European Conscience

Sentiment analysis

A new method gauges changing national moods through social networks

by Manus Flanagan

On the eve of the European Parliament elections on May 24-25, one could already sense a clash of opposing viewpoints among EU citizens over election-related issues.

Between April 1 and April 30, websites in twelve countries racked up nearly 1.4m mentions related to Europe-wide concerns – an increase of 13.3% over the month of March, easily explained by the upcoming elections.

Less obvious was the simultaneous uptick in positive comments – from 35.4% to 41.9% -- on the four issues at the heart of the public debate: austerity measures; employment and economic growth; the euro and fiscal union; and lastly, the brand-new banking union.

These findings emerge from a report by the start-up *Voices from the Blogs* – with the collaboration of *East* – which was released just before the elections.

The study was based on an analysis of so-called "big data", which crunches numbers from data sets so large and so complex that they cannot be analyzed using traditional methods.

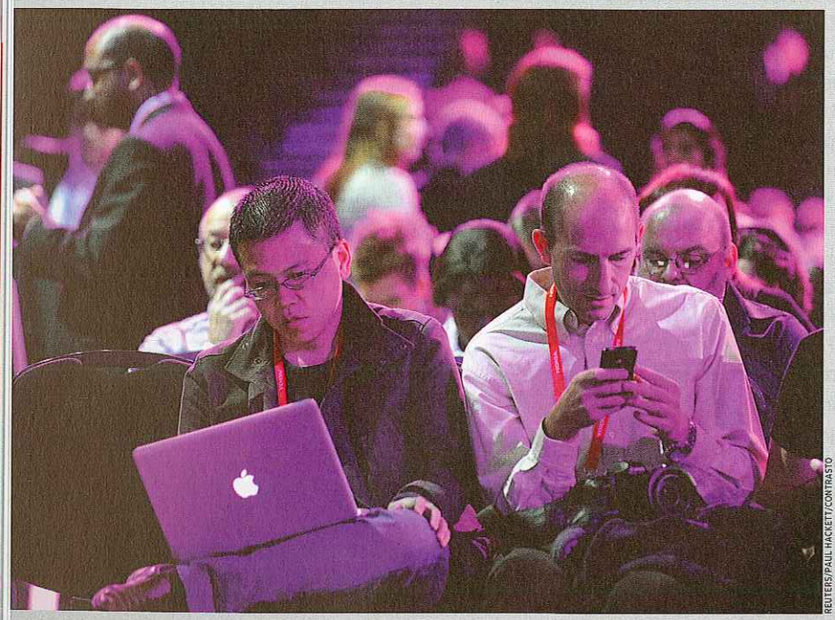
The report was based on constant monitoring of social networks (Twitter, Facebook and Google+) over the course of two months, along with forums, news websites and blogs from an assortment of European countries that included historic EU members and new members, inside and outside the eurozone.

Over 2.6 million comments, posts and tweets in ten different languages were scanned and put through a "Sentiment Analysis algorithm" developed by the University of Milan in order to compile a distribution of the opinions expressed.

The data collected show that, with the sole exception of Germany, the most hardened euro-critics are to be found in the countries that are historically pro-EU, while the newest EU members turn out to be the euro-optimists. The same holds true comparing countries which have adopted the common currency – generally more hostile towards it – and the ones outside the eurozone, who wouldn't mind joining. Poland and Romania were the most enthusiastic about the EU, while France and Italy were the least.

It's easy to understand why this type of survey is becoming more and more important. "Up to ten or fifteen years ago, the hot-button issues in public discourse were exclusively based on the traditional news media," explains Professor Luigi Curini, co-founder of Voices from the Blogs along with Stefano Iacus and Andrea Ceron.

Curini explains, "Today, newspapers are still probably the first to come up with the stories, which then get picked up by websites while the print media forget all about them, only to pick the news back up again if and when the online are seen to be pursuing it. The result is a de facto twin-track coverage, with websites enjoying a great deal of leeway." Hence the importance of being able to gauge the mood shifts on this platform to detect changes in public opinion.



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From even a cursory glance at this report, it's no surprise that Germans are the biggest fans of austerity measures, while those who are critical of them, starting with the French, pin the blame for such policies on the leadership of Chancellor Angela Merkel.

A more detailed examination reveals that one out of five criticisms relating to austerity issues refer to the EU institutions using a derogatory term which in each language means 'userer'. Italy aside, relatively speaking there was more appreciation for the growth policies devised by the European Commission, even though strong objections, particularly from Spain, Germany, France and Austria, pointed out how these policies had failed to address unemployment, while programmes supposed to promote economic recovery were deemed inadequate to stem rising inequality in the UK, Ireland, Austria and Italy.

Romania emerges as the country most enthusiastic about the euro despite the fact that its currency is still the *leu*. Vice versa, starting with Austria and Italy, eurozone countries voiced unfavourable opinions of the single currency, which they feel still lacks credibility.

The Germans appear to be largely in favour of the introduction of a joint European budget, yet at the same time, paradoxically, this country proves to be the most hostile towards the fiscal and banking unions.

On this last issue, the agreement signed between the Council of Europe and the European Parliament in March is viewed as a bulwark against future bank crises that besides coming to the aid of banks in trouble will also guarantee customers faster refunds. The report shows that in the event of such crises, the role of supranational institutions – as opposed to individual governments – is positively assessed in Italy and France, as well as in Ireland and the UK.



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Strasbourg, European Parliament, 2013. Sentiment Analysis has big advantages over traditional public surveys.

London, Nokia World Event 2011. It has become important to be able to assess the mood on the web in order to detect shifts in public opinion.

Sentiment analysis offers enormous advantages over traditional opinion polls. "First of all, it's a real-time analysis that can process the information right away, instead of all the weeks it takes to perform old-fashioned surveys", Curini points out. "Plus, there are no pre-determined questions to answer. People writing on line feel free to express their emotions; the kind of information we get is more truthful since it basically comes from the gut."

What's more, there's none of the "keeping up appearances" – the bane of all pollsters– whereby respondents reply to certain questions 'strategically', or don't answer at all, which makes for grey areas in the surveys and findings that may well be belied, once the votes are in.

Manus Flanagan *has reported on online media for over a decade and has become an expert in social networks and the evolution of the Web.*