Staying Sane in an Era of Information Overload: How Heuristics Can Be Used to Fight the Expert Problem

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ABSTRACT

Experts issue forecasts and advice to the public on matters such as education, child-rearing, personal finance, mental health, politics and economics. Since the layman lacks the idiosyncratic knowledge needed to assess the theories, methodologies or analyses upon which this expertise is based, he risks becoming overly reliant on the expert in making sense of the world. In a draft paper circulated in early 2018, the writer Nassim Nicholas Taleb proposed ten principles for politics under complexity, four of which are examined here as means of protecting the layman against the 'tyranny' of the expert. The analysis shows how dominant discourses on immigration policy and social media regulation in the Western media violate these heuristics, and therefore are exposed as ideological activism masquerading as expertise.

Keywords: The expert problem, Heuristics, Sociopolitical discourse, Nicholas Nassim Taleb, Paul Krugman

INTRODUCTION

If you believe the doctors, nothing is wholesome; if you believe the theologians, nothing is innocent; if you believe the soldiers, nothing is safe. They all require to have their strong wind diluted by a very large admixture of commonsense. (Lord Salisbury, letter to Lord Lytton, 15 June 1877).

The 21st century citizen is subjected to a deluge of expertise, analysis and punditry of a scale scarcely imaginable to Lord Salisbury. In the West, a transfer of allegiance has accompanied technological advances following the industrial revolution from the sacred to the secular, from reliance on elders to faith in experts. The power of traditional institutions from which citizens of old would have derived knowledge of the world—the church, the village community, the extended family—has waned[1], while those consisting of experts, such as schools, universities, media corporations, government bureaucracies and think tanks, flourish. In recent years, the Internet, and more recently still social media, have facilitated access and exposure to this pool of willing advice-givers. But the preponderance of experts, and the means by which their expertise is distributed, have failed to disabuse us of our desire for certainty, confidence about the future, or the need to build a consensus on how to solve shared problems (Chafetz, 1996). Walsh (2015) contends that it may even have made us more uncertain in our quest. Even if poor quality expertise could be rooted out, the layman is faced with the inconvenient truth that one expert opinion often contradicts another, and consensus opinion changes over time with new scientific understandings and changing sociopolitical mores.

This paper offers no grand solution to the human quest for understanding. Rather, it is intended to provide some modest aid in identifying (so that it might be ignored) expertise built on ideological, insincere, or simplistic premises. It proposes measures that lie somewhere between the extremes of blind faith in particular experts or information sources (dangerous), and conducting in-depth investigations into the quality of all the expertise encountered (impossible). Following an introduction to the expert problem and the concept of the heuristic, a selection of contentious contemporary discourses is evaluated using principles proposed by Taleb (2018a).

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[1]Western Europe, for example, has witnessed a decline in religious affiliation (Vincett et al.), while in the United States, the congregations of all Christian denominations with the possible exception of Roman Catholicism are in falling year on year (Hopfensperger, 2018).

THE PROBLEM WITH EXPERTS

One prominent example of the expert problem is Paul Krugman. Krugman, who received the Nobel Prize in economics in 2008 for his contributions to new trade theory and new economic geography, writes a weekly column in the New York Times in which he opines on numerous topics unrelated to his academic specialization with consummate confidence. His record of prediction is reliably unreliable:

• He predicted in 1998 that by 2005 it would become apparent that the Internet's economic impact has been 'no greater than the fax machine's' (Krugman, 1998).

• He recommended in 2002 to Federal Reserve Chairman Alan Greenspan that he create a housing bubble to replace the Nasdaq bubble (a crisis in the subprime mortgage market was a major contributor to the financial crash of 2007-2008 (Sanchez, 2013).

• He praised the European economic model just weeks before the Eurozone crisis began.

• He argued before Argentina's recent default that the country's economy was a 'remarkable success story' (Green, 2014).

• He called the U.S. 'just a bystander' in global energy only months before America surpassed Russia to become the world's biggest oil and gas producer (ibid).

• He wrote that Trump's election would cause an immediate global recession (Krugman, 2016).

Krugman's six most recent columns at the time of writing were headlined: "Donald Trump is Trying to Kill You; Republican Health Care Lying Syndrome; The Incredible Shrinking Trump Boom; G.O.P Cruelty is a Pre-existing Condition; Republicans Really Hate Health Care; and Trump's Kakistocracy Is also a Hackistocracy". (New York Times, 2019).

Not all experts constitute a problem. Car owners take their vehicles to mechanics to have them repaired, and societies entrust power generation, bridge construction, and dentistry to the appropriate specialists equipped with cumulative knowledge of their field. The scope of consensus experts such as these tends to be limited to the non-human realm (or, in the case of insurance analysts, the aggregate human realm). They reside on the left-hand side of Table 1, which is derived from Shanteau's (2015) binary classification of expertise into genuine and suspect types.

Table 1. Experts/not experts (adapted from Shanteau, 2015).

Reliably expert	Unreliably expert
Livestock judges	Stockbrokers
Astronomers	Psychiatrists
Test pilots	College admissions officers
Chess masters	'Intelligence analysts'
Physicists	Councilors
Mathematicians	Personnel selectors
Insurance analysts	Judges

In the right hand column can be found social scientists who address much more complicated issues. To this side can be added financial forecasters, political scientists, risk experts, and economists who, Taleb (2010) writes with typical gruffness, 'serve as experts while offering the scientific reliability of astrologers.' Taleb further divides these unreliable experts into two groups. The first contains those who are basically incompetent, unable to 'distinguish between relevant and irrelevant information'; the second consists of those who 'do not know what they do not know' (2008). The attributes listed below can bedevil even the most sincere of experts, but characterize particularly well the expert of the unreliable type. Together, they constitute *the expert problem*:

• Expertise changes over time as the underlying science, or sociopolitical norms dictating acceptable political expression, change. Examples include fashions in dietary advice (Crotty, 1996), or the contentiousness (in politically correct circles) of the nature/nurture debate (Pinker, 2002).

• Experts both take advantage of and fall prey to the objective sheen of the *numerical* over the *narrative*. In the face of what has arguably been lost with modernity (see introduction), Chafetz (1996) notes that some of us are dangerously susceptible to scientists, social 'scientists', or experts who, for example, exhibit as evidence 'numbers calculated by a purportedly objective process', declaring them to be 'true indicators of the best and healthiest ways for us to live.'[2]

• Expertise is contingent upon the institutions that legitimize

[2]Prediction based on relatively simple statistical analyses such as group averages has, however, been found to be more reliable than individual diagnosis in areas such as academic success (Dawes, 1971); business bankruptcy (Beaver, 1966); longevity

and/or finance it. The classification of abnormal behavior as deriving from *mental illness*, for example, was initially metaphorical, but in the following decades became *de rigueur* (Szasz, 2010/1974), as did the chemicals treatments, produced by a powerful pharmaceutical industry, used to treat it[3]; The pursuit of a particular line of research is often tied closely to the pursuit of grant money (Kearns et al., 2016); As Upton Sinclair (1935) noted, "It is difficult to get a man to understand something if his salary depends upon his not understanding it."

• Expertise tends to be mediated to the public by journalists who are motivated less by scientific truth than by the desire to arouse an emotional response (Taleb, 2004).

•Perhaps due to enthusiasm, ignorance, or arrogance, many experts tend to assume that their specialized knowledge is applicable to other fields—a tendency that may be strengthened by overspecialization. As Nobel Peace Prize winner Nicholas Murray Butler quipped, "An expert is one who knows more and more about less and less."

•Experts face few consequences for poor diagnosis/forecasting. Economists, Taleb (2008) notes, regularly produce thirty-year projections for phenomena such as oil prices and social security deficits. He writes: "our cumulative prediction errors for political and economic events are such that every time I look at the empirical record I have to pinch myself that I am not dreaming." Yet these projections are routine, and confined to the dustbin of history as soon as the following years are produced. Two more mainstream examples from recent history were the 'security experts' invited onto cable television to share claims that Iraq was in possession of weapons of mass destruction in the lead up to the 2003 Iraq invasion, and the host of 'intelligence' officials (some of whom may even have been sincere) accusing Donald Trump of colluding with Russia to secure victory in the 2016 U.S. presidential election (Iraq Survey Group, 2004; Mueller, 2019).

•Rather than being part of a grand quest for truth, expertise tends to be produced on demand. "Don't ask the barber if you need a haircut" (Buffet, 1994), and "don't ask an academic if what he does is relevant" (Taleb, 2008). The preponderance of experts is itself a consequence of the demands of academic inflation.

(Einhorn, 1972); and violent behavior (Miller & Morris, 1988).

[3]More than 55% of American adults regularly take prescription medicine (Preidt, 2017).

•Many experts, eager for their expertise to be of practical use, fail to bear in mind the fact that predictive ability declines with the complexity of the phenomenon under examination. It is when experts predict the future or tell us how to live, that we need to be leery (Chafetz, 1996).

In the following section, four simple heuristics that may help protect against the more flagrant violations of scholarly or expert responsibility are introduced.

HEURISTICS AS AN ANTIDOTE TO THE EXPERT PROBLEM

Within psychology, heuristics are unconscious 'mental shortcuts' that ease the cognitive load of decision-making (Simon, 1976; Kahneman et. al., 1982). Examples include the *availability*, *representativeness*, and *familiarity* heuristics (Kahneman & Tversky, 1972; Ashcraft, 2006; Harvey, 2007). More generally, heuristics are aids to learning, discovery, or problem-solving by experimental or trial-and-error methods that allow humans to navigate life without employing technical analyses. Examples include rules of thumb, educated guesses, intuitive judgments, and common sense. Some heuristics are even simpler still, derived personal experience. In the face of information overload, one may use a 'lazy' heuristic such as: 'trust CNN over FOX', for example. For the purposes of this paper, a heuristic is defined as a general rule that we can expect competent experts to follow more reliably than fake experts. No single heuristic is watertight. It is possible, for example, to be a hypocritical gas-guzzling private jet-owner while being right about climate change (see the section *Skin in the Game* below). But taken in the aggregate, they offer some indication of how expertise is either genuine, or of the 'punditry' variety.

METHODOLOGY

The four of Taleb's (2018a) ten *Principles for understanding politics under complexity* utilized in the analysis are presented in the left-hand column of Table 2. On the right are shown their adaptation as heuristics.

Table 2. Principles for understanding politics under complexity (adapted from Taleb, 2018a).

	Taleb's principles	Heuristics
Asymmetries	A weak form of homophily (preference for similar people) is not xenophobia (distaste of the foreigner).	The genuine expert does not condemn others solely for expressing a preference for a particular culture or people.
Skin in the Game	No decision should ever be taken by someone who doesn't exit the gene pool if he or she is wrong.	The genuine expert pays a price for unsound analysis/ prescription.
Scalability	Between the concrete individual and the abstract collective there are a certain number of tangible fractal gradations.	The genuine expert does not conflate levels of scale in his analysis.
Greek vs. Roman	Greeks put theory above practice. Romans put practice above theory.[4]	The genuine expert is pragmatist first, an ideologue second.

These principles were selected on account of their utility in analyzing discourseson contemporary political issues. Particular attention is paid to immigration discourse.

RESULTS

Asymmetries

Taleb (2018a) notes that studies of adaptive systems show how "a collection of people who are tolerant yet have a weak preference not to be in a minority will inevitably cluster to the point that communities may appear deliberately segregated." In research on social dynamics (1969, 1971), the economist Thomas Crombie Schelling observed how even a weak desire to live among people who to a degree share similarities in terms of socioeconomic class, income level, language spoken, or race, can lead over time to almost complete separation of

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[4]This is not, as Taleb (2018a) explains, intended as an ethnographic statement, but a broad-brush distinction between how the Greeks and Romans developed their political theories and practices.

communities along these lines. Interestingly, his *General Theory of Tipping* suggests that neither tolerance between groups, nor a lack of preference for the absence of the other group is likely to prevent *de facto* segregation. While Schelling's theory cannot definitively account for the fact that segregation, rather than multiculturalism, appears to have been the norm rather than the exception for the entirety of human history until the post-second world war period, it certainly predicts that this ought to be the case. A growing body of empirical research within agent-based social simulation supports Schelling's contentions, showing how segregation develops through non-malicious means in various areas of society (Hatna & Benenson, 2012; Stoica & Flache, 2014; Lloyd, 2015; Troitzsch, 2017). Within sociology, a number of studies have found that racial diversity is strongly connected to decreased trust within society (see, for example, Putnam, 2007; Nagle, 2009).

It follows that the easiest way to prevent segregation in a given society is to ensure that citizens have as much in common with each other as possible. Introducing newcomers to such a society in great numbers, especially from culturally distant countries, is unlikely to be the most straightforward way to achieve this. An instinctive uneasiness towards mass immigration by the public on the grounds that is would affect social cohesion cannot therefore be considered irrational. Unless there are strong empirical grounds for painting opponents of mass-immigration in Europe and the United States as primarily motivated by racism (see, for example Rierson, 2016; Kramer, 2018; Krugman, 2018; Shaw, 2019), then it is irresponsible of the expert to do so. Golecde et al. (2017) do in fact present empirical evidence for support for Brexit via a perceived threat of immigrants linked to personality traits of *collective narcissism* (tellingly, this is the label they give to 'belief in national greatness') *right wing authoritarianism*, and *social dominance orientation*.Their study is flawed in a number of ways[5], but of relevance here is the fact that they take as axiomatic the notion that 'fears of immigrants' (a deliberatively emotive formulation of what could easily be termed 'concerns about immigration') are unjustified. This assumption violates the asymmetries heuristic, and alone should raise concerns as to the legitimacy of the study (see also *Greeks vs. Romans*).

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[5]In brief: they surveyed only Brexit voters; average scale scores indicate that respondents did not score particularly highly on these measures; the (slanderously titled) scales test effectively 'reworded' support for Brexit. The result (effectively 'Brexit voters are bad people') was never in doubt.

Skin in the Game

Taleb (2018b) quotes Hammurabi, the sixth king of the first Babylonian Dynasty, as declaring that: "If a builder builds a house and the house collapses and causes the death of the owner of the house—the builder shall be put to death." Thus, the builder has a healthy incentive to produce robust structures. A more recent counterexample raised by Taleb is Robert Rubin, a former Secretary of the United States Treasury, who was paid more than $120 million by Citibank in the decade leading up to the banking crash of 2008, none of which he had to pay back when the taxpayer subsequently rescued the insolvent bank. Unlike Hammurabi's builders, Rubin had no *Skin in the Game*—heads he wins, tails everyone else loses. People with no skin in the game are less incentivized to learn, and should therefore be treated warily, according to Taleb. Examples include tenured professors who cannot be fired, globetrotters campaigning for lower emissions standards[6], and childless leaders of countries[7] (no 'skin in the future').

In terms of immigration debate, the *Skin in the Game* heuristic would require public policymakers (and, for that matter, university professors) enamored of diversity and multiculturalism to live the life they propose others live: residing, competing for their jobs, and sending their children to school with immigrants. In this way they would be required to test their theories on immigration in the light of firsthand experience. Conversely, the opinions of working class citizens who typically have more skin in the immigration game than their leaders should be given a more weight (see *Greeks vs. Romans*).

Scalability

While empirically groundless accusations of racism or xenophbia, or rank hypocrisy from experts (violations of the asymmetry and *Skin in the Game* heuristics) may be relatively easy to identify, implementing the scalability heuristic is more difficult. First, doing so is much more cognitively challenging than viewing the whole as the sum of its parts, with causality running in linear fashion from bottom to top. It thus,

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[6]Compare the Rubin example to the Guardian columnist George Monbiot, a prominent environmental campaigner who has eschewed international travel. His efforts to 'put his money where his mouth is' should, according to the *Skin in the Game* heuristic, incline us to take his opinions more seriously than those of more hypocritical campaigners.
[7]In Europe alone, at the time of writing: Theresa May (UK), Angela Merkel (German), Mark Rutte (Holland), Emmanuel Macron (France), Stefan Löfven (Sweden), Xavier Bettel (Luxembourg) and Nicola Sturgeon (Scottish First Minister).

ostensibly at least, runs counter to the principle of parsimony, according to which simpler explanations are preferable to more complicated ones. In the physical sciences reductionism has long been dead as a universal explanation for the behavior of complex systems. Instead, the emergent qualities of higher order components are understood to act upon lower order components, rendering these lower order behaviors alone insufficient in explaining the behavior of the system as a whole. The same phenomenon can be seen within human psychology and organizations. A simple example: Individual companies comprise the stock market, the emergent behavior of which in turn affects the behavior of individual companies. The principle underlying the scalability heuristic is that systems of different scale—for example the extended family as compared to the body politic—are not only quantitatively different but also *qualitatively* different. As Taleb (2018a) notes with reference to political classifications: "One can be…libertarian at the federal level, Republican at the state level, Democrat at the county level, Socialist within the commune, and Communist at the family level." Concepts such as nationalism or globalism are more complex still and must be addressed at least in part as emergent phenomena with unique characteristics.

Simplistic analogies that conflate scales, while valuable in drawing parallels between different phenomena in the social realm, are particularly susceptible to violations of the scalability heuristic. Grant (2016), for example, argues by way of analogy with out of control household spending that government debt accumulation is fiscally irresponsible. But differences in scale mean that national and household debts are qualitatively different in nature. Cutting household spending brings immediate clear-cut benefits such as being able to pay off credit card debt, while cutting government initiates a much more chain of unpredictable consequences (Varoufakis, 2018). Similarly, while the analogy drawing attention to the hypocrisy of politicians who oppose the construction of a wall on the Southern border of the United States yet build walls around their own houses (Stelloh, 2018) may satisfy the *Skin in the Game* heuristic, it fails the scalability heuristic. A home invasion yields no conceivable benefits to the homeowner, but illegal immigration may—as many who use the wall analogy would readily concede—confer advantages to corporations in need of cheap labor, or to the Democrat party, should entrants later gain voting rights. Rhetorically powerful analogies such as these do not *in themselves* constitute watertight arguments.

The unprecedented scale of social interaction in the information age poses difficulties to the analyst tempted by reductionist explanations. In the space of a decade, billions have gone from largely interacting with relatively few people who they know by name, to interfacing with hundreds or thousands of unknown people, anonymously, at greater speed, about new (often banal) topics, and within certain space constraints. The overall consequences of social media interaction appear to be a mixed bag. Anonymity facilitates incivility and insincerity, yet it can be life-saving to members of repressive societies; while the open nature of social media erodes trust in more traditional media organizations, it empowers citizen journalists with insightful perspectives or honest intentions; and although increased connectivity through social media may have led to reduced trust between people, it undoubtedly offers opportunities for engagement with new and valuable perspectives and ideas.

It is posited here that these contradictions of social media are *inherent to its unprecedented scale*. One's interactions must, *de facto*, be anonymous[8], and given the extension of social media into the public square, interaction must be regulated at the community level rather than *en masse*—because the Internet is not itself a community. Expert analyses, however, to borrow Culkin's (1967) formulation, tend to "view the new as just a little bit more of the old." Notwithstanding the way in which many of the 'concerns' expressed toward social media are disingenuous efforts to silence political opponents, critiques based on fundamental misunderstandings of scale represent a dangerous threat to a free society. Some academics (Davenport, 2002; Schnorr, 2005) and journalists (Albright, 2017) call for anonymity communication to be stripped from the Internet, while others (Lowd, 2018, Fouquet & Viscusi, 2019) propose that social media companies regulate online discourse as though they were the leaders of a community (see above).

Such proposals fail to take into account the way in which the scale of the Internet enables and requires *both* private and public sphere activity. Put simply, in the public sphere one has to watch one's words and behavior so as not to breach social norms. In the private sphere, by contrast, one can afford to be more honest with one's opinions.

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[8]Dunbar (1992) posited that we are cognitively limited to maintaining stable social relationships (those in which we know who everyone is and how they related to everyone else) with 150 people or less.

Internet anonymity can be understood as a way of conducting private sphere interaction 'in public', in that like-minded people can 'meet' in some corner of the Internet to have private conversations. Since billions of people around the world interact 'privately', through the use of anonymity, removing anonymity would be akin to having microphones secretly placed in one's house and conversations recorded there publicly broadcast. The tendency to monitor in-person communications and online communications both arise from the same authoritarian impulse, and it pays for those with such impulses to ignore issues of scale. For a clear example of one purported social media expert's apparent inability to grasp the consequences of scale, one need only refer to Facebook founder and president Mark Zuckerberg's testimony before the Senate Judiciary Committee in 2018:

> …it's clear now that we didn't do enough to prevent these tools from being used for harm as well…We didn't take a broad enough view of our responsibility, and that was a big mistake… It was my mistake…I started Facebook, I run it, and I'm responsible for what happens here.
>
> So now we have to go through every part of our relationship with people and make sure we're taking a broad enough view of our responsibility. It's not enough to just connect people, we have to make sure those connections are positive. It's not enough to just give people a voice, we have to make sure people aren't using it to hurt people or spread misinformation. (Zuckerberg, 2018, emphasis added).

Zuckerberg's naïve (to give him the benefit of the doubt) willingness to play thought police and censor to billions of adult users as though Facebook is *analogous to a classroom in which a teacher strives to cultivate discipline* should be deeply unnerving.

Greek vs. Roman

Giveaway clues that experts place idealism over pragmatism include absolutist proclamations such as 'diversity is our strength' (Rock & Grant, 2016) or, to take an example from libertarians, stubborn belief in the infallibility of the free market (Banks & Powell, 2013). An elementary understanding of recent history illustrates that the type of multiculturalism brought about by mass immigration can introduce into the host society ill effects (see asymmetries). Diversity cannot therefore in all cases, and to all degrees, simply be considered a

'strength'. Similarly, only a fanatical believer in the sanctity of the corporation can conclude that social media companies such as Facebook and Twitter should be entrusted to decide who gets to participate in the public space (see previous section). This section examines how the Greeks vs. Romans heuristic can inform understanding of immigration discourses in the West.

In his infamous 'Rivers of Blood' speech to a meeting of the Conservative Political Centre in 1968, British Member of Parliament Enoch Powell characterized the government's immigration policy as follows:

> *We must be mad, literally mad, as a nation to be permitting the annual inflow of some 50,000 dependents, who are for the most part the material of the future growth of the immigrant-descended population. It is like watching a nation busily engaged in heaping up its own funeralpyre.* (Powell, 1968).

Following this provocative speech, in which he talked of the black man gaining 'the whip hand', Powell was fired from the shadow cabinet. The general public, however, was more sympathetic to Powell than the party leadership: 98% of the 110 thousand letters he received following his dismissal were supportive, and a subsequent Gallup poll found that 74% of the general public agreed with Powell that mass-immigration should be halted (Neather, 2009). The gap between government and public opinion on mass-immigration remains almost as stark 50 years later. 67% of the British public in 2011 thought that the previous decade of immigration had been 'a bad thing for Britain'. The results of a poll of European public opinion in 2014 showed that a majority wished for lower levels of immigration; in all countries surveyed, 60% or more of respondents disagreed that the presence of inhabitants of different nationalities, ethnic groups and races made their countries better to live in.

Despite this, mass immigration from the third world into Europe continues unabated. The general intellectual and political establishment NGOs, government officials, and immigration 'experts' consistently undermine public concerns about mass immigration[9].

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[9]Space precludes a rigorous defense of this assertion, and it is left to the reader to decide how fair this portrayal is.

Immigration is inevitable, and complaining about it will not do any good:

• A spokesman for the Office for National Statisticsclaims that a report that white Britons form a minority in 23 out of 33 boroughs in London constituted 'a tremendous display of diversity' (Goodwin, 2012).

• Foreign minister, Boris Johnson opines: "We need to stop moaning about the downburst. It's happened. There is nothing we can do now except make the process of absorption as eupeptic as possible" (Johnson, 2012).

• Sunder Katwala of the think tank 'British Future' responded to opponents of mass immigration: "The question of do you want this to happen or don't you want this to happen implies that you've got a choice and you could say 'let's not have any diversity'…this is who we are—it's inevitable" (Katawala, 2012).

• Former Labour policymaker, Andrew Neather (who refers to those opposing immigration as 'whingers') explained why the Blair government eased immigration laws as follows: "to rub the right's noses in diversity..." (in Whitehead, 2009).

The media, which by virtue of its function plays an expert role, tends to avoid discussion of the negative consequences of mass immigration while castigating the public for opposing it. The final paragraph of an article entitled "The Immigration Crisis is Tearing Europe Apart" (Stokes, 2016), for example, reads:

The intertwining fear of refugees, Muslims, and terrorism is now very real among many Europeans. This in itself poses a major challenge for leaders of countries that are rapidly becoming more diverse. Compounding this is the rise of right-wing populism and the spread of nativist rhetoric. And each terrorist incident only strengthens this argument and adds to the base of support. If the far-right continues to surge in the months ahead in countries like France and Germany, it could mean a return to nationalist politics that have more than once left Europe with a sorry legacy.

The implication is that public opinion, not immigration policy, is to blame for the 'immigration crisis', and that the solution is therefore for the public to 'correct' its ideology. The problem with terrorism, for example, is not dead bodies and bereaved families, but the way in which it strengthens the populist argument (a clear example of reality viewed as a hindrance to ideology); stated differently: "if only terrorism *didn't* turn people against immigration, the situation would be better." Popular views favoring reduced immigration and independence from the EU are smeared as far-right and implicated in the resurgence of Nazism (no definitions of these terms are offered)[10]. It is hardly surprising that the Western media are increasingly reviled (Ingram, 2018).

CONCLUSION

Chafetz (1996) notes that when we become dependent on experts for too long, we "undermine our natural instinct for self-preservation. Like an addiction, dependency eventually makes us fragile and impotent." In this paper it has been shown that the evaluation of public discourse in terms of heuristics can help identify 'experts' of the undesirable variety, who exhibit the following behavior:

• Basely condemn the character of those who exhibit a perfectly natural preference for people who are *like themselves* in certain ways
• Hypocritically propose public policy that is at odds with their private behavior
• Lack awareness of differences in scale
• Fail to maintain awareness of how their ideology to shapes their analysis

It is hoped that more work can explore how heuristics such as these, or others like them, can be put to practical use to help the non-expert retain some sanity in an era of information overload, for example through their use in education.

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[10]For a more detailed analysis of this topic, see Pigott (2018).

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