

Happy Map

Mapping Happiness

Abstract: This paper is a follow up to the project titled 'Happy Map' (Armitage, 2014). The project collected live, passive 'happiness data' and represented it, visually on a map. This paper discusses the findings and what they could mean for societal, political, statistical and philosophical fields.

Key terms: Happiness, happy planet index, depression, joy, wellbeing, life satisfaction, tranquility, consciousness, psychology, expectations, mapping, cartography, information design, data visualisation, London, traffic, weather, datasets, floodplain, fbomb, SINTEF.

See also: Defining Happiness by Jacob Armitage (2014)

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The figures in this paper are videos which can be located here:

<http://jacobarmitage.co.uk/portfolio-items/defining-happiness-animated-essay-jacob-armitage/>

Video figure style: Fig 1 [video] 'name of video'.

Definition

In the world of politics, expressing heightened concern for a nation's happiness has become a popular method of obtaining 'soft power' (Nye, 2004, Corp, 2014). Though, without proper definition, politicians find it difficult to argue their success in 'the war of wellbeing'.

By conducting research to assimilate statistics, philosophy, politics and critical thinking, the previous section of the Happy Map project found that well-being can be defined as a scale of one's own physical and emotional attributes, happiness being the high end of well-being's emotional spectrum (Haybron, 2012). Happiness and joy have been distinguished as long and short term variations, respectively. The right path in the pursuit of happiness is a matter of opinion, while some describe spiritual solutions others simply put it down to managing one's own expectations (Ricard, 2007, Schwartz, 2005, Armitage, 2014).

Purpose

Happy Map visually represents, in real time, the location and volume of happiness or joy in London. Active data has been collected successfully before, one project, Mappiness is still ongoing, it directly asks participants about the state of their happiness (MacKerron and Mourato, 2011). However, this method, it could be argued, collects a skewed perspective. Only collecting data from willing participants, people, who therefore, are already self-conscious of their state of wellbeing. The collection technique, an iPhone app also limits the demographic of the research sample. Happy Map, by contrast collects passive data from unknowing participants, across multiple social media platforms.

It was deduced that, in an international city such as London, this data had to come in non-text form, due to the many languages used across the city. Images could be scanned for facial expressions, however this wasn't within the temporal scope of the project. Instead, emoticons, the textual representation of facial emotions, were explored. It was found that different cultures and ethnic backgrounds, used the same two emoticons i.e. ':)' - happy' and ':(' - sad' in all languages. While eastern cultures tend to use vertical emoticons i.e. '^.^ - happy', the standard two were found to be used in similarly and consistent proportions (Park *et al*, 2009). To collect the data, software had to be developed that would scan social media platforms for the use of these two emoticons. This method does discriminate against non-social media users but given the potentially very large sample-size, this discrimination was acknowledged but overlooked.

The software then outputs the raw data to an online browser based Google Map, similar to FBomb (fbomb.co, 2014) which locates and highlights use of the word 'fuck' on a map. Happy Map represents the information visually as green and red temperature-style datasets. Using the Google Maps method allows for the easy integration of other data-sets as layers, similar to the way in which #floodplain (Cummings and 51%, 2014) compares such datasets. These other datasets include weather, traffic and transit lines for example. We are then able to find patterns, positive and negative correlations enabling the user to interpret and deduce different conclusions.

Findings

Generally speaking, according to the collected data, London is a happy city, happy emoticons, by far dominate sad emoticons, to the point which we rarely see any red appear on the map.

As shown by Fig 1 [video] '*Happy Map Tuesday 18th February 2014*'. On an average day (in this case 18/2/2014) the temperature grows throughout the morning, peaking around lunchtime (1:30pm) we then see the level of happiness decrease toward 4:30pm, only to peak again around

5:30pm. This activity, though prevalent and consistent across the city is more noticeably apparent in the east, a little north of the Thames. A logical conclusion drawn from this could be that people are unhappy during work hours, finding relief at lunch breaks as well as the end of the working day. It could also be argued that these are the times in which people are able to access their social media accounts without their bosses looking over their shoulders. As for the over-saturation of happiness in the east, it could be said that, the area is home to a lot of creative businesses, design agencies, artist's studios, galleries and exhibition spaces. While this conclusion may be based on stereotype, it could be interpreted that the area's demographic is both young, and emotionally expressive. Shoreditch, Hoxton and Dalston, at almost anytime, show a higher level of happiness than any other area in London.

Fig 1 [video] *'Happy Map Tuesday 18th February 2014'* also represents an average evening, we see the level of happiness decrease around the centre, moving outwards towards the suburbs, with a higher level increasing into the night around the outskirts of the city centre, creating a ripple like pattern. Concluding from this pattern could be the idea that the first wave moving outward is influenced by the commuters leaving the city centre and arriving home, this movement is relatively sudden in comparison to the slow filtering of people moving to the outskirts either from home or work. The outskirts as well as the centre of London is home to a lot of the nightlife, clubs and bars and is therefore a host venue of these volumes of happiness, spreading the levels of happiness across a wider area, showing a less condensed volume in comparison to the daytime.

Fig 2 [video] *'Happy Map Sunday 16th March 2014'* shows that during the St Patrick's day celebrations, a Sunday (16/3/2014), a growing level of happiness could be seen centred around Trafalgar Square and St James' Park, this is where the city's celebrations were being held (TimeOut, 2014). This continued throughout the day and even lasted into Monday where the levels of happiness moved more into the suburbs, while a lower degree of happiness lingered over the centre. It would be apparent from this information that people attending their regular jobs as well as people assisting in the clean-up effort, following a celebration such as this experience decreased levels of happiness, while those who are at home are significantly happier. Tuesday however, is a different story. The day following St Patricks Day shows a much lower level of happiness. It could be deduced that this is a result of a city-wide hangover.

When looking at London's parks on the map it is noticed that, despite what society is told by politicians (ACS, 2014) and researchers including the findings of Mappiness (MacKerron and Mourato, 2011), the beautified areas do not show a higher level of happiness. In fact, if one is to look closely at Hyde Park in particular: Fig 3 [video] *'Happy Map Hyde Park'*, it can be seen that it is less populated by happy and unhappy data. This is true of both days with warm weather and days when it rained. This could be due to the fact that people tend to be more relaxed and less concerned with technology in green spaces. People may communicate and express their happiness to one and other rather than to the world via social media. Another conclusion could be that the density of people is overpowered by the built up areas, people tend to have more space in a park and therefore, the data is more thinly spread, having less influence on the overall happiness density of the area.

Fig 4 [video] *'Happy Map Traffic'* shows a negative correlation between traffic and happiness. When the traffic data is overlaid at 6pm on a Friday for example, in heavy traffic areas, we see a decreased level of happiness. An obvious conclusion of this would be that people become stressed when in traffic, however this also suggests that motorists are using Twitter while driving, which is possible, though, the reduced number of social media users while driving would most likely, have less of an influence on the map. If we look closer at the raw data, Fig 5 [video] *'Happy Map Traffic Raw Data'*, we can see that a lot of the unhappy data is coming from around the traffic areas, suggesting that the increased density of people at these times, appears to be having more of an unhappy effect on the residents than it is the motorists passing through.

According to: Fig 6 [video] *'Happy Map Tuesday Compared to Friday'*, Fridays prove to be particularly emotive, with increased levels of both happiness and sadness and an overall increase

in social media traffic. This is represented on the map showing similar patterns to an average day, however somewhat exaggerated and lasting longer into the night. Essentially then, we see increasing waves throughout an average week, climaxing at the weekend. Fig 7 [video] *'Happy Map Saturday 22nd February 2014'* shows that Saturday mornings in contrast to the day following St Patrick's day don't show a city-wide 'hangover period' instead, a more thinly spread wide area of increased happiness, this could be put down to the peaking levels of tourism in the city on weekends. These findings have a strong correlation with the findings of Mappiness (MacKerron and Mourato, 2011).

Problematic data

It could still be argued that there is a discrimination against the working and living population of London. Perhaps the map doesn't locate happiness at all, perhaps all it is representing is the average current population of social media users throughout the day.

To overcome this discrimination the data could be offset against dynamic population figures in the city i.e a 'happiness per person' data set. However, this depends on one's interpretation of happiness, even with the researched definitions, the term is still very subjective. One view could be that happiness is embodied in human consciousness and therefore needs a high volume of humans to provide a host to high volumes of happiness. This, put simply could be described as 'happiness atmosphere', a location feels happier when it is full of happy people. If for example, the Trafalgar Square St Patrick's Day celebrations were only attended by one very happy person, in a happiness per-person algorithm, the area would be represented as 100% happy, but if an averagely happy person were to actually join that one happy individual, it's doubtful that the averagely happy person would feel quite as happy as they would surrounded by a thousand people creating a 'happiness atmosphere'.

One contrast that can be seen between current political belief and data found by Happy Map is that new physical structure, city gentrification, beautification and regeneration do not correlate with the density of happiness (ACS, 2014). Perhaps, suggesting that money, resources and efforts should be put into events rather than permanent structures. Though this could also be put down to the short term, passive nature of the collection tool, social media users are not necessarily expressing their long term state of wellbeing but their short term feeling of joy. If we assume the Aristotelean definition of 'a lifetime of virtuous and excellent activity' (Haybron, 2012) to be accurate then, over a long period of time, a true psychological happiness could be mapped, showing long-term collected data for happiness, this would then give us reliable data to support or refute politicians plans to gentrify and regenerate.

Conclusion

Happy Map visually represents the organic, emotive, human liquidity of a metropolis, while the data collected may not be useful within scientific parameters, it does support that wellbeing resides within human consciousness and while it can be influenced by its surroundings, it's more likely to be influenced by other humans.

The project also highlights the inescapability of technology. Critically it questions the methods used by Mappiness (MacKerron and Mourato, 2011) which asks users to contribute data using technology. Happy Map, on the other hand, acknowledges the fact that we are constantly creating data. It puts forth that tools should be created to collect this existing data rather than inventing ways of collecting new data. Heidegger (1954) expresses this notion in saying "Everywhere, we remain unfree and chained to technology, whether we passionately affirm or deny it." In this idea, Happy Map passionately affirms societies connection while Mappiness appears to deny it.

Assimilating politics and technology, Happy Map supports the words of Ervin László the Dalai Lama (2011). “We are evolving out of the nationally based industrial societies that were created at the dawn of the first industrial revolution, and heading toward an interconnected, information-based social, economic, and cultural system that straddles the globe”. From this perspective an importance is placed on the necessity to visualise and begin to understand the data society is producing. Humanity has successfully constructed a tool, the internet, which constantly collects data. Reports published by SINTEF (2013) show that 90% of all the worlds data, at that time, had been recorded in the previous two years. From this notion we can understand that, with a continued progression of Happy Map, adding long term well-being and other datasets such as age and income, adding additional search terms for words such as ‘pleased’ etc and extending the collection area to a global landscape, a tool such as this would be greatly important in humanising and disambiguating the masses of collected data. Essentially, an effort to make sense of what society has already created.

To summarise, Happy Map teaches us:

The omnipresence of technology.

The liquidity of a metropolis.

That wellbeing resides within human consciousness.

References:

ACS. (2014) 'Green space can make people happier for years' Available at: <http://www.acs.org/content/acs/en/pressroom/presspacs/2014/acs-presspac-february-12-2014/green-space-can-make-people-happier-for-years.html> (Accessed 27th March 2014)

Armitage, Jacob. (2014) 'Defining Happiness' Available at: <http://jacobarmitage.co.uk/portfolio-items/defining-happiness-animat-ed-essay-jacob-armitage/> (Accessed 27th March 2014)

Armitage, Jacob. (2014) 'Happy Map' [Videos] Available at: <http://jacobarmitage.co.uk/wp-content/uploads/2014/03/Defining-Happiness.pdf> (Accessed 27th March 2014)

Corp, Ann. (2014) 'Measuring National Well-being, Life in the UK, 2014' London: Office for National Statistics. Available at: <http://www.ons.gov.uk/ons/rel/wellbeing/measuring-national-well-being/life-in-the-uk--2014/index.html> (Accessed 27th March 2014)

Cummings, Neil and 51%. '#floodplain' [ongoing project] Available at: <http://www.floodplainlondon.org/> (Accessed 27th March 2014)

fbomb.co. (2014) 'fbomb' Available at: <http://www.fbomb.co/> (Accessed 27th March 2014)

Haybron, Dan. (2012), *What Is Happiness? A Quick and Dirty Overview* Available at: https://0b0687ee-a-62cb3a1a-s-sites.googlegroups.com/site/danhaybron/What%20Is%20Happiness%20-%20simple%20definition%20v3.pdf?attachauth=ANoY7cp2Ro4wQch86A8bVbVSpCaoRrEJVcl2pi2AGiR2_jcORHQJvzbHUDtd5D0sxCPM8lgpAckrePL3YBjc2tOEcEqdnKNTvNM2_WkDFunPcZtwBpn0wHAQ3X8PyJjyczdRAGszS1wo-OvCW_JUNEEJW4AwzZtgL-Qpd0Pp9kpZ_elkS6CoaYxhxFFkPIz0bPNKOwRAiwXZs_FEL_nDjhpIXgO7gd8dBNaQ1nA4EJOMtwhyvRBJ_KuTRJF8zKqOyMSo1o77htDP&attredirects=1 (Accessed 13th February 2014)

Heidegger, Martin. (1954) 'The Question Concerning Technology' Translated to English by William Lovitt in 1977, New York and London, Garland Publishing Inc. pp 4.

László, Ervin. And The Dalai Lama (2011) 'Manifesto on Planetary Consciousness' Utopian Research. Available at: <http://www.scribd.com/doc/59257600/Manifesto-on-Planetary-Consciousness> (Accessed 27th March 2014)

MacKerron, George and Mourato, Susana. (2011) 'Mappiness' [ongoing project] Available at: <http://www.mappiness.org.uk/> (Accessed 27th March 2014)

Nye, Joseph S. (2004) 'Soft Power: The Means to Success in World Politics' New York: Public Affairs.

Park, Jaram. Barash, Vladimir. Fink, Clay and Cha, Meeyoung. (2009) 'Emoticon Style: Interpreting Differences in Emoticons Across Cultures' National Research Foundation of Korea. Available at: http://mia.kaist.ac.kr/icwsm13_emoticon.pdf (Accessed 27th March 2014)

Ricard, M. (2007) 'The habits of happiness' [TED] Available at: http://new.ted.com/talks/matthieu_ricard_on_the_habits_of_happiness (Accessed 13th February 2014)

Schwartz, B. (2005) 'The paradox of choice' [TED] http://new.ted.com/talks/barry_schwartz_on_the_paradox_of_choice (Accessed 13th February 2014)

SINTEF. (2013) 'Big Data – for better or worse' Available at: <http://www.sintef.no/home/Press-Room/Research-News/Big-Data--for-better-or-worse/> (Accessed 27th March 2014)

TimeOut (2014) 'Guinness on tap, green garments abound: three ways to spend St Patrick's Day in London' Available at: <http://now-here-this.timeout.com/2014/03/14/guinness-on-tap-green-garments-abound-three-ways-to-spend-st-patricks-day-in-london/> (Accessed 27th March 2014)