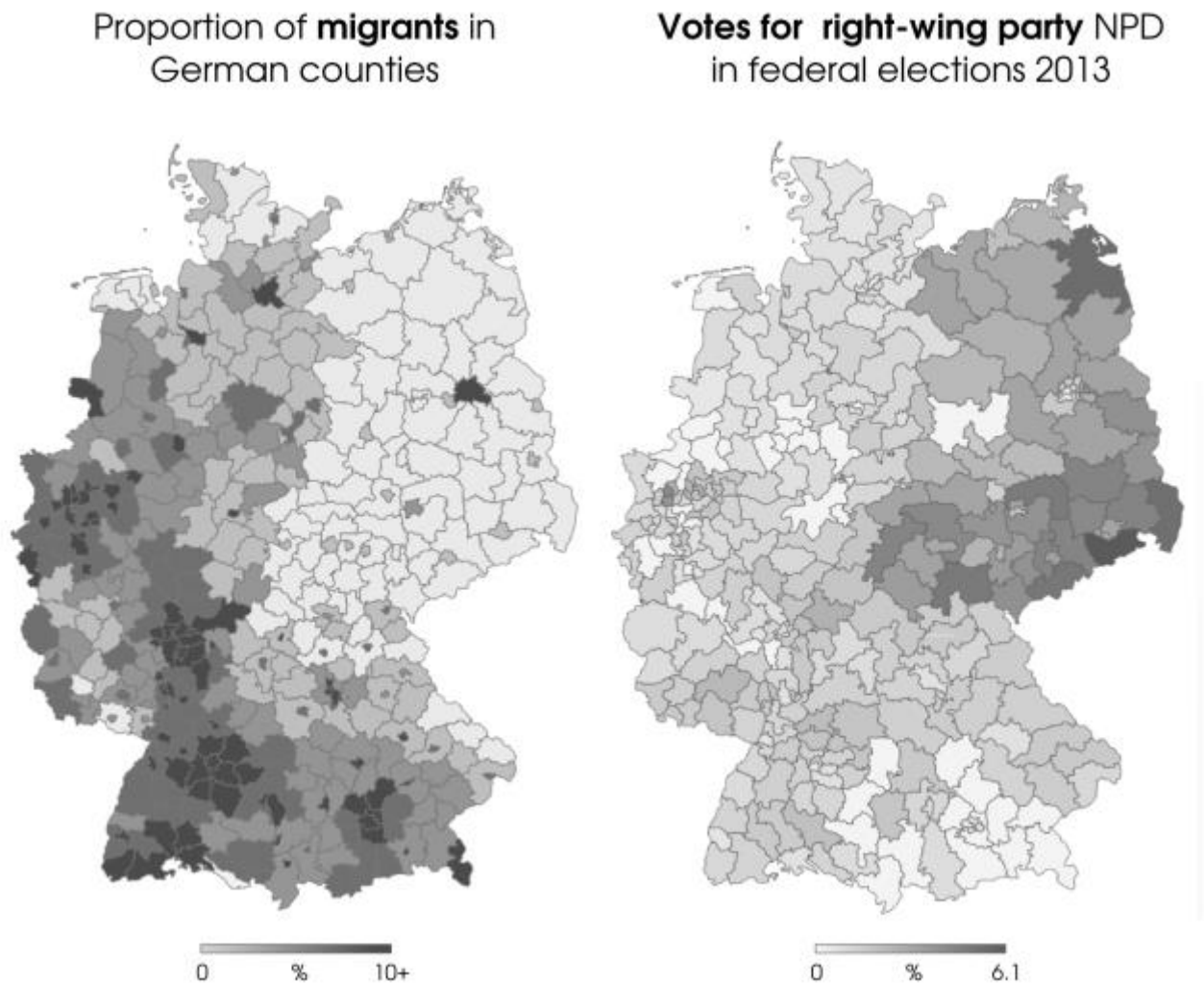
Posted on January 29, 2015 by [europebynumbers](#)

[definition according to [Merriam-Webster](#)]

Today was a bad day for the ones spreading fear and hatred of foreigners. The unbearable anti-islamic movement in Germany lost its head, more or less. Basically the complete [PEGIDA](#) board resigned due to inner conflicts. But as we know from the ancient Greeks, you can cut off many heads and there will always grow some anew. (Naturally, I'm referring to the nine-headed Hydra, no other heads shall be touched).

While this movement is surely over its peak, many people noted that it was exceptionally successful in regions where there are actually very little numbers of foreigners who could threaten 'old Europe'. I wondered whether this was a coincidental finding, or backed by the numbers. To map xenophobia, I simply used the results of the 2013th federal election for the xenophobic, right-wing party NPD per county. And then compared it to the actual numbers of foreigners living in the respective area.

Do you see the pattern?



EDIT: Sources are [Spiegel online](#) and the [GENESIS regional database](#) of the German federal agency of statistics.

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Do the math: Common misconceptions in Germany's immigration debate

Posted on January 21, 2015 by [europebynumbers](#)

Tonight, thousands of people will demonstrate against immigration and cultural diversity in my current home town of Leipzig. And thousands of

people will demonstrate against them, standing up for an open and welcoming society. Although both parties distrust each other, the ones opposing migration distrust even more the established media, politicians and mainstream common sense in general.

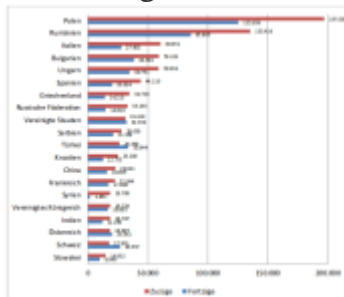
The debate is ongoing in Germany for years, gaining momentum after each new terrorist attack (supposedly) related to Islamic fanaticism. It's the question of migration being **more a burden or an enrichment for society**, and of immigration from Islamic countries being a danger in particular. Of course, the matter shall be discussed openly and without prejudices, but on the basis of facts, not fiction.



Demonstration for the PEGIDA anti-immigrant movement in Dresden, January 2015. Source: wikimedia commons, CC by 3.0.

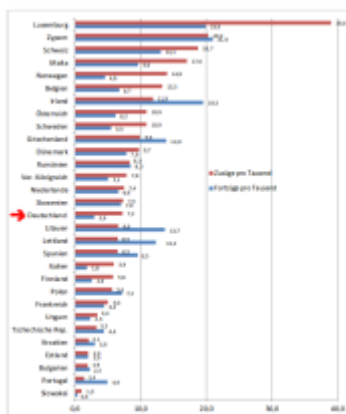
I will make my position quite clear. I am convinced a **lot of misconceptions** are floating around about immigration, particularly about the role of Muslim immigrants. **Here are five common mistakes** deliberately used to mislead public opinion.

“Lots of immigrants are coming from Arabian/Muslim countries to Germany”



Migration is an entirely inner-European phenomenon, most immigrants are coming from East-European countries. Only a few percent enter from Arabian/Muslim countries, the biggest share of them is actually Syria due to the ongoing civil war.

“Germany is taking up more immigrants than any other European country”



That's true! But only on absolute terms. If you correlate the numbers to population size, other countries are doing much more, see figure.

“The boat is full. The country cannot take more outsiders”

This point is often heard but the opposite is true. Germany has a rather stable population of around 80 million. But surprisingly *the birth rate of 1.4 is way too low to sustain this number!* Only migration compensates for the population loss. Or, Germans get more babies, a birth rate of 2.1 would suffice.

“Immigrants just want to exploit Germany’s social security system”

Of the ~1 million immigrants to Germany are more than 90 % entering the country to work or to study, most of them from *inside the EU and highly qualified*. Of the 110,000 persons applying for asylum, 1.1 % are accepted, 23 % are tolerated for a while, the *rest is rejected*. Still, most applicants originate from highly unstable countries such as Iran, Iraq, Afghanistan, Syria and so on.

“Politics are too soft when dealing with criminal migrants”

Really, this one is stupid. There’s no evidence that migrants are more criminal than Germans. And naturally, applications for asylum of criminals are not accepted, and applicants can be expelled easily when convicted for a crime in Germany.

You can look up all the numbers in the brand new [Migration Report 2013](#).

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| Tagged [asylum](#), [migration](#), [PEGIDA](#), [politics](#), [statistics](#), [xenophobia](#) | [Leave a comment](#)

Sophisticated drinking: How to map a beer

Posted on October 26, 2014 by [europebynumbers](#)

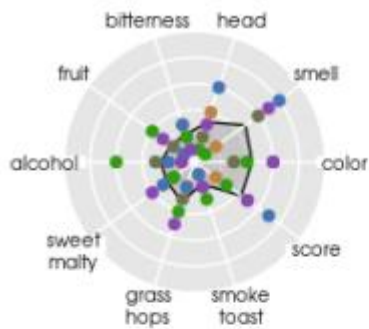
From time to time, having a **beer is fun**. Sometimes it’s even more fun if you can try different beers in a (more or less) controlled environment and rate them. Such a **tasting** is best enjoyed if it’s ‘blind’. Otherwise you may get easily diverted by fancy labels and beautiful custom bottles. Not to mention all the nonsense marketing blurb praising the ‘distinct, unique beer’, ‘brewed using only the very best ingredients’.



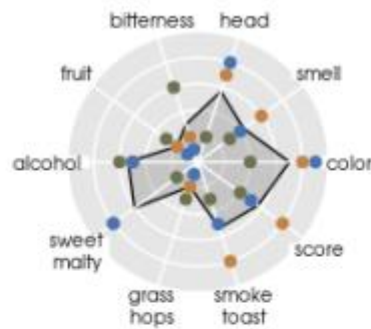
Well, we (as a group of five) tried around 20 different beers and rated some basic qualities from color to head to taste. Among them were popular and not-so popular German beers as well as some UK bottles from a

specialized [shop](#). Then, I combined all the single scores of each beer in a **‘polar-coordinates’ plot**. The grey area denotes the mean of the individual tester’s scores.

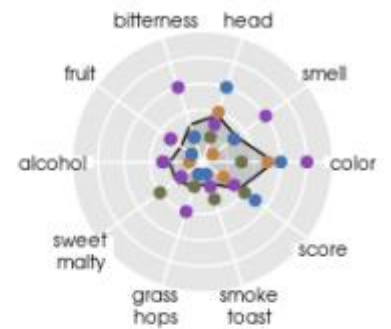
Bayreuther Hell



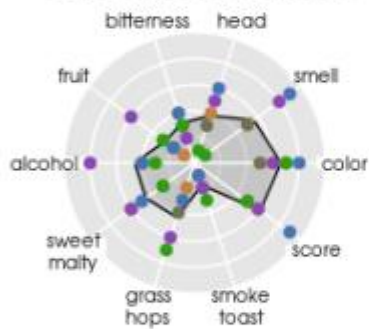
Belhaven Scottish Stout



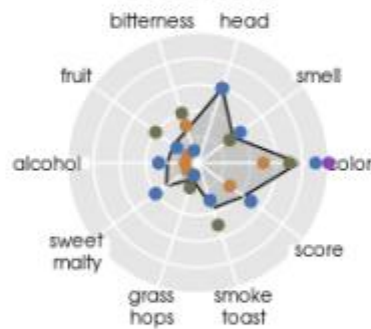
Braustolz Pils



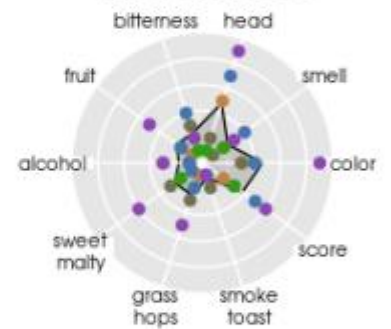
Carlsberg Elephant Pils



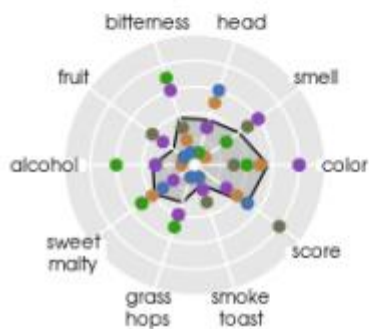
Diebels Alt



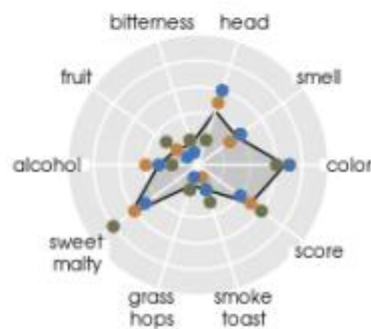
Flensburger Pils



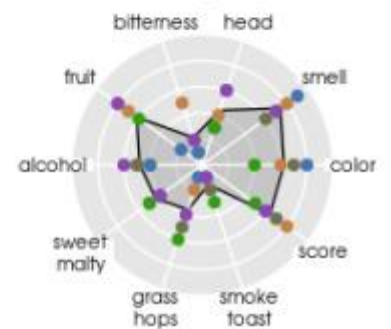
Freiberger Export



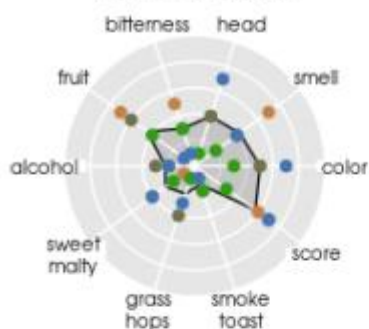
Gessner Original Pils



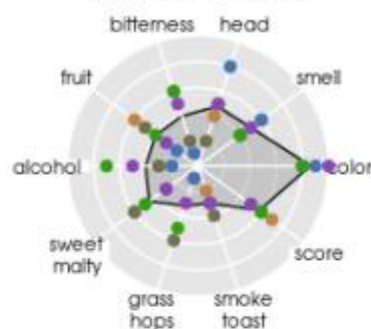
Hook Flagship Ale



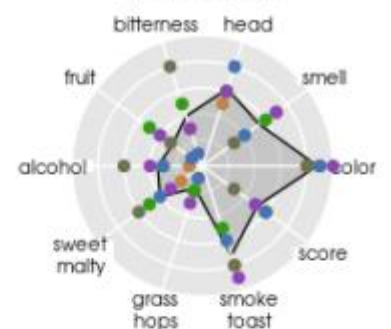
Hook Gold Ale



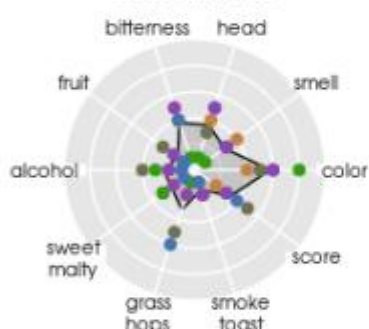
Hook Old Hooky



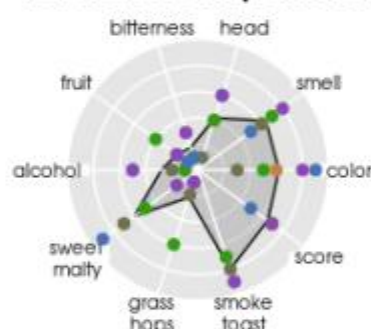
Hook Stout



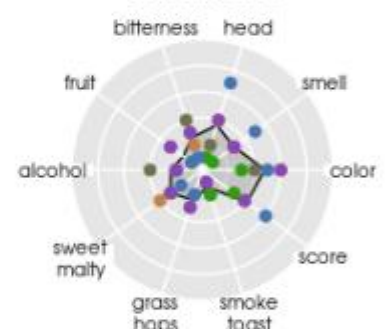
Leikeim Pils



Nerchauer Pumpenickel



Schultheiss



None of us is a professional in describing flavours, but some results are nevertheless intriguing. All the common **Pilsner beers** (Braustolz, Flens, Schultheiss, Sternburg) obviously **lack character**, although they definitely have the biggest market share in Germany. The Ales perform better in terms of character, but that doesn't mean I would drink a particular Ale all the time.

However, we found two notable exceptions to the standard German beers in our survey, the sweet and malty [Nerchauer Pumpnickel](#) and the American style [Atlantik Ale](#). Both are coming from smaller-sized breweries, and they might be indicating a trend towards more powerful and courageous brews. Cheers!

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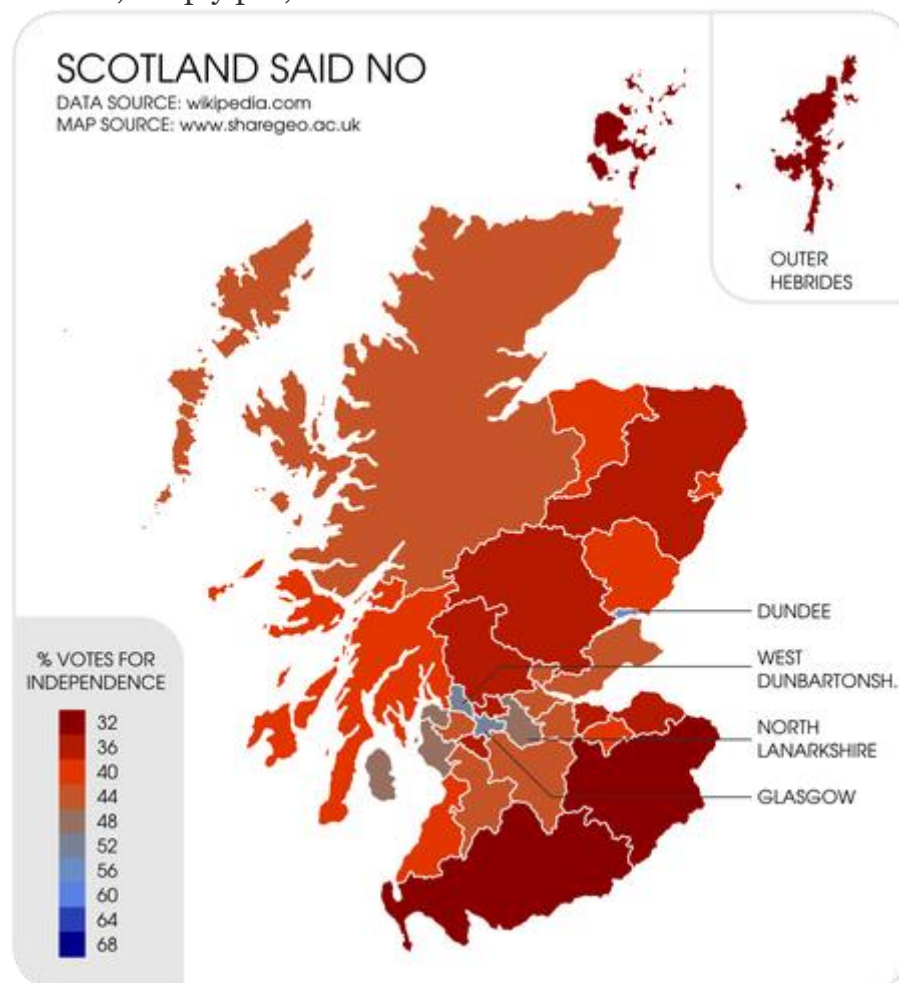
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Scotland: Wealthy counties said NO to independence

Posted on September 27, 2014 by [europebynumbers](#)

Roughly a week has passed since Scotland decided about **leaving or staying in the UK** via referendum. As written in my last post the polls were [far from being clear](#) and it was a head-to-head race until the very end: Scotland decided not to leave the UK and the rest is history. But now, as dust has settled a bit and UK officials are relieved by the outcome of the referendum, it's time to take a closer look on the results.

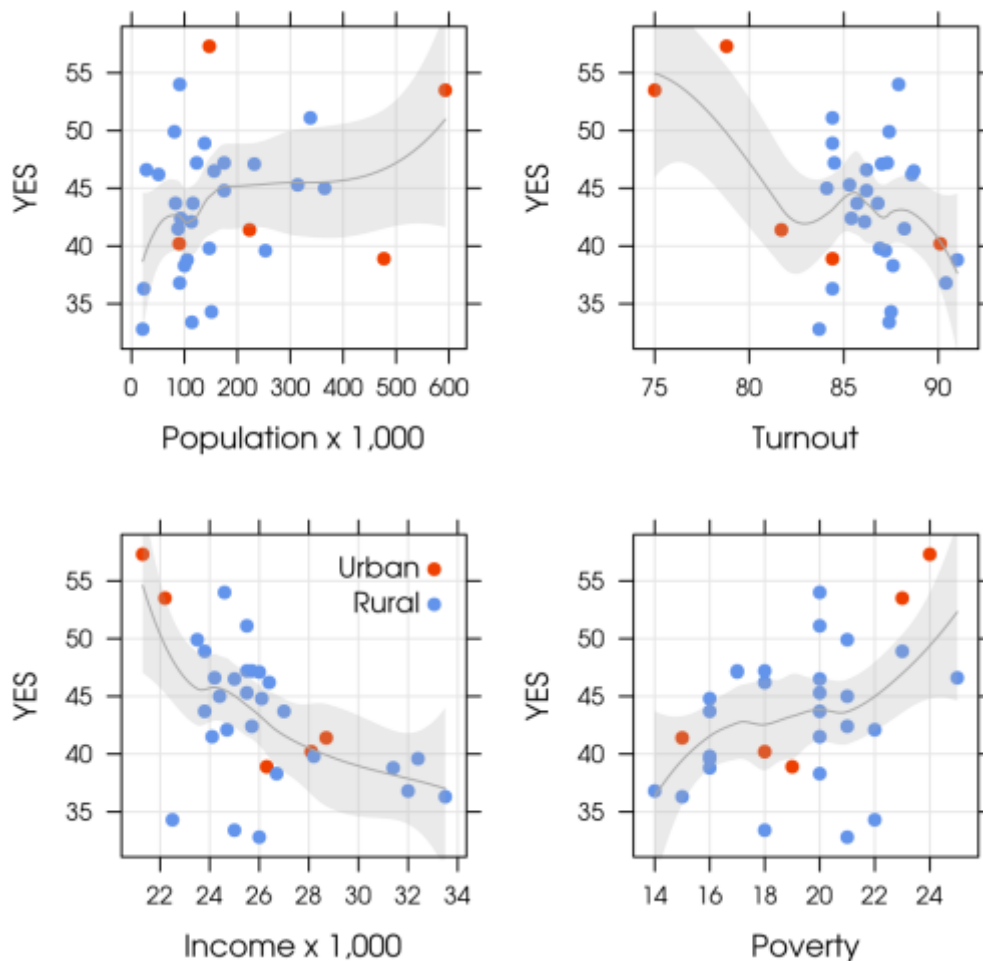
First, we can take a look on a map of Scotland with election results ordered by 'council area' or, simply put, **counties**.



The more red you see the more people said NO to Scottish independence, but be aware that the coloring does not cover the full 100 % of the scale. That means, although an overwhelming majority of counties voted against independence, it was still very close in

most counties itself. Notably, only a handful of counties reached more than 50 % YES votes and these were the urban areas of Glasgow and Dundee.

Nothing special so far, but we can still dive deeper into the election results by taking social data into consideration. Using the [official report](#) on income and poverty, we can correlate the votes for independence (YES) with these measures. In the following figure, **every dot represents one county**. There is no clear correlation with the first two variables (Population and Turnout) but indeed for the next two: **Counties with higher income and lower poverty rate voted against independence** and for staying in the UK!



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The birth of a new country?

Posted on September 10, 2014 by [europebynumbers](#)

If you walk around in **Edinburgh** these days, you can discover many interesting things.



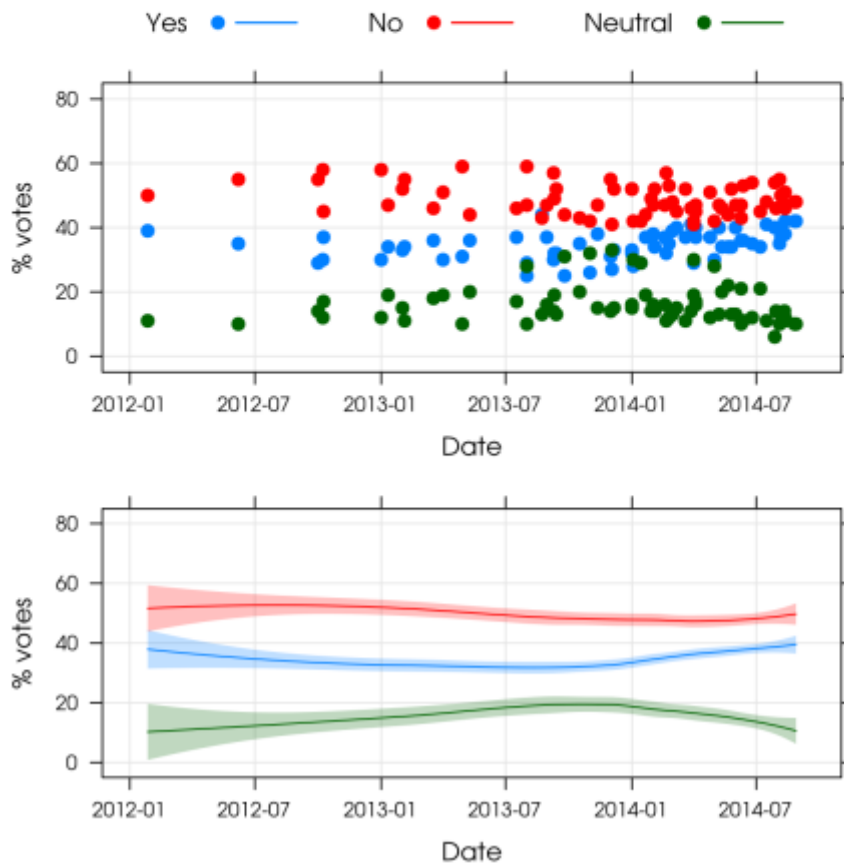


And you can occasionally spot a post card in a window or shop display reading simply **'YES'**. What looks for an outsider like an expression of support for Barack Obama, or a positive statement about life in general, is actually advertisement for the **Scottish independence** movement. Roughly one week remains until an important decision will take place in Northern Europe, to which I want to draw your attention.

Scotland has the choice

On **September 18th** 2014, in the year of the 700th anniversary of the [Battle of Bannockburn](#), the Scottish people have to decide whether they still want to be part of the United Kingdom, or not. What has happened?

A referendum was issued, mostly on the initiative of the [Scottish National Party](#) (SNP), whose stated aim is to separate Scotland from the UK. The SNP was able to do so as they headed the government after 2007 and 2012 elections of the Scottish Parliament. Two campaigns emerged around the referendum, the supporting 'YES' and the opposed 'UKOK' movement. Many polls have since been conducted – the following charts show the public opinion from 2012 until now.



The upper graph shows the votes for Yes, No and undecided for each of the polls, while the lower graph shows mean and confidence 'area'. Two things are obvious. First, the fraction of undecided votes declines while the votes for Yes and No both increase, and second, the majority of Scots still prefers to stay in the UK, but the country seems deeply divided.

I am curious if the YES campaign will be able to mobilize even more voters. An independent Scotland, however, would raise many more serious questions from currency to EU membership.

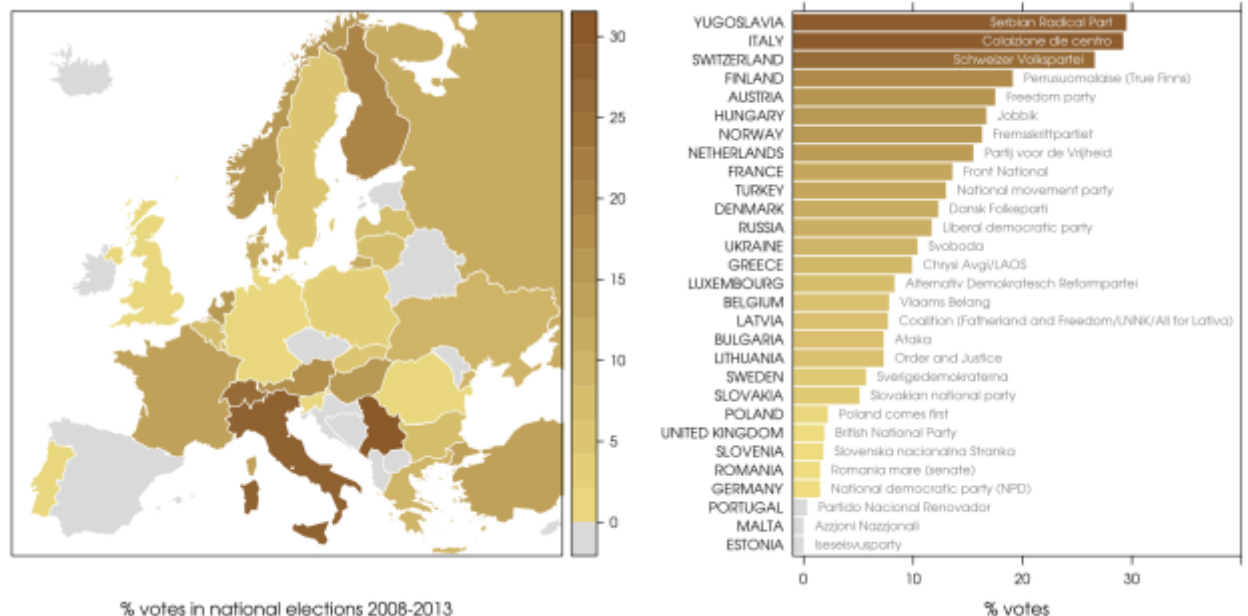
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Europe in the 'right' direction: Extremism

Posted on August 7, 2014 by [europebynumbers](#)

The European elections are long gone. But a little distance is often useful for an objective analysis of the matter. As discussed in my [last post](#), we could observe a slight shift from centre to right direction in electoral behaviour, but this is not as serious as the dramatic decline of turnout over the years. However, the European parties are literally melting pots of a diverse selection of different parties, loosely grouped by common interests. You can

find **moderate and extremist national parties** being members of the European blocks. The centre-right (christian-democratic) EPP alone counts 72 national parties as its members, among them populist right-wing parties like Fidesz from Hungary. The extreme right-wing parties are often small and don't show up in European policy. But how many people actually support them on the national level? This **info graphic** gives the answer, assembling the percentage of **votes for strong right-wing parties** in national elections of the last six years.



Naturally, maps like these are a simplification: the political profile of each party may be very different. For instance, **Italy** seems to be a country just on the edge of nationalistic uproar, but the right-wing party included in this data set is actually a coalition and quite moderate compared to others.

Let's take a closer look on my home country, **Germany**. Its genuine right-wing party is the **NPD**, once in a while even conquering a small share in federal and regional elections. It's a right-wing party from the text book, being so radical it's more than dubious if they even adhere to the most fundamental ideas of the German constitution. Therefore, in 2001 and 2012 lawsuits were initiated to exclude the party from political activity. The latest one, which is still pending, got much support by an alleged link between the party's activities and the racist killings of the terror group **NSU**. This group of only two man and one woman managed to kill 10 turkish or greek people all across Germany from 2001 to 2011, without the authorities even noticing it could be a racist motivation behind.

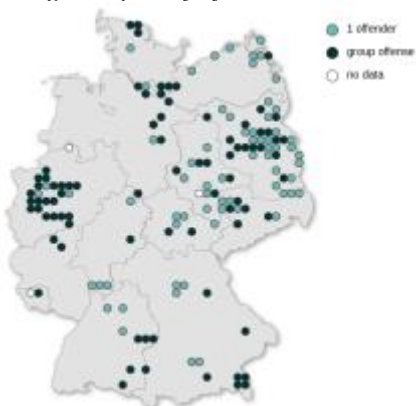
Since the reunification of Germany in 1990, 152 people lost their live in attacks most likely motivated by right-wing hate and ideology. These maps illustrating all cases are courtesy of [ZEIT](#) online, where you can find more resources on each casualty (German only).



Age of the victims



Degree of penalty by case



Single offenders or a group?

Sources: [Le Monde diplomatique's](#) Atlas of globalisation, [ZEIT](#) online.

