So language. Very prescribe. Wow.

Abstract: The philosophical dispute about linguistic normativity is one battlefield in a larger war over the nature of language as an object of scientific study. For those influenced by Wittgenstein, language involves following – or failing to follow – public, prescriptive rules; for Chomsky and his followers, language is a property of individual minds and brains, and the grammatical judgements of any mature individual speaker – her competence – cannot be, in any linguistic sense, 'wrong'. As I argue here, the recent 'doge meme' internet fad provides surprising evidence for the prescriptivist view. Normative attitudes towards linguistic practices are a ubiquitous feature of those practices, and there is no principled basis on which to regard them as non-linguistic.

Keywords: Chomsky; Doge; I-Language; Normativity; Prescriptivism.

The familiar popular dispute between descriptivists and prescriptivists about grammar is – let us not mince words here – a profoundly tiresome and pointless one (Wallace 2001), which the explosion of opportunities for pedantry afforded by the internet has done everything to amplify, and nothing to revivify; I have no intention of pursuing it here. But the dispute has roots, or at any rate analogues, in some deep issues in theoretical linguistics and the philosophy of language; and as I shall argue, interesting light is shed on *that* dispute by a most unlikely online phenomenon.

I begin by summarising the main threads of the philosophical debate about normativity in grammar, and the apparent stalemate they have recently issued in. I then try to make whatever sense can be made of the wilfully absurd 'Doge' meme, before showing how that phenomenon, surprisingly, provides significant evidence for the prescriptivist case.

1.

The philosophical dispute about linguistic normativity is one battlefield in a larger war over the nature of language as an object of scientific study. According to Noam Chomsky and his followers, the popular view of language as a public, collective, or abstract entity has no place in a scientific worldview; language is a feature of the individual brains of individual speakers. And one consequence of this view is that mature speakers cannot be 'wrong' in their linguistic judgements or practices, by any scientific standard; linguistic should aim to describe the *I-language* – the relevant features of individuals' minds and brains – and the

behaviour that results from them, and eschew any attempt to evaluate that behaviour as proper or improper.

The radicalism of the I-language or 'mentalist' position (Isac & Reiss 2008: 12) is often unappreciated. 'There is simply no way of making sense of ['a notion of "common, public language"'],' writes Chomsky. '… or of any of the work in theory of meaning and philosophy of language that relies on such notions' (1995: 48-9). And lest we thought he was making a narrower claim than he appears to be in this statement, he immediately assures us that it 'is intended to cut rather a large swath' (*ibid.*). Variations on this theme recur throughout Chomsky's writing. Whereas the I-language is 'a real object of the real world' (Chomsky 1993: 39), and 'as real as chemical compounds' (Chomsky 1988: 679), public language ('E-Language') is 'arbitrary' and 'artifactual' (Chomsky 1986: 26); despite philosophers' 'constant reliance on some notion of "community language" or "abstract language," there is virtually no attempt to explain what it might be' (Chomsky 1993: 39). And public language is 'useless for any form of theoretical explanation' (Chomsky 1995: 48), playing no 'role in an eventual science of language' (Chomsky 1986: 16); we 'gain no insight into what [language-learners] are doing by supposing that there is a fixed entity that they are approaching, even if some sense can be made of this mysterious notion' (Chomsky 1992a: 17). Any distinctions we might wish to draw between different 'public languages' are therefore matters of class, politics, or race, rather than linguistics; '(p)eople who live near the Dutch border,' he writes, 'can communicate quite well with people living on the German side, but they speak different languages in accordance with the sense of the term [Michael] Dummett argues is "fundamental"' (Chomsky 1992b: 101).

On Chomsky's view, then, there are no such entities, abstract or concrete, as 'public languages'; at most, there are mereological sums of more-or-less overlapping particular I-languages, embodied in the brains of particular individuals. But these sums play no explanatory or theoretical role in linguistic science, and there is no scientific basis for drawing their boundaries in one place rather than another.

Now, if language is not a property of communities, as Ludwig Wittgenstein recognised, then there cannot be any question of any individual speaking 'correctly' or 'incorrectly'. If there is no external, community standard by which to judge my speech, 'whatever is going to seem right to me is right. And that only means that here we can't talk about "right"' (Wittgenstein 1953: §258). For Wittgenstein it followed that, language being normative, its

rules must be matters of public convention. But one man's modus ponens is another's modus tollens; for Chomsky, it followed that language, being a property of individual minds and brains, could not have rules in Wittgenstein's sense at all (*cf.* Chomsky 2013: 183).

It is to this issue, indeed, that we can perhaps trace Chomsky's introduction of the terms *I-Language* and *E-Language*. Chomsky had previously distinguished between *competence* and *performance*; the linguistic knowledge possessed by a speaker and the concrete linguistic phenomena they produced as a result. But Saul Kripke's exegesis of Wittgenstein's rule-following considerations directly challenged this terminology; competence, he observed, is 'not a dispositional notion. It is normative, not descriptive… [it] is dependent on our understanding of the idea of "following a rule"' (1982: 31, fn.22). 'Modern transformational linguistics,' as a result, 'inasmuch as it explains all my specific utterances by my "grasp" of syntactic and semantic rules generating infinitely many sentences with their interpretation, seems to give an explanation of the type Wittgenstein would not permit' (*ibid.*: 97, fn.77).

So much the worse, then, in Chomsky's eyes, for Wittgenstein. In his first major work following the publication of Kripke's lectures (which had circulated for several years previously) Chomsky not only responds to 'Wittgenstein,'[1] but also replaces the older competence/performance distinction with the new I-Language/E-Language one. It is in his rejoinder to the Wittgensteinian criticism that Chomsky first explicitly denies that there are 'rules' of language in any familiar sense (Chomsky 1986: 688*ff.*). Language consists not of normative rules, but of purely descriptive principles and parameters for neural and mental organisation, and these are to be understood simply as natural, biological features typical to our species (*ibid.*; *cf.* Chomsky 1995: 17).[2] The underlying dichotomy presumed here between the normative and the natural has been forcefully challenged (Millikan 1995;

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[1] It is to the version of Wittgenstein presented by Kripke – often referred to as 'Kripkenstein' or 'Kripke's Wittgenstein' – that he in fact responds; the consensus view seems to be that this does *not* represent the real Wittgenstein's position, and Kripke is careful not to assert that it does (Steiner 2011: 170, fn. 20). McNally & McNally (2012) provides a useful overview of Chomsky's response.

[2] One notable failure to appreciate the radicalism of Chomsky's turn here can be found in Devitt (2008), whose index contains a single combined entry for 'rules (or principles)', and generally treats this as a merely terminological shift, attributing a single position on the status of linguistic rules and their mental representation to Chomsky on the basis of both pre- and post-1986 writings (*e.g.* p. 4, 69, 174-5). But Chomsky has tended to obscure the discontinuity of his views here, and I myself have previously overlooked the novelty of the I-Language position (Glackin 2011: 203, 210).

Millikan 2003; Millikan 2005); nevertheless, for Chomsky, normativity and prescription 'plainly has nothing to do with an eventual science of language, but involves other notions having to do with authority, class structure, and the like' (Chomsky 1988: 675; c*f.* Isac & Reis 2008, ch. 12).

According to Chomsky, then, language is not the sort of thing mature individual users can 'get wrong'; at most, we can descriptively state that they fail to make themselves understood (Chomsky 2000: 7). However, this view not only runs counter to those of the great number of philosophers influenced by Wittgenstein; it is also at odds with the phenomenology of our language-use.

It is uncontroversial that we do in fact experience the 'rules' of our grammar, whether or not we can formulate them explicitly, as having some sort of normative pull. 'When we hear ["The child seems sleeping"],' write the authors of a recent pro-Chomsky textbook, 'we automatically interpret it as meaning basically the same thing as what *The child seems to be sleeping* means. And yet, it intuitively feels like there is something wrong with the structure of the sentence' (Isac & Reiss 2008: 83). For Peter Ludlow, elucidating Chomsky's view, a sentence like 'That's the book that Bill married the woman who illustrated', while perfectly comprehensible, is nevertheless 'clearly bad' (2013: 6). Maria Teresa Guasti tells us, of three-year-old speakers, that '(a)lthough their language may still not be perfect, they put words *in the correct order*' (Guasti 2004: 2. Emphasis added). These clearly normative judgements of acceptability seem ubiquitous among language users. Indeed, they constitute the main, perhaps the sole, evidence available to linguists in their primary empirical task of reconstructing speakers' I-Languages;[3] and Chomsky declares that 'a theory of language [which] failed to account for these judgements … would plainly be a failure' (1986: 37). How, then, can it be claimed that language is not normative?

The key, for anti-prescriptivists, is to distinguish between *what the intuitions express* and *the fact that speakers have these intuitions* (Devitt 2008: 119; Devitt & Sterelny 1989: 520-1). The linguist can use these judgements as evidence of how the speaker's I-Language is constructed, without taking their content – including its normative aspect – to be *true*. The normative pull experienced by the speaker is thus regarded as a sort of extra-linguistic

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[3] For detailed discussion of the controversies over the nature of evidence in linguistics, see Devitt (2008: 95*ff.)*; Ludlow (2013: 53-4, 64*ff.*).

gilding; we are trained to police social, class, and political boundaries through our use of language, but this training is not *itself* a part of language, merely one exclusionary use to which language can be put.

The most detailed development of this response is due to Peter Ludlow. If an individual's grammar is the result of the parameters of Universal Grammar (UG) being set during the language acquisition process then he, Ludlow, has the grammar G_{PL} as a result of being in parametric state UG_{PL}. We can then distinguish between the 'language narrowly construed'[4] which is *generated* by his grammar – L_{GPL} – and any 'other phenomena that we might pre-theoretically take to be linguistic, or part of my "language" understood loosely speaking' – L_{PL} (Ludlow 2013: 51). Now, sentences may be well-formed according to L_{GPL}, yet still rejected by Ludlow as unacceptable – that is, excluded from L_{PL} – owing to non-linguistic processing limitations, for instance; he gives the example of 'The mouse the cat the dog bit chased ran away'(*ibid*.).

But other extraneous, non-linguistic factors can have a similar effect; if Ludlow rejects 'I ain't got no money', it may be because the sentence in fact violates L_{GPL}, or because he was 'inculcated with prescriptive rules … drilled by grammar school teachers not to use "ain't" and "double negatives"' (*ibid.*: 51-2).[5] The first of these will be a linguistic reason in the strict sense, the second non-linguistic; and it may prove exceedingly difficult for linguists to discern which is in play. But in either case, there is no reason to think that the normative nature of Ludlow's 'surfacey' judgement shows his I-Language – L_{GPL} – to be normative. If the sentence does violate L_{GPL}, then that is an interesting linguistic fact about Peter Ludlow and the parametric state of his mind/brain, with no bearing on any other individual's. If the aversion is a 'drilled', inculcated one then it turns out, against appearances, not to be linguistic at all.

2.

So stand the two sides of the debate, with little sign of movement. As I will go on to argue, however, a recent 'paralinguistic' phenomenon provides some reason to doubt that the

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[4] In the sense of Hauser, Chomsky & Fitch (2002) and Fitch, Hauser & Chomsky (2005).

[5] As Ludlow goes on to note, this is *not* in fact a double negative.

response just outlined is satisfactory.[6] I will first here describe that phenomenon, then go on in the final section of the paper to explain the problem it poses for the anti-prescriptivist position.

The 'Doge' meme, an internet fad that became wildly popular during 2013,[7] even spawning its own currency (Hern 2014) and consequent cybercrime (Souppouris 2013), consists in its canonical form of a photograph of a Shiba Inu dog, surrounded by snippets of interior monologue in brightly-coloured Comic Sans.[8] The meme attracted a surprising amount of attention from linguists, who noted that the snippets had highly distinctive stylistic and grammatical features, to the extent 'that doge speak is recognizably doge even when it's not on an image at all' (McCullough 2014).[9]

There are two chief kinds of doge phrase. The first is a one-word interjection; usually 'wow', 'amaze', or 'excite.' The second consists typically of two words, of which the first is usually 'such,' 'much,' 'so,' 'very,' or 'many;' corpus analysis shows that nearly 40% of all doge phrases begin with one of these five modifiers (Nodar 2014). A typical doge utterance will combine at least two or three two-word phrases, along with at least one interjection, usually 'wow' (McCullough 2014). Hybrid types – *e.g.* 'such wow', 'very excite' – are also permitted.

The most distinctive grammatical feature occurs in the two-word phrases, and involves 'mismatching in the phrasal templates' (Gawne 2014), a violation of 'selectional restriction' (McCullough 2014). That is, the modifier must be one which would *not* usually modify a word of the type which follows it. 'So' and 'very', for example, in standard usage modify only adjectives; in doge speak they may modify anything *but* an adjective. 'Very tasty' and 'so delicious' are good English, but poor doge; 'very drink' and 'so wine' good doge, but poor English. The modified phrase is typically also in its simplest form; hence 'amaze' rather than 'amazed' or 'amazing'. Thus, while doge speak looks ungrammatical or grammatically primitive, it is neither; it is 'built around a very specific grammar which users wouldn't be

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[6] No doubt other such phenomena could illustrate the same point more or less well. However, I focus on this one for reasons of both clarity and topicality.

[7] https://trends.google.com/trends/explore?date=all&q=doge&hl=en-US; accessed 5th March, 2019.

[8] http://knowyourmeme.com/memes/doge; accessed 5th March, 2019.

[9] McCullough cites one ingenious text-only effort, which begins: 'What light. So breaks. Such east. Very sun. Wow, Juliet.'

able to use unless they had quite a sophisticated grasp of standard English grammar' (Chivers 2014).

3.

All very whimsical and entertaining, but what has any of this to do with I-Languages and normativity? Quite a lot, as it happens. To say that doge speak is 'built around a grammar' is, for a prescriptivist, to say that doge speak is composed of *rules*, in the normative, Wittgensteinian sense. That is, failure to abide by the conventions of the Doge meme is not regarded simply as non-standard or idiosyncratic doge speak; it is, precisely, a *failure*. And we can expect other doge users to regard it as such, and to police the rule-following of their interlocutors.

This is, indeed, what we see; users routinely correct others for using constructions that are *too conventionally grammatical*. Linguist Gretchen McCullough provides a first-hand example:

> *Friend #1 (posting link): Doge is a rescue dog. Much respect. So noble. Wow.*

> *Friend #2 (commenting): Your dogeing is too coherent. 'Much noble, so respect.'* (McCullough 2014).

The most famous case of doge-correction came in December 2013 when U.S. Rep. Steve Stockman (R-Texas) tweeted a doge-style image of primary rival Sen. John Cornyn, featuring the text 'wow. kill GOP filibuster. oppose Ted Cruz. support Obamacare funding. don't like Rand Paul.' The response was swift and unequivocal: 'It's hard to explain the doge meme… but it's definitely not supposed to include full, coherent sentences like "support Obamacare funding".' (Logiurato 2013); 'Aside from "wow," the words in the photo are just phrases, not doge-isms. Please get it together, Representative' (Jones 2013); 'so correct spelling. not any funny. weak attempt. wow.' (Ore 2013).[10]

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[10] Note that the complaints here cannot be construed as merely indicating a pragmatic violation (as in Ludlow's 'mouse/cat/dog' example); there is no difficulty understanding what Stockman, or Friend #1, intended to say in their deviant doge-utterances.

Nor was the reaction simply partisan. Both Stockman and fellow Rep. Thomas Massie (R-Kentucky) – who had tweeted a Shiba Inu image with the caption 'Much bipartisanship. Very spending. Wow.' – were criticised for 'ruining' (McMurry 2013), and 'killing' (McHugh 2013) the meme by using it for political ends. But while both were accused of crass opportunism, Massie escaped comparatively lightly; 'Stockman's tweet was targeted,' CBC News explained, 'for its flagrant use of grammatically correct phrases - something completely against the spirit of doge' (Ore 2013).

Of course, Chomsky and his allies are well aware that language-users police each other's rule-following; they simply deny that there is anything *linguistic* about this policing. So why should doge speak present any new problems for them? Recall that such policing was explained by anti-prescriptivists as being 'inculcated' and 'drilled' into children by parents, teachers, and the general social milieu whose non-linguistic strata and divisions language was being used to enforce. That explanation is *not* obviously available in the case of doge speak; its rules are not learned injunctions, drilled into new users at the time of their socialisation in a particular community. Rather, it looks as though the conventions for using doge speak – its 'grammar' in the wide, Wittgensteinian sense – simply are themselves normative. In other words, at least in one admittedly exotic region of human language, normativity is an inherent part of linguistic experience rather than an extraneous accompaniment to it. This shifts the onus of proof considerably; it can no longer be presumptively the case that language, *per se* lacks this feature. To the contrary, the anti-prescriptivist now owes us an explanation of what, if this inherent normativity is not a general feature of language, makes cases such as doge speak special.

Of course, playing 'burden tennis' in this way can never be conclusive, and there's an obvious response available here to the I-Language theorist. That is, such a theorist can point out that doge speak *obviously* isn't governed by the principles and parameters of UG. We described it earlier as 'paralinguistic'; it uses many of the features of the human language faculty, but in a derivative, 'piggybacking' fashion. But it's not *language*; 'competence' in doge speak is not part of the speaker's I-Language, and doge speak is not one of the natural human languages that a child can acquire as part of the developmental process of first-language acquisition which the I-Language theory seeks to explain. So the mere fact that the 'grammar' of doge speak is normative does not show that *grammar* properly so-called is.

There are, I think, two ways to construe this move. One is to treat it as demarcating the proper target of linguistic explanation; for some Chomskyans, linguistics is properly concerned only with a distinct subset of the phenomena generally regarded as 'linguistic' (the 'Faculty of Language in the Narrow Sense' or 'FLN'). So doge is not a linguistic phenomenon *sensu stricto*, and its normativity shows nothing about purported linguistic normativity. I return to this point below.

The other way of understanding this defense of anti-prescriptivism is to see it as drawing a line between admittedly linguistic phenomena on the basis of their developmental history; though some linguistic behaviours may be learned in a normatively-laden way, they *are* 'special cases' because the 'core' linguistic behaviour with which generative linguistics is concerned is acquired by a different, and norm-free, process. But this response, I think, misunderstands the nature of the challenge. What the normativity of doge speak demonstrates is that norms *just do* for whatever reason phenomenologically accompany (at least some) human linguistic (or quasi-, or para-linguistic) behaviour. The developmental history of that behaviour is beside the point, that point being that such norms don't need to 'come from' anywhere external in order to form part of our linguistic experience and behaviour; they may simply arise spontaneously as part of the conditions of rule-following in a social context. So there is no reason to think that some extraneous source such as indoctrination is necessary to explain the norms which accompany canonical cases of grammatical speech, when the phenomenologically indistinguishable norms accompanying doge speak can arise without it.

The anti-prescriptivist again seems to have a persuasive answer available here; the phenomenological normativity of language may still be extraneous, but ubiquitous. More precisely, the child learning its language is not taught to attach class or ethnic evaluations to *particular* infractions of its linguistic rules. Rather, it is taught to take *generally* class- or ethnicity-sensitive attitudes towards *any* breach of familiar linguistic conventions; but these attitudes are still not, as such, linguistic. Thus, because doge speak 'piggybacks' on normal language, its users' normative attitudes may likewise piggyback on the extraneously-drilled normative attitudes they acquired when they first acquired language. That is, the same extraneous drilling accounts for the normative pull of our I-Language and our doge speak alike.

However, this isn't a solution with which Chomsky and his allies should feel comfortable. Universal Grammar was first invoked to explain the ubiquity of certain

structural features across the grammars of all human languages; by the explicitly Cartesian reasoning of the I-Language theorists, a trait universal among humans is likely to be innate to humans (Chomsky 1966). The sheer ubiquity of normative attitudes to language, therefore, creates a defeasible presumption that those attitudes are similarly part of our cognitive and linguistic patrimony. Moreover, though I cannot do more than briefly sketch them here, several related lines of evidence in the literature support this conjecture.

The first line proceeds from the widespread belief that our normative *moral* attitudes – whether or not they possess some further external justification – are just the sort of attitudes we would expect our ancestors to have evolved, given their usefulness in ensuring the cooperative and reciprocal behaviour greatly beneficial to members of a social species like ours (*e.g.* Singer 1982; Ruse 1986; Joyce 2006; Street 2006; Wielenberg 2010; Brosnan 2011). Our moral psychology, in other words, has survival value. But our normative *linguistic* attitudes, too – which mark the boundaries of social, ethnic, and national groups – would have had obvious utility in policing complex inter- and intra-group relations, allegiances, and rivalries; a utility which ethnolinguistics suggests they still possess.[11] So they too are 'the sort of attitudes', if anything is, that we could expect to have inherited from the earliest humans. Indeed, building on Axelrod & Hamilton's (1981) classic analysis of songbird dialects, Daniel Cloud has argued that the complexity of human grammars – and the comparative ease with which children acquire them during the critical developmental window for first-language acquisition – may be adaptations 'mostly to make it difficult for adults to learn the language well enough to sound like real natives. At some point in our recent evolutionary history, it might have benefitted us, as it does birds, to be able to quickly tell the difference between genuine members of our own tribe and interlopers' (2015: 110-1). And like moral norms, it is perfectly consistent where linguistic norms are concerned to think both that we are drilled in them at our mother's knee, and that we have evolved to hold them. If it is plausible that our normative moral attitudes evolved, then it looks equally plausible that normative attitudes to language have.

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[11] *E.g.* 'Once a nation or tribe splits in two, each with its own political organization, the two groups will seize on linguistic features as tokens of self-identification. A handful of lexemes and/or pronouns can be sufficient. The dialects of two new nations or tribes may well be fully intelligible, the important political thing being to take care to use certain words and to avoid others' (Dixon 1997: 58). It is from just such a biblical story that the term 'shibboleth' is derived.

Anti-prescriptivists acknowledge that normative attitudes are part of the psychological make-up of language-speakers, but hold that they are drilled and inculcated into us from external sources. What the second line of argument suggests is that, as long as there is survival value to being able to learn them quickly and easily, such psychological traits may well *originate* externally in this fashion, but become progressively assimilated into the genome over many generations via what is known as a 'Baldwin Effect' (Baldwin 1896). More precisely, while such traits may be phylogenetically external, at least to begin with, they are ontogenetically internalised in modern humans. In recent years, evolution of the UG via such a mechanism has been independently proposed by several theorists to explain various features of human language (*e.g.* Pinker & Bloom 1990; Dor & Jablonka 2000; Jablonka & Lamb 2005; Anderson 2008; Szathmáry 2010; Anderson 2011; Glackin 2011; Anderson 2013; Glackin 2018). Extensive computational modelling confirms the plausibility of these hypotheses (*e.g.* Steels 2011; Suzuki & Arita 2013; Azumakigato, Suzuki, & Arita 2013). Again, if it is plausible that the ubiquitous features of human language which form the UG evolved by this kind of mechanism, it is at least as plausible that the ubiquitous normative attitudes which humans hold towards language did so too.

The first two lines of argument suggest that normative attitudes towards language could have become 'hardwired' in the human genome. The third line suggests that such hardwiring is not actually necessary for the overall point here, once we have come to regard such attitudes as a ubiquitous feature of human linguistic behaviour. Contemporary biological thinking is increasingly moving away from a 'genocentric', reductionist understanding of evolutionary processes, towards one that stresses genes' conceptual dependence on environmental conditions, and the cross-generational transmission of non-genetic information and resources, including human culture (*e.g.* Oyama 1985; Godfrey-Smith 1996; Jablonka & Lamb 2005; Sterelny 2012). Chomsky himself has expressed support for this move, and argued for its applicability to the human language faculty (2010).

Accordingly, we can regard our drilling and inculcation in normative linguistic attitudes as part of our cognitive inheritance, which has shaped both our minds and our linguistic practices, *whether or not any genetic hardwiring took place.[12]* Since vertical genetic and

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[12] There is a further point to be made here, though it does not form part of the main thread of the argument. As Cloud has shown, complex informational resources, if they are to be reproduced across generations without succumbing to 'error catastrophe' due to the accumulation of mutations

cultural transmission are equally legitimate and biologically significant modes of intergenerational information flow, there is no principled argument for excluding the cultural part of our linguistic inheritance – if that is, as Chomsky and his followers claim, 'all' that our learned normative attitudes to linguistic practice represent – from biolanguage.

We arrive, then, at the view that normative attitudes towards language, which are as robustly ubiquitous a feature of human language-use as any other, are therefore as much and as central a part of our linguistic inheritance as any other. That they are typically taught to us externally, unlike the supposedly 'innate' and 'automatic' operations of the UG, makes them no less natural or normal a feature of linguistic development; human language, both in its practice and its phenomenology, looks – in Wilfrid Sellars' phrase – thoroughly 'fraught with ought' (Millikan 2005: 79).

There is one remaining move available, however, to anti-prescriptivists, which I flagged above; that is to return to the distinction between 'language in the narrow sense' (FLN) and 'language in the broad sense' (FLB) as Ludlow did previously (§1; Ludlow 2013: 51). That is, I-Language theorists might grant all of the foregoing, but nevertheless insist that these universal, inherited attitudes are still not, strictly speaking, *part of language*. Fitch, Hauser, and Chomsky define FLB as 'all of the many mechanisms involved in speech and language, regardless of their overlap with other cognitive domains or with other species'

(Eigen 1992: 20), must be accompanied by corrective mechanisms; since imitation has a particularly poor fidelity of replication, an informational resource substantially passed on in this fashion – as is typical of human culture (e.g. Grimm 2000, Sterelny 2012) – is crucially dependent upon the awareness of the imitated party that they are being imitated, and their willingness to provide feedback by correcting failures of imitation. This explains a large part of humans' capacity for culture, which is not shared by chimpanzees despite their cognitive resources; 'Humans imitate a lot, and humans correct one another's mistakes a lot. Chimpanzees and other apes don't imitate very much; they mostly emulate, and they very seldom correct one another's mistakes. This… must be at least partly because the fidelity of their imitations would be too low to avoid error catastrophe, and make imitating a good idea for the typical individual in the typical population' (Cloud 2015: 131-2). This insight, speculative though it is, provides further support for the first line of argument traced above; insofar as the conventions of human language form a complex informational resource to be transmitted across generations, there will be selective pressure for the tendency to correct linguistic 'errors' – failures to replicate the convention accurately – in others, as well as to accept such correction from others, and modify linguistic behaviours accordingly.

(2005: 179-80) and FLN as whatever 'subset of the mechanisms of FLB is both unique to humans, and to language itself' (*ibid.*: 180). This subset, they hypothesise, is limited to the internal computational system which handles syntactical recursion (*ibid.*: 203*ff.*; Hauser, Chomsky & Fitch 2002: 1571), and would thus exclude the normative attitudes we are interested in. That exclusion looks correct, as it goes; besides the possibility that these attitudes use the same cognitive apparatus as our moral attitudes, there is some evidence for precursors to normativity in animal communication (Hausberger *et al.* 2008; Lachlan 2008).

But this isn't enough to show that human language is not, *per se*, normative, or that those normative attitudes are not part of the province of linguistics. In fact, Fitch, Hauser, and Chomsky repeatedly stress that the mechanisms making up FLN are 'neither the only, nor necessarily the most, interesting problems for biolinguistic research' (2005: 181). Again; 'we don't suggest that only phenomena in FLN are worthy of study' (*ibid.*: 203). And most pertinently; '(w)e doubt that future researchers will need to make a point of distinguishing FLN from FLB at every mention of the word "language," as we have done here' (*ibid.*: 205). So the Ludlovian move of placing normative attitudes and the processes which produce them outside of language 'narrowly construed' doesn't thereby establish that they are only 'pre-theoretically' to be regarded as linguistic.

There's a deeper problem lurking here for the FLN/FLB distinction, too. As I have elsewhere (Glackin 2018: 174) pointed out, the 'first motivation' (Berwick & Chomsky 2016:11) for the introduction of the FLN as the true object of linguistic study, and the accompanying 'minimalist' view of linguistics, is to reduce the explanandum for a saltationist theory of language's evolution. Since Chomsky and his followers regard a gradual evolutionary process for the language faculty as implausible, that faculty must be such that it could be achieved by a sudden process instead; as small and as un-complex as possible. But if this evolutionary reasoning is flawed, as I have argued, then the motivation for the FLN/FLB distinction disappears; there is no good reason to accept the FLN as the proper and unique subject matter of generative linguistics – and to thereby exclude our normative attitudes to language from the province of the linguistic – unless one adopts a series of controversial assumptions about the nature of evolutionary theory.

In short, what the Doge meme shows us is that the normative attitudes we adopt towards grammatical rules cannot simply be a set of learned particular prescriptions;[13] rather, whether it is learned or innate, they must result from a generalised normative attitude towards such rules. And a general, ubiquitous normative attitude towards linguistic rules, whether learned or innate, could only arbitrarily be excluded from the province of language, and the subject-matter of human biolinguistics. Chomsky and his followers are certainly entitled to hold that such norms have nothing to do with *their* research project. They are right to point out, too, that much of the norms' interest is sociological or political; but humans are, of course, social and political animals, and any comprehensive biolinguistics must take those facets into account. Prescriptive norms are a real and ubiquitous feature of language, and a real and legitimate object of study for linguists.

References

Anderson, S.R. (2008). The logical structure of linguistic theory. Language, 84, 795–814

-- (2011). The role of evolution in shaping the human language faculty. (In M. Tallerman & K.R. Gibson (Eds.), The Oxford handbook of language evolution (pp. 361-69). Oxford: Oxford University Press.)

-- (2013). What is special about the human language faculty and how did it get that way? (In R. Botha and M. Everaert (Eds.), The evolutionary emergence of language: Evidence and inference (pp. 18–41). Oxford: Oxford University Press.)

Axelrod, R. & Hamilton, W.D. (1981). The evolution of cooperation. Science, 211, 1390-96

Azumakigato, T., Suzuki, R. & Arita, T. (2013). Cyclic behavior in gene-culture coevolution mediated by phenotypic plasticity in language. (In P. Liò, O. Miglino, G. Nicosia, S. Nolfi, & M. Pavone (Eds.), Advances in artificial life, ECAL 2013: Proceedings of the twelfth European conference on the synthesis and simulation of living systems (pp. 617-24). Cambridge, MA: MIT Press.)

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[13] To avoid any ambiguity; whether the grammatical rules themselves are learned or innate in any particular case, my claim here is that *our normative attitudes towards them* are not learned as particular prescriptions.

Baldwin, J.M. (1896). A new factor in evolution. The American Naturalist, 30, 536–53

Berwick, R.C.& Chomsky, N. (2016). Why only us: Language and evolution. (Cambridge MA: MIT Press)

Brosnan, K. (2011). Do the evolutionary origins of our moral beliefs undermine moral knowledge? Biology and Philosophy, 26, 51-64

Chivers, T. (2014, February 18). Doge: Such grammar. Very rules. Most linguistic. Wow. The Daily Telegraph Blogs. Retrieved August 13, 2014, from http://blogs.telegraph.co.uk/news/tomchiversscience/100260120/doge-such-grammar-very-rules-most-linguistics-wow/

Chomsky, N. (1966). Cartesian linguistics: A chapter in the history of rationalist thought. (New York: Harper & Row)

-- (1986). Knowledge of language: Its nature, origin, and use. (New York: Praeger)

-- (1988). Language and problems of knowledge. (In A.P. Martinich (Ed.), The philosophy of language, international 5th edition (2010) (pp. 675-92). New York: Oxford University Press.)

-- (1992a). Explaining language use. Philosophical Topics, 20, 205-31

-- (1992b). Language and interpretation. (In J. Earman (Ed.), Inference, explanation and other frustrations (pp. 99-128). Berkeley: University of California Press.)

-- (1993). Mental constructions and social reality. (In E. Reuland & W. Abraham (Eds.), Knowledge and language vol. 1: From Orwell's problem to Plato's problem (pp. 29-58). Dordrecht: Kluwer Academic.)

-- (1995). Language and nature. Mind, 104, 1-61

-- (2000). New horizons in the study of language and mind. (Cambridge: Cambridge University Press)

-- (2010). Some simple evo devo theses: How true might they be for language? (In R.K. Larson, V. Déprez & H. Yamakido (Eds.), The evolution of language: Biolinguistic perspectives (pp. 45-62). Cambridge: Cambridge University Press.)

-- (2013). Appendix: Interview with Noam Chomsky. (In Ludlow (2013), pp. 174-91.)

Cloud, D. (2015). The domestication of language: Cultural evolution and the uniqueness of the human animal. (New York: Columbia University Press.)

Devitt, M. (2008). Ignorance of language. (Oxford: Oxford University Press)

Devitt, M. & Sterelny, K. (1989). What's wrong with 'the right view'. (In J. Tomberlin (Ed.), Philosophical perspectives, 3: Philosophy of mind and action theory (pp. 497-531). Atascadero, Cal.: Ridgeview.)

Dixon, R.M.W. (1997). The Rise and Fall of Languages. (Cambridge: Cambridge University Press)

Dor, D. & Jablonka, E.(2000). From cultural selection to genetic selection: A framework for the evolution of language. Selection, 1, 33–55

Eigen, M. (1992). Steps towards life: A perspective on evolution. (Oxford: Oxford University Press.)

Fitch, W.T., Hauser, M.D. & Chomsky, N. (2005). The evolution of the language faculty: Clarifications and implications. Cognition, 97, 179–210

Gawne, L. (2013, November 20). Doge - meme watch. Superlinguo. Retrieved March 5, 2019, from http://www.superlinguo.com/post/67501611729/doge-meme-watch

Glackin, S.N. (2011). Universal grammar and the Baldwin effect: A hypothesis and some philosophical consequences. Biology and Philosophy, 26 (2), 201-22

-- (2018). Against Thatcherite linguistics: Rule-following, speech communities, and biolanguage. The Southern Journal of Philosophy, 56 (2), 163-92

Godfrey-Smith, P. (1996). Complexity and the function of mind in nature. (Cambridge: Cambridge University Press)

Grimm, L. (2000). Apprentice flint-knapping: Relating material culture and social practice in the upper paleolithic. (In J. Safaer-Derevenski (Ed.), Children and material culture. New York: Routledge.)

Guasti, M.T. (2004). Language acquisition: The growth of grammar. (Cambridge, Mass.: MIT Press)

Hausberger, M., Herny, L., Testé, B., & Barbu, S. (2008). Contextual sensitivity and bird song: A basis for social life. (In D. Kimbrough Oller & U. Griebel (Eds.), Evolution of communicative flexibility: Complexity, creativity, and adaptability in human and animal communication (pp. 121-38). London: MIT Press.)

Hauser, M.D., Chomsky, N. & Fitch, W.T. (2002). The language faculty: What is it, who has it, and how did it evolve? Science, 298, 1569–1579

Hern, A. (2014, February 18). What is doge? The Guardian. Retrieved March 5 , 2019, from http://www.theguardian.com/technology/2014/feb/18/doge-such-questions-very-answered

Isac, D. & Reiss, C. (2008). I-language. (Oxford: Oxford University Press)

Jablonka, E. & Lamb, M.J. (2005). Evolution in four dimensions: Genetic, epigenetic, behavioural, and symbolic variation in the history of life. (Cambridge, Mass.: MIT Press)

Jones, A. (2013, December 23). Cool politicians use doge memes to prove they really 'get' twitter. The Wire. Retrieved March 5, 2019, from http://www.thewire.com/politics/2013/12/politicians-trying-be-cool-twitter/356429/

Joyce, R. (2006). The evolution of morality. (Cambridge, Mass.: MIT Press)

Kripke, S. (1982). Wittgenstein on rules and private language. (Oxford: Blackwell)

Lachlan, R.F. (2008). The evolution of flexibility in bird song. (In D. Kimbrough Oller & U. Griebel (Eds.), Evolution of communicative flexibility: Complexity, creativity, and adaptability in human and animal communication (pp. 305-26). London: MIT Press.)

Logiurato, B. (2013, December 23). Congress has finally discovered 'doge', and it's going about as badly as you would expect. Business Insider. Retrieved 5 March, 2019, from http://www.businessinsider.com/doge-memes-congress-steve-stockman-massie-2013-12#ixzz39pkTBuwb

Ludlow, P. (2013). The philosophy of generative linguistics. (Oxford: Oxford University Press)

McCullough, G. (2014, February 6). A linguist explains the grammar of doge. Wow. The Toast. Retrieved 4 March, 2019, from http://the-toast.net/2014/02/06/linguist-explains-grammar-doge-wow/

McHugh, M. (2013, December 23). The life and death of doge, 2013's greatest meme. The Daily Dot. Retrieved 5 March, 2019, from http://www.dailydot.com/lol/doge-is-dead-long-live-doge/

McMurry, E. (2013, December 23). Rep. Steve Stockman ruins doge for the rest of us. Mediaite. Retrieved 5 March, 2019, from http://www.mediaite.com/online/rep-steve-stockman-ruins-doge-for-the-rest-of-us/

McNally, T. & McNally, S. (2012). Chomsky and Wittgenstein on linguistic competence. Nordic Wittgenstein Review, 1, 131-54

Millikan, R.G. (1995). Pushmi-pullyu representations. (In J. Tomberlin (Ed.), AI, connectionism, and philosophical psychology. Atascadero, Cal.: Ridgeview.)

-- (2003). In defense of public language. (In N. Antony & L. Hornstein (Eds.), Chomsky and his critics (pp. 215-37). Oxford: Blackwell.)

-- (2005). The son and the daughter: On Sellars, Brandom, and Millikan. Pragmatics and Cognition, 13.1.

Nodar, L. (2014, March 4). The curious linguistics of the doge in the internet. The League of Nerds. Retrieved 5 March, 2019, from http://www.asktheleagueofnerds.com/doge/

Ore, J. (2013, December 24). U.S. republican doge tweets 'wow' internet meme fans. CBC News Community Blogs. Retrieved 5 March, 2019, from http://www.cbc.ca/newsblogs/yourcommunity/2013/12/us-republican-doge-tweets-wow-internet-meme-fans.html

Oyama, S. (1985). *The ontogeny of information.* (Cambridge: Cambridge University Press)

Pinker, S. & Bloom, P. (1990). Natural language and natural selection. Behavioral and Brain Sciences, 13, 707–84

Ruse, M. (1986). Taking Darwin seriously. (New York: Blackwell)

Singer, P. (1982). Ethics and sociobiology. Philosophy and Public Affairs, 11, 40–64

Souppouris, A. (2013, December 26). Millions of dogecoin stolen in Christmas hack. The Verge. Retrieved 5 March, 2019, from http://www.theverge.com/2013/12/26/5244604/millions-of-dogecoin-stolen-in-christmas-hack

Steels, L. (2011). Modelling the cultural evolution of language. Physics of Life Reviews, 8(4), 339–56

Steiner, M. (2011). Kripke on logicism, Wittgenstein, and *de re* beliefs about numbers. (In A. Berger (Ed.), Saul Kripke (pp. 160-76). Cambridge: Cambridge University Press.)

Sterelny, K. (2012). The evolved apprentice: How evolution made humans unique. (Cambridge, Mass.: MIT Press)

Street, S. (2006). A Darwinian dilemma for realist theories of value. Philosophical Studies, 127, 109–66

Suzuki, R. & Arita, T. (2013). A simple computational model of the evolution of a communicative trait and its phenotypic plasticity. Journal of Theoretical Biology, 330, 37-44

Szathmáry, E. (2010). Evolution of language as one of the major evolutionary transitions. (In S. Nolfi & M. Mirolli (Eds.), Evolution of communication and language in embodied agents (pp. 37–53). Berlin: Springer Verlag.)

Wallace, D.F. (2001). Tense present: Democracy, English, and the wars over usage. Harper's Magazine, April 2001, 39-58

Wielenberg, E.J. (2010). On the evolutionary debunking of morality. Ethics, 120, 441–64

Wittgenstein, L. (1953) Philosophical Investigations. (Oxford: Basil Blackwell)