

FORUM

A Response to Gardner and Harrison: the Reasons for, and Implications of, Brexit from an Anthropological Standpoint

Megan Arnot

This is a response to the Brexit, Archaeology and Heritage workshop held in May 2017 at the Institute of Archaeology, UCL. On the 23rd of June 2016, the majority of the United Kingdom (UK) electorate voted in favour of leaving the European Union (EU), despite the implications of such a decision being unclear. Now, a year on, and with Article 50 signed, it is still no clearer what the terms of 'Brexit' are, or how the UK will fare culturally, socially, and economically as a result. This discussion article presents aspects of the author's research relating to the link between voting decisions and *life history theory* conducted as part of her Master's research.

Keywords: Archaeology Heritage Brexit Anthropology Post-Truth

Introduction

On the 23rd of June 2016, the majority of the United Kingdom (UK) electorate voted in favour of leaving the European Union (EU), despite the implications of such a decision being unclear. Now, a year on, and with Article 50 signed, it is still no clearer what the terms of 'Brexit' are, or how the UK will fare culturally, socially, and economically as a result. The implications of Brexit on archaeology and heritage are some of those not often addressed, and therefore it was with great pleasure that I read Gardner and Harrison's paper regarding such issues. Their paper covered topics including the practical implications of Brexit, ancestry, nationalism,

and 'post-truth' politics. Having recently undertaken research assessing whether evolutionary theory can explain people's voting decisions during the referendum, the results of this study will be examined in the context of Gardner and Harrison's discussion; primarily addressing the role of new-nationalism and post-truth politics in Leave voters' decisions.

Ecological correlates of voting decisions

I will first outline the research undertaken during my master's degree, which tested whether people's voting decisions could be explained by evolutionary theory – specifically *life history theory*. In summary, life history theory predicts that organisms will evolve phenotypes that best divide energy between reproduction and growth, in response to their risk

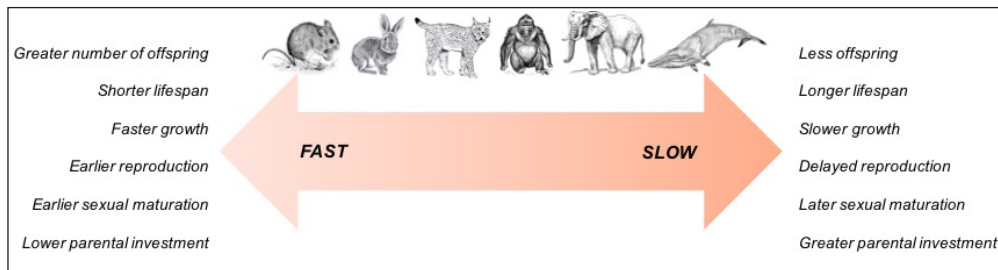


Figure 1: The fast-slow life-history continuum (adapted from Del Giudice & Ellis, 2016).

of mortality (Charnov 1993). One classic example is the mouse versus the elephant. Mice have a high risk of mortality due to the ecological niche which they inhabit (e.g. high risk of predation), and therefore they adaptively allocate energy towards reproduction, leading them to display *fast life histories*. Generally, fast life histories are characterised by traits such as large litter sizes, short lifespans, small body sizes, and early maturation. On the other hand, elephants display *slow life histories*, as a result of their low mortality risk. Energy is allocated towards growth, and reproduction later in life, and thus they display traits including a large body size, small litters, delayed maturation, and long lifespans (Figure 1).

While life history theory was initially developed to explain the variation seen between species, it has also been generalised to explain differences in phenotypes within species (Stearns & Koella 1986). For example, it is thought that life history theory can explain the evolution of pygmy populations (Migliano et al. 2007). Furthermore, when applying life history theory to humans, it is thought that – as well as a high risk of extrinsic mortality – ‘harsh’ environmental conditions can lead to the development of a fast life history strategy (Ellis et al. 2009). Harsh conditions include, but are not limited to, parental desertion, a low socio-economic status, living in an ecology with a lower life expectancy and high homicide rate, and multiple house relocations (Ellis et al. 2012). For example, it has been shown that females present an earlier age of first birth when they have multiple stressors in early life.

This suggests that these females are ‘accelerating’ their life histories adaptively through shifting investment from growth to reproduction (Nettle 2010). Human-specific signifiers of life history strategy have also been identified, which are generally behaviours that indicate how much the actor is considering the future. For example, it is thought that fast-strategists will be less likely to invest time into behaviours that are beneficial in the long term (e.g. education and career related activities), and more likely to engage in behaviours that are rewarding in the short term (e.g. risky behaviours such as crime, drinking and drugs) (Wilson & Daly 1997; Ellis et al. 2012).

The observation that risky behaviour is indicative of a fast life history formed the basis of my hypothesis. Based on the prominent discourse in the media that leaving the EU was a risky decision (e.g. Eleftheriou-Smith 2016), combined with the fact that leaving the EU was a step away from the status quo; I predicted that fast life history strategists would be more likely to vote to Leave due to their tendency to engage in risky behaviour (Arnot 2017).

To test this hypothesis, I collected relevant variables (such as life expectancy, population density, immigration rate, teen pregnancy, education levels) at local authority level, and analysed them alongside the percentage of people in the local authority that voted Leave. Initial analyses supported my hypothesis: for example, areas with a higher teen pregnancy rate, lower life expectancy, and lower level of education (fast life history traits) also had a higher proportion of Leave voters. However, a multiregression model told a different story.

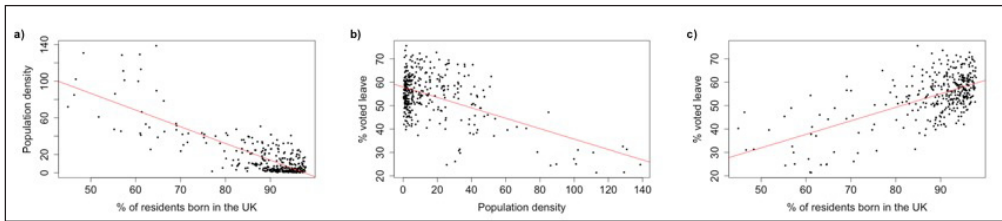


Figure 2: Graphs showing the relationship between **a)** population density and percentage of residents born in the UK, **b)** percentage of people who voted leave and population density, and **c)** the percentage of people who voted leave and percentage of residents born in the UK (by local authority).

Having reduced the number of variables included in the model from 11 to 6 using the Variance Inflation Factor and the Akaike Information Criterion, the final regression model included: female life expectancy, mean age, qualifications, wealth, teen pregnancy and population density, with an R^2 of 0.81. While looking at the inclusion of these variables alone may imply positive evidence for life history theory being involved in people's Brexit decisions, examining the internal relationships of the model implied otherwise. Without explaining the reasons fully (complete data analysis can be accessed through citations), it appeared population density was the most influential variable within the model. The conclusion drawn was that population density was integral due to the differences in cultural make up between high and low density populations. Population density and the percentage of residents born in the UK were strongly negatively correlated ($r = -0.80$), as was population density and the percentage of Leave voters ($r = -0.56$) demonstrating dense populations have a higher immigration rate and a lower Leave vote (**Figure 2**). In relation to Brexit, I proposed less dense areas may have a greater proportion of Leave voters due to having a less diverse community, resulting in *aversive racism*. This explains that negative evaluations of ethnic/racial minorities are the result of a lack of exposure. Thus, while the results did not support the initial hypothesis, my research did offer an insight into the ecological correlates of Brexit and why some people may have voted the way they did. I must emphasise that I am not implying every Leave supporter

voted in such a way due to issues surrounding immigration and globalisation. However, there was a plethora of 'vote Leave' propaganda that focussed on decreasing immigration on leaving the EU (see **Figure 3**), and statistical analysis demonstrated that immigration rates locally may have impacted people's decisions during the referendum.

Response to Gardner and Harrison *New nationalism*

I would first like to respond to Gardner and Harrison's discussion of the 'emergence of new nationalisms [. . .] often finding expression in right-wing anti-globalisation' attitudes. This is, of course, not the only reason people chose to leave the EU, nor is it likely the most common motive. However, it is a new concept which appears to have arisen in the past 10 years as a response to increased globalisation, and high levels of migration to western countries. This makes it a particularly pertinent and controversial topic for discussion. The real irony is that those who adhere to such rhetoric, are those who have felt the impacts of globalisation and increased immigration the least. As exemplified in my research, so-called 'Brexiters' are more likely to live in environments with low levels of immigration, meaning these people are trying to prevent the continuation of a phenomenon they are hardly experiencing. It is not those who reside in environments with high levels of cultural diversity, such as London, that strive towards a 'British-Britain', but those who live in areas of the UK with a high white- British population. This lead to a paradox, in which areas with high levels



Figure 3: Nigel Farage and his much criticised 'Breaking Point' anti-EU poster, which shows a long queue of migrants (BBC news).

of Leave voters will feel the social impact of Brexit in a more minimal way than culturally diverse areas that were more likely to vote Remain. For example, in my own borough of Camden where 58% of the residents are non-UK natives, 75% of people opted to vote Remain (Arnot 2017).

Furthermore, the nationalistic attitude held by many people in favour of leaving the EU may be pushing both 'skilled' and 'non-skilled' EU workers out of the UK. Not only do many migrants do the jobs that the British do not want to do (O'Connor 2016), but they are also invaluable in many 'skilled' fields, including academia. Recently, UCL's provost, Michael Arthur, revealed that 95% of UCL's top European academics have been approached by head-hunters from non-UK universities (Fazackerley 2017). While we do not know how many academics have been lost to Brexit yet, I am sure there will be a significant brain-drain as a result of the Leave vote. It is surely understandable if any migrants do not want to reside in an environment where race-related hate crimes have increased by 41% since the Brexit vote (Forster 2016).

Post-truthers

While my research primarily related to nationalism, I feel compelled to comment on this era of emerging 'post-truthers'. As highlighted by Gardner and Harrison, Michael Gove stated during the Leave campaign that 'people in this country have had enough of experts' (Deacon 2016). This is perhaps related to the correlation between education and voting decision uncovered during my research, where less-educated local authorities had a greater proportion of Leave voters. People now question everything – being an expert in a topic is no longer enough for many members of the general public, perhaps the result of the internet, which allows everyone to be an 'armchair expert'. Scientific scepticism reaches across all academic disciplines, ranging from people who believe a cure for cancer has already been found and is being hidden by drug companies, to people who believe climate change is a hoax and the earth is really flat. Now that information is readily available to all, independent conclusions are simultaneously being drawn, and formal qualifications are no longer a sign of superior knowledge and a more valuable

insight. Perhaps with the rise of post-truthers, many prominent Brexiteers will be unbothered about the brain-drain or possible loss of EU research funding; for without experts, there is no one to ignore.

A final comment

While everyone had different reasons for voting in the way they did, ideology was certainly a prominent reason for many people. It is likely that we will not only suffer a loss of culture, but also a loss of experts and other skilled workers to nations more accepting of cultural differences. It is thought that young people now are the most tolerant generation thus far; yet as diversity decreases, it is likely that such tolerance will decrease alongside it.

Gardner and Harrison addressed the possible implications of Brexit on heritage and archaeology, however, much like Brexit itself – it is an unknown.

Competing Interests

The author has no competing interests to declare.

References

- Arnot, M** 2017 *The Application of Life History Theory to Political Decision Making During the 2016 European Union Referendum*. Unpublished manuscript, University College London. Available at: https://www.academia.edu/34459644/The_Application_of_Life_History_Theory_to_Political_Decision_Making_During_the_2016_European_Union_Referendum.
- Charnov, E L** 1993 *Life history invariants*. Oxford, England: Oxford University Press.
- Deacon, M** 2016 Michael Gove's guide to Britain's greatest enemy . . . the experts. *The Telegraph Online*. Available at: <http://www.telegraph.co.uk/news/2016/06/10/michael-goves-guide-to-britains-greatest-enemy-the-experts/> (Accessed 4 Sept. 2017).
- Del Giudice, M** and **Ellis, B J** 2016 Evolutionary Foundations of Developmental Psychopathology. In: Cicchetti, D (Ed.) *Developmental Psychopathology*, Volume II, Developmental Neuroscience, 3rd Edition. United Kingdom: Wiley, pp. 1–52. DOI: <https://doi.org/10.1002/9781119125556.devpsy201>
- Eleftheriou-Smith, L-M** 2016 Leaving EU would be 'risky bet' for Britain and damage special relationship with US, ex-white house advisers warn. *The Independent Online*. Available at: <http://www.independent.co.uk/news/uk/home-news/leaving-eu-would-be-risky-bet-for-britain-and-damage-special-relationship-with-us-ex-white-house-a6992451.html> (Accessed 9 August 2017).
- Ellis, B J, Del Giudice, M, Dishon, T, Figueredo, A J, Gray, P, Griskevicius, V, Hawley, P, Jacobs, W, James, J, Volk, A** and **Wilson, D** 2012 The evolutionary basis of risky adolescent behaviours: Implications for science, policy, and practice. *Developmental Psychology*, 48(3): 598–623. DOI: <https://doi.org/10.1037/a0026220>
- Ellis, B J, Figueredo, A J, Brumbach, B H** and **Schlomer, G L** 2009 Fundamental dimensions of environmental risk: The impact of harsh versus unpredictable environments on the evolution and development of life history strategies. *Human Nature*, 20(2): 204–268. DOI: <https://doi.org/10.1007/s12110-009-9063-7>
- Fazackerley, A** 2017 Universities abroad headhunting 95% of UCL's top EU researchers, provost says. *The Guardian Online*. Available at: <https://www.theguardian.com/education/2017/aug/29/universities-abroad-headhunting-ucl-eu-researchers-brexit> (Accessed 4 Sept. 2017).
- Forster, K** 2016 Hate crimes soared by 41% after Brexit vote, official figures reveal. *The Independent Online*. Available at: <http://www.independent.co.uk/news/uk/crime/brexit-hate-crimes-racism-eu-referendum-vote-attacks-increase-police-figures-official-a7358866.html> (Accessed 4 Sept. 2017).
- Migliano, A B, Vinicius, L** and **Mirazón Lahr, M** 2007 Life history trade-offs explain the evolution of human pygmies. *Proceedings*

- of the National Academy of Sciences, 104(51): 20216–20219. DOI: <https://doi.org/10.1073/pnas.0708024105>
- Nettle, D** 2010 Dying young and living fast: variation in life history across English neighbourhoods. *Behavioural Ecology*, 21(2): 387–395. DOI: <https://doi.org/10.1093/beheco/arp202>
- O'Connor, S** 2016 The UK will miss unskilled migrants after Brexit. *Financial Times*. Available at: <https://www.ft.com/content/abc67bac-41e1-11e6-9b66-0712b3873ae1> (Accessed 4 Sept. 2017).
- Stearns, S C and Koella, J C** 1986 The Evolution of Phenotypic Plasticity in Life-History Traits: Predictions of Reaction Norms for Age and Size at Maturity. *Evolution*, 40(5): 898–913. DOI: <https://doi.org/10.1111/j.1558-5646.1986.tb00560.x>
- Wilson, M and Daly, M** 1997 Life expectancy, economic inequality, homicide, and reproductive timing in Chicago neighbourhoods. *British Medical Journal*, 314(7089): 1271–1274. DOI: <https://doi.org/10.1136/bmj.314.7089.1271>

How to cite this article: Arnot, M 2017 A Response to Gardner and Harrison: the Reasons for, and Implications of, Brexit from an Anthropological Standpoint. *Papers from the Institute of Archaeology*, 27(1): Art. 27, pp. 1–6, DOI: <https://doi.org/10.5334/pia-547>

Submitted: 25 November 2017 **Accepted:** 26 November 2017 **Published:** 21 December 2017

Copyright: © 2017 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <http://creativecommons.org/licenses/by/4.0/>.

]u[*Papers from the Institute of Archaeology* is a peer-reviewed open access journal published by Ubiquity Press.

OPEN ACCESS 