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## Markets are a function of language: notes on a narrative economics

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## Markets are a function of language: notes on a narrative economics

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### Abstract

Narratives are under-theorised and until recently under-recognised as core variables influencing the speed and direction of changes in expectations and, therefore, as core macroeconomic variables that shape the policy processes of central banks. The author examines below how the thousands of micro-level narratives garnered on a regular basis by the Bank of England's staff of regional agents can inform what Ricardo Reis and Alan Blinder (Understanding the Greenspan standard, 2005) term the "macroeconomic allegories" that influence monetary policy decision-making. The contacts that make up the 'network' perform descriptive, explanatory, and interpretive labor *in situ* putting words both to the ephemera of local expectations across the UK and to the rapidly changing competitive pressures unfolding in global markets. Internal studies have demonstrated that the micro-level narratives collected and scored by the agents provide the most reliable information on the future course of the British economy of any of the projections or forecasts available to the Bank.

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## Introduction

Narratives are under-theorised and until recently under-recognised as core variables influencing the speed and direction of changes in expectations and, therefore, as core macroeconomic variables that shape the policy processes of central banks – in this case the Monetary Policy Committee of the Bank of England (MPC).

The Bank operates a ‘network’ consisting of a relatively small staff of ‘agents’ spread across twelve regional offices. The network is composed of approximately 9,000 contacts in the business and financial communities, as well as in governmental and non-governmental organisations, and the agents interview 600 or so of these contacts each month. In these interchanges, they glean contemporaneous reports on the UK economy, and they also garner from their interlocutors the details and contradictions typically lost or suppressed by economic statistics. The discursive exchanges enable them to put words both to the ephemera of local expectations and sentiments and to the rapidly changing competitive pressures unfolding in global markets, particularly among the UK’s trading partners. The diverse groups of contacts that make up the network perform descriptive, explanatory, and interpretive labor, refining the discursive nature of economic phenomena in real time. The agents summarize and score these conversations and present their findings to members of the MPC just prior to their regular scheduled decisions on interest rates.

Drawing on past work and preliminary thoughts provoked by a new collaborative project<sup>1</sup>, I intend to show how the micro-level narratives told to the agents by their contacts inform what Ricardo Reis and Alan Blinder (2005) term the “macroeconomic allegories” that influence monetary policy decision-making. A wider claim is that precisely at a time when fundamental understanding about the UK may be subject to significant shifts and/or transformations—at present this is “Brexit” influenced but it could be at any moment triggered by other disruptions and shocks—the narratives picked up and interpreted by the agents are providing meaningful accounts that can help the Bank navigate what are uncharted waters.

This is by no means an idle claim. Internal studies have demonstrated that the regular scoring exercise performed by the agents provide the most reliable information on the future course of the British economy of any of the projections or forecasts available to the Bank (England et al 2015). In other words, the agents’ scoring system—despite its highly qualitative and subjective nature—regularly anticipates key economic measures before they are available in Office of National Statistics (ONS) reports.

In the first instance, we seek to explain this predicative capacity, how narratives gleaned by the agents can provide analytical purchase on the future direction of the UK economy.

What follows is not a report on the new research per se, but rather a preliminary effort to portray the operation of a narrative economics: how it functions and where it can be observed. Specifically, we are investigating how narratives move through the Bank influencing policy pronouncement and underwriting communications with market participants, parliamentarians, and various segments and strata of the public.

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<sup>1</sup> The research on which this paper is based is being carried out based at the Centre for Decision-Making under Uncertainty at University College London by Laura Bear, Alice Pearson, David Tuckett and myself consulting with Tim Besley (LSE). The text draws directly on material from Holmes (2018).

More broadly, we seek to delineate the particular—indeed critical—analytical labour that a narrative economics can and does perform and how these innovative practices can contribute to a rebuilding of macroeconomics.

We are arguing for an approach to macroeconomics that is inherently interdisciplinary, indeed, an approach that at every turn invites analytical scrutiny from the other social and behavioural sciences and perhaps even the humanities.

Finally, our approach is neither fanciful nor speculative: a robust narrative economics is integral to the operation of central banks (see Abolafia 1998; 2004; 2005; 2010). Indeed, in the following section Ben Bernanke acknowledges the crucial role of language—“talk” as he puts it—in recasting the analytical agendas of macroeconomic to address the day-to-day exigencies of central banking.

## **Visible Hands, Audible Voices**

Here is a brief aside by a former central banking, Ben Bernanke. The comment captures the rhetorical nature of monetary policy, while simultaneously posing, albeit implicitly, key questions of, and for, a narrative economics:

When I was at the Federal Reserve, I occasionally observed that monetary policy is 98 percent talk and only two percent action. The ability to shape market expectations of future policy through public statements is one of the most powerful tools the Fed has. The downside for policymakers, of course, is that the cost of sending the wrong message can be high. Presumably, that’s why my predecessor Alan Greenspan once told a Senate committee that, as a central banker, he had ‘learned to mumble with great incoherence’. (Bernanke 2015).

In the informal genre of a blog post—indeed his first blog post—the former chair of the Federal Reserve System broached, albeit wryly, the deepest questions about the nature of contemporary monetary affairs. He asserted that monetary policy is managed not solely or necessarily by conventional levers that central bankers’ employ to set interest rates and regulate the availability of money and credit, but by ‘talk’.

This assertion, of course, begs a series of other questions: what is the nature of this talk, where does it come from, how does it work? Further still, it opens vertiginous questions of how markets, particularly financial markets, operate as a function of language (Austin 1961; 1975; Holmes 2014a; Riles 2011).

Talk is action. But who is listening? Bernanke is suggesting that there is an audience for this talk, an audience that is not merely overhearing policy pronouncements, but enacting them prospectively. This talk is not simply a descriptive genre for the representation of economic and financial conditions; it is the substance of policy (Draghi 2012; Yellen 2013).

By drawing attention to the now famous aside by his predecessor, Alan Greenspan, Bernanke contrasts his attitude towards communication with the traditional stance of central bankers as resolutely secretive, as figures who cultivated opacity and viewed talk, clear unambiguous talk, as antithetical to the effective exercise of their statutory duties.

Bernanke's modest blog post also disrupts fundamental assumptions of economics, not least of which is how economic ideas are created and by whom, as well as how these ideas are integral to the operation of the economy and not sequestered from it in the realm of academic scrutiny.

Talk implies a conversation and thus, from the standpoint of neoclassical economics, it represents an anomaly insofar as it spawns forms of social relations as instruments for both gleaning information and the exercise of policy (McCloskey 1985). This talk has an unusual reach, demarcating conversations sustained by vast, global networks of interlocutors in which distinctive forms of knowledge are circulated relentlessly (Habermas 1987, 1991; Holmes 2014b).

The talk also reaches down to the deepest levels of quantitative research within central banks, to the technical operation of the large macroeconomic models and the scenarios they generate: variables are critically scrutinized, theory continually reassessed, and layer upon layer of contextual information added discursively. The economy and financial systems undergo a continuous and relentless linguistic intermediation (Holmes 2014a; Morgan 2012).

Perhaps most importantly for our research, language is used experimentally to explain and articulate the novel contingencies defining central banks' relationship to the market and to the public (Dewey 1927; Lippmann 1927).

*How is language used experimentally?*

Far more than the price of money is at stake in central bankers' narratives: talk is their two-way bridge to the sociological and political, and to the entrepreneurial relationships within which creative economic action is planned and orchestrated.

Thus coextensive with the market is an expansive communicative field across which words and ideas circulate, and within which the policy pronouncements thereby informed are reflected and acted upon (Akerlof and Shiller 2009; Beckert 2016; Searle 1969; Bronk and Jacoby 2016).

Central bankers create and enter, as it were, a communicative field upon which countless protagonists model economic phenomenon for their own purposes employing their own pragmatic insights and grounded truths. They (and we) are confronted with actors whose futures are enlivened by just about every emotional sensibility, every constellation of thought and belief, reason and unreason, rationality and irrationality; as well as every human proclivity to create truth, untruth, virtue, beauty, and depravity (Bronk 2009: 84-148). The stories told by these unruly figurers can impel or impede the leaps of faith that ratify or foreclose a tractable future (Beckert 2016: 263). The efficacy of monetary policy thus rests on the representational enterprise of these protagonists with whom central bankers must orchestrate prospectively the contingencies of economic stability and growth (Holmes 2018).

We can map out this communicative field as a prerequisite for a narrative economics and the Bank of England's Agents' Network allows us to begin that task. Let me say a bit more about the Agents' Network and its remarkable capacities to use language discursively and experimentally

## **The Network**

Central bankers employ carefully constructed networks (formal and informal) as a means to glean backstories incorporating an alternative epistemic framework—that is an alternative to their

standard quantitative analyses—to render the economy and the financial system legible. In this way, they draw on stories continually generated outside the central bank from situated actors who are themselves orchestrating and evaluating economic and financial conditions.

Central bankers have developed sophisticated discursive techniques to assimilate these stories—and the contextual information they contain—into their communicative regimes and their policy frameworks.

Again, The Bank of England’s ‘network’ operates by means of relatively small staff of ‘agents’ spread across twelve regional agencies. The network is composed, again, of approximately 9,000 contacts in the business and financial communities, as well as in governmental and non-governmental agencies, and the regional agents interview 600 of these contacts each month.

The contact pool is selected ‘with a cross-section of companies in terms of sector, location and size, in order to get a reasonably balanced view’ of the UK economy as a whole (Ellis and Pike 2005, 424).

There is an amplification effect that ramifies across this communicative field. Each of the nine thousand contacts, the moving parts of the network, are continually in conversation with scores of their own contacts, creating an enormous epistemic apparatus of secondary and tertiary actors that extends the field of intelligence-gathering far beyond the shores of the UK, yielding a system for gleaning information with a global reach (Holmes 2015: 23)

The reports generated are summarized and presented to the Monetary Policy Committee of the Bank just prior to its deliberations on interest rates.

Senior policymakers from the Bank—including the governor and deputy governors and other members of the MPC—regularly accompany the agents on these forays into the field. These senior officials communicate central bank policy during these visits, but they also actively solicit stories—*anecdotal data*—from the employees, managers, and owners of these enterprises. They talk numbers; they talk trends; and they talk outlooks.

In these interchanges, they glean contemporaneous reports on the UK economy, and they also garner from their interlocutors the details and contradictions typically lost or suppressed by economic statistics.

The discursive exchanges enable them to put words both to the ephemera of local expectations and sentiments and to the rapidly changing competitive pressures unfolding in global markets, particularly among the UK’s trading partners.

This network of interlocutors provides technical representations of the British economy, imparting (or restoring) social mediation and social context to economic analysis (Holmes 2014a, 108; Riles 2000). The diverse groups of contacts that make up the network perform descriptive, explanatory, and interpretive labor, refining the discursive nature of economic phenomena in real time.

In these face-to-face conversations, officials draw on the creative insights of individuals, who are making, remaking, and unmaking the economic drama prospectively under conditions in which ‘*ceteris paribus*’ does not obtain (Rudnyckij 2014).

These conversations—the micro-foundations of a narrative economics—can align policy with the shifting challenges of the present and the near future and the means and methods by which they are addressed by firms, households, and individuals.

These interlocutors are, in fact, protagonists who model the economy and the financial system on their terms and for their purposes. Their ideas—their configurations of belief—thereby play a decisive role in the economic and monetary drama by which investment, employment, and consumption plans by firms, households, and individuals become the basis of action or inaction.

The forward-looking appraisals of these contacts—articulated in a language that may or may not be congruent with conventional economic theory—are capable on their own of orchestrating the transformations by which plans become deeds (Austin 1975; MacKenzie 2006; MacKenzie et al 2006; Merton 1948).

Information, data, and intelligence managed by means of the Network provide policymakers with distinctive insights—thick descriptions—of the operation of the UK economy. In this bottoms-up process the judgment, experience, and intellectual acumen of thousands of protagonists are brought to bare the shifting opportunities and challenges. According to Andy Haldane (citing three internal Bank studies) the agents’ network provides the Bank with the best forward-looking information available on the development of economic and financial conditions.

A majority of the [Agents’] scores have a correlation coefficient of over 0.7, indicating a strong degree of comovement. Some of the highest correlations are for output measures for key sectors of the economy, such as business services and manufacturing output. Correlations in pricing for those sectors are also very high, although retail goods price inflation has the highest correlation of any individual score (England et al 2015).

*Why does it work?*

Our preliminary answer is relatively simple, deceptively simple. The “predicative” or forward-looking capacity of this reporting regime resides, unsurprisingly, in the information exchanged in the meetings relating to planning, broadly conceived. For example, discussion relating to employment and investment over the coming year or two and the forces influencing changes in those plans can be particularly diagnostic. But virtually every other aspect of business planning and the expectations they encompass can provide forward-looking appraisals that anticipate changes in the broader economy. This remains the most active area of our research and we are developing a systematic method for appraising shifts in various registers of planning and the expectations influencing planning decisions.

## **Aside on the Anecdotal**

Much of my work as an anthropologist has been based on exploring precisely this kind of discrepancy in the data, information, and intelligence. A particular kind of information has been central to my approach since the 1980s: the “anecdotal account.”

A reference in late 2000 to “anecdotal reports” as the basis a key decision by the policy committee of the Federal Reserve convinced me that an anthropologist had good reasons to spend

time in central banks (Holmes 2014a; 2014b).<sup>2</sup> Indeed, my efforts to determine what Fed officials meant by “anecdotal data” revealed the operation of a sophisticated epistemic apparatus—like the Banks’ Network—in which language and communication were absolutely essential.

For anthropologists, “anecdotal” is not a tainted or disreputable term, but fundamental to our methodological approach, fundamental to our science. We traffic in narrative accounts as the basis of what we call “ethnography” (Holmes and Marcus 2007). Ultimately, this ethnographic approach led me to investigate over the last three decades how markets are made, remade, and unmade by means of language. Specifically, I have argued that meaningful information no longer solely or necessarily arises from the interplay between and among variables, rather it is available to us in and from contextual materials, from contextual accounts that constitute a narrative economics.

A former senior executive of a chip manufacturer put it simply: we know exactly the number of chips sets we ship to China, but we do not fully understand how they are used. The latter problem is, of course, a narrative problem that can be investigated ethnographically.

The operation of anecdotal data is critical for an understanding of another role the Agents’ Network performs.

## **Puzzles**

We are interested in how the agents investigate “puzzles,” eliciting interpretive narratives about changes in the underlying dynamics of the economy and with the means and method for measuring these changes. This kind of interpretative labor, though at times urgent, does not directly align with the regular MPC process.

“Our agents are in a unique position to be able to gather the most up-to-date intelligence on the ground and to offer insights into puzzles in official data, such as the performance of productivity. They help the Bank to understand how the world is changing and how firms’ behaviour is evolving.” <https://www.bankofengland.co.uk/about/people/agents>, accessed September 20, 2018

These puzzles are not merely investigated by means of conversations with a hand full of contacts in the field, rather they emerge in the regular discussions among the agents as well as in discussions they have with senior personnel of the Bank.

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<sup>2</sup> “Vice Chair William McDonough (New York Fed) outlined the particular situation the committee faced in mid- December 2000: ‘Available official and private data make clear that the expansion is slowing to a pace below trend growth. Inflation seems quiescent, but it is not decreasing. Anecdotal evidence, however, is overwhelming that the economy is slowing faster than the available data indicate, and the anecdotal information is more forward- looking. The economy in my view is likely to grow at a slower pace than we had hoped to achieve through our policy tightening’ (FRB 2000b, 58–59). The other senior member of the committee, Chair Alan Greenspan, was more precise about the significance of the anecdotal data and the urgency of their message: ‘I’ve been hearing the same sort of adjectives that all of you have heard used to describe everything that is going wrong. And indeed we ought to be very careful to recognize that if one could put hard numbers on the anecdotal data we now have, we would not be looking at a 2 percent plus growth rate in GDP. It would be closer to zero. How one reads that evidence is a question, which we have to consider’ (Holmes 2014a: 44).

Thus in addition to shadowing the agents on their forays in the field, we (the UCL team) have begun to analyze conversations among agents and how they address specific questions posed by members of the MPC. In particular, we will focus on the meetings (scheduled immediately after the pre-MPC meeting) when agents are in direct conversations with MPC members.

These conversations typically focus on ambiguities and anomalies in standard macroeconomic measures and the development of open-ended questionnaires that the agents can use to glean relevant information from contacts to address if not resolve these puzzles. The kind of issues that can and have been investigated include productivity, supply chain issues, the shifting composition of the labor market, investments in IT and AI, the impact of venture capital, the emergence of peer-to-peer financing, shifting nature of outsourcing, the impact of on-line retailing and so on. Questions like these can be probed via narratives, via thick descriptions offered by contacts grappling with these riddles in situ. Again, these questions often address the changing nature of the UK and global economies, the means and methods by which we measure, analyze, and interpret these changes.

In the next phase of the project we will also examine how the agents answer questions posed by members of The Financial Policy Committee (FPC) and The Prudential Regulation Authority (PRA). We are particularly interested in how these two reporting systems interact and how the practices of the agents have evolved to accommodate these new demands.

Thus, we are increasingly interested in the kinds of questions that policymakers are posing and the means and methods by which agents answer them.

## **From the discursive to the textual Narratives**

We are also examining how indeterminacy is built into the policy apparatus of the Bank of England. Fundamental to our project is fully acknowledging the operation of uncertainty at every juncture in the formulation and communication of policy (Tuckett, David and Milena Nikloic 2017; Tuckett 2018).

We have thus far emphasised the operation of narratives as discursive phenomenon, herein we broach the operation of narratives as textual phenomenon as serialized statements suturing economic and financial research to the Bank's regulatory functions (as specified in the Bank of England Act 1998).

Narratives—which in the first instance operate as a descriptive and interpretative genre—take shape textually as interrelated insights that can underwrite the adjudication on policy. The serialized nature of both the research and the decision-making operations render both inherently uncertain and, crucially, provisional. Decisions are based on what are—to a greater or lesser degree—imperfect historical data and the outcomes of any policy decisions will only yield measurable results in the medium term, something like six to twenty four months in the future.

Further these decisions are susceptible to refinement, revision, and reversal at subsequent policy meetings. Decisions on interest rates are, thus, punctuations in the process of monetary policy, rather than ends. Decisions are never definitive or absolute but rather they operate under the sign of indeterminacy as the means by which the Bank acts upon and within the dynamic landscape of expectations (Tuckett 2018).

We have begun to investigate one regular report that marks the shift in discursive to textual narratives: the Minutes of an MPC meeting.

## **Minutes**

The Minutes (and related documents) are part of a serialized process, which discloses the distinctive forms of technocratic labour performed by personnel of the Bank.

For example, the Minutes of the August 1, 2018 Monetary Policy Committee Meeting represents a summary statement—in 39 steps—of discussions that yielded a decision on interest rates. The sequential steps demark particular areas of the Bank’s research and data analysis functions and each is bracketed by contingency and conditionality. In other words, the Minutes represent an inscription of the policy discussions—the meta- or composite narrative—that underwrites policy deliberation.

Different forms of indeterminacy and contingency punctuate each of the 39 steps: taken together they reveal the logic—the institutional logic—of monetary policy. The economy and financial system emerge in 3500 words, as a textual instrument upon which policy decisions are rendered—as a matter of law—susceptible to parliamentary oversight and public scrutiny.

These accountabilities yield a distinctive kind of “conviction narrative” that must be persuasive and legible to market participants and various segments and strata of the public and, not insignificantly, to policymakers themselves. This sequence of steps thus serves as the epistemic bridge from monetary affairs to political economy (Tuckett and Nikloic 2017; Tuckett 2018).

Further, the formulation of this kind of conviction narrative acknowledges at each juncture the boundless complexity of economic and monetary phenomena and the relentless uncertainty that define them. Restated, policy formulation is predicated on a stark inevitability: every metric available in the present can and will within a relatively short interval be superseded, with measures that convey (or not) different information with potentially different policy implications.

The Minutes lay out the fundamental logic of decision-making as a sequence of steps, which progressively and cumulatively set the stage for a vote on interest rates. Each step conveys relevant data and the uncertainties that surround them. Policymaking is built on a truly staggering amount of data and the reciprocal indeterminacies, which are inextricable from them (Tuckett 2018).

The Minutes, along with “key judgements” supporting the policy decision are delineated in Section 5 of the Inflation Report. Both documents are drafted sentence by sentence with most if not all of the members of the MPC and their staffs participating. Hence these documentary materials seek to blend and synthesize numerous voices, diverse perspectives, as well as alternative analytical and interpretative modalities. The Bank openly acknowledges discretion as fundamental to its deliberative process.

The rhetorical expertise of the Bank are revealed in these documents, their capacity to move among diverse technical narratives in the formulation of a systematic rationale for policy decisions. Broadly, we seek to foreground these rhetorical competences, to bring them fully within the ambit of macroeconomics. Further we seek to demonstrate how these documents align

systematically economic analysis with statutory requirements governing the Bank, to yield a policy decision, a decision that can accommodate dissent and uncertainty (Tuckett 2018).

## **Conclusion**

Let me return to Brexit. Markets are a function of language by virtue of the technical work of regulators, diplomats, and politicians who will in all likelihood be charged with revising and re-writing the legal architecture of commercial transactions across industries and regions of the UK.

To rebuild macroeconomics from the standpoint of policymakers/regulators we must include them in our analytical framework, and, as argued above, we must draw on their experience, and their intellectual acumen to inform our understanding of institutional dynamics operating discursively and textually (see Tim Besley’s work).

The conceptual tools—the variables—by which policymakers explain, interpret, and model economic and financial phenomena are transitory, if not fugitive. As a result, central bankers—like other policymakers—can reconfigure and stabilize their own understanding of the uncertain futures they face—provoked at the moment by Brexit—only through sustained conversational interaction with the market and the public.

The Agents’ Network affords us access to protagonists providing narrative appraisals of the shifting architecture of markets and the challenges they pose for businesses and households across the UK. Again, the efficacy of monetary policy rests—whatever the outcome of Brexit—on the representational enterprise of these protagonists with whom central bankers must orchestrate prospectively the contingencies of economic stability and growth (Holmes 2018).

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