

In defense of public languages

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Abstract My modest aim in this note is to sketch three interrelated critiques of public languages, and to respond to them. All are broadly Chomskyan, and all support the same conclusion: that, insofar as they even exist, the study of public languages is not a viable scientific project. (Related critiques of semantics, understood as involving word–world relations, will be touched on as well).

Keywords Philosophy of linguistics · Metaphysics · Philosophy of science · Linguistic methodology

1 Introduction

My modest aim in this note is to sketch three interrelated critiques of public languages, and to respond to them. All allegedly support the same conclusion: that, insofar as they even exist, the study of public languages is not a viable scientific project. (Related critiques of semantics, understood as involving word-world relations, will be touched on as well).

The three, variants of which are widespread throughout the literature in philosophy of linguistics, are broadly Chomskyan. This is not to say—to issue a first caveat—that they are directly traceable to Chomsky’s own writings. Strands also derive from Jackendoff (1983, 2002), McGilvray (1999) and Hinzen (2007), among many others. (A recent textbook discussion may be found in Isac and Reiss (2008). See also Stainton (2006), where I explain such arguments without endorsing them). In fact, the arguments are not to be found *in toto* in any one text: I have compiled them to make the three critiques as clear as possible, and to highlight connections

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among them. Another caveat. I am not convinced by any arguments against public languages—e.g., those in Davidson 1986—but in the present paper I will only respond to these three. Finally, I do not intend to censure any undertaking labeling itself ‘linguistics’ or ‘semantics’; in particular, I have no quarrel at all with mainstream linguistics, nor with the study of mental grammars. My stance in philosophy of linguistics is steadfastly ecumenical.

A word is in order about what I mean by ‘public languages’. First off, I mean natural, spoken, human languages—as opposed to artificial computer or logical languages, ‘body language’ or things like bird calls and bee dances. That is, things such as Armenian, Cantonese, English, Guaraní, Igbo, Italian, Japanese, Mandarin, Mohawk, Nahuatl, Norwegian, Portuguese, Spanish, Swahili, Tok Pisin and Urdu. I do not mean ‘a genuine language as opposed to a mere dialect’: Piedmontese and Schweizerdeutsch are fully-fledged public languages in the desired sense, as is Southern Cone Spanish. Public languages are things which have not just morpho-syntax, but also phonology; some are spoken, some signed, and some are no longer spoken nor signed. They can be acquired at mother’s knee, without explicit instruction. They have a history, and belong to language families (e.g. Bantu, Indo-European, Romance, Slavic). Some have corresponding writing systems, but not all do. And so on, in what I hope are familiar ways.

The paper proceeds as follows. I begin with less compelling critiques, the first drawing heavily on metaphysics, the second more on philosophy of science. It is important to introduce these not just because they are prevalent in the literature, but also because they afford the materials for a hybrid which is rather more subtle and sophisticated.

2 First critique: metaphysics

Let me introduce this first argument with half a dozen quotations from a vast repository:

Languages

- “The idea [of a common public language] is completely foreign to the empirical study of language... What are called ‘languages’ or ‘dialects’ in ordinary usage are complex amalgams determined by colors on maps, oceans, political institutions and so on, with obscure normative-teleological aspects” (Chomsky 1993, pp. 18–19).
- “If we take the mentalistic approach seriously, then we have to admit that there is no entity in the world that we can characterize as ‘English’. There is just a (large) bunch of people with fairly similar mental grammars...” (Isac and Reiss 2008, p. 15).

Linguistic Expressions

- “The perception of word boundaries depends on which mental grammar is being used to process the signal. The signal itself contains no information about word boundaries, since words are not physically definable entities” (Isac and Reiss 2008, p. 32).
- “[Allophones] provide another very strong argument for the construction of experience. . . [T]he identity of the sounds we hear is largely a product of the computations of our minds. Note that our perception of the *t* sounds leads us to hearing signals that are physically quite different as the same—we hear, in some sense, the plain and aspirated *t*, the glottal stop, the flap, and even silence (whatever it means to *hear silence*) as tokens of the same type, the phoneme /*t* . . .” (Isac and Reiss 2008, p. 113).

Ordinary Objects

- “There is nothing tangible about Wyoming, no great geographical features that mark it off, no lines drawn in the landscape. . . It is a politically constructed entity, its rectilinear boundaries fixed by stipulative act.

We can touch the Mississippi River, and swim in it. But is the river the water contained in it, the bed of the river, the complex of the two? Exactly where does it end in the Gulf of Mexico, and exactly where does its tributary, the Missouri, end in it? One can draw arbitrary lines on a map, but these are understood as matters of convenience and not some sort of ‘natural truth about the world’” (Jackendoff 2002, p. 301).

One may reconstruct the following argument from the quotations. These and many related examples show that languages, linguistic expressions, and their purported referents are human mental constructs. They are not objective things, out there in the physical world. For instance, there is no such thing as the English language, understood as extra-mental and shared. Hence, there can be no science of public languages, nor any evidence drawn from them, etc. Similarly, there is no extra-mental word ‘London’; nor, more radically, does its supposed denotation the city of London exist ‘out there in the world’. Hence, there can be no science which studies (among many other things) the relationship between ‘London’ and London. In brief:

P1: Shared public languages, along with linguistic expressions and their denotations, are supposed to be objective things “out there in the world”.

P2: Numerous examples show that public languages, linguistic expressions, and many objects of ordinary experience are human mental constructs.

P3: Human mental constructs are not objective things “out there in the world”.

P4: There cannot be a viable science of what fails to exist.

C1: Public languages, along with linguistic expressions and their denotations do not exist. [By P1, P2 and P3]

C2: The study of public languages is not a viable scientific project. [By P4 and C1]

Whatever its initial attractiveness, the argument commits a fallacy of equivocation. In particular, ‘mental construct’ can be read in two quite different ways in premises P2 and P3. In one sense of the term, for x to be a mental construct is for it to be the case that the human mind must perform sophisticated and surprising operations to identify x . Call this “psychological mental construction”. In another sense of the term, for x to be a mental construct is for it to be the case that x is a mental thing, e.g., an idea. Call this “metaphysical mental construction”. Roughly, the contrast is between “The mental is importantly involved in constructing a representation of the object” versus “The constructed mental representation is the object”.

Let us now scrutinize this metaphysical critique of public languages in light of the ambiguity. Suppose we read the key phrase psychologically throughout. Then P2 merely says that, as the examples make clear, shared public languages like English and Urdu, linguistic expressions like ‘London’, and many objects of ordinary experience can only be grasped using sophisticated mental operations. Undoubtedly. So read, however, P3 says that any object which requires sophisticated and surprising psychological processing to be identified, is not an objective entity in the external world but is (at best) a mental representation! Suppose, then, that we read the phrase metaphysically throughout. It is on this reading that P3 is true by definition. However, P2 now says that our examples show that shared public languages, etc., are mental things, things which “dwell in the mind”, comparable to dreams or hallucinations. But only a radical idealist would grant this—and that is because she is independently committed to *all* objects being mental. (Is the study of shared public languages and expression-world relations incompatible with radical Berkeley-style idealism? Maybe so. But, frankly, why should anyone care?) Either way, then, if ‘mental construct’ is read univocally, no support is provided for the argument’s conclusions.

3 Second critique: philosophy of science

Chomsky (2000) champions Methodological Naturalism, the heart of which involves treating all scientific inquiry of a piece. One should thus look closely at the actual practice of successful sciences, and apply the canons found therein to emerging fields. Additional, ad hoc methodological restrictions should be treated with suspicion. Of particular interest to me, one may draw twin (anti-verificationist) normative conclusions from such observations: in linguistics as elsewhere, (a) one should not equate the evidence base of a science with its object of inquiry; and, more generally, (b) one should not restrict the evidence base a priori. This is surely correct.

The second critique of an alleged science of public languages builds on (a) and (b). Goes the idea, there are two ways of thinking about languages qua public: as concrete, material things, or as abstract Platonic entities. Thinking of them in the former way, as per the Quinean Behaviorist tradition, one violates the twin norms. Specifically, given that they exhaust the language, evidence cannot go beyond behaviors in principle observable to a field linguist. Being familiar to most, I won’t

say more about this tradition. Thinking of public languages in the latter abstract way, English and Urdu are like logico-mathematical systems. It has thus been urged that the linguist learn about them solely through intuition and reflection. Indeed linguistics, says Katz (1985), is not an empirical discipline at all. A milder variant on this idea is found in Soames (1984). Again speaking roughly, his suggestion is that insofar as languages are ontologically akin to logico-mathematical entities in certain ways, then, since one does not uncover the truths of logic and mathematics by studying human cognitive processes, psychological evidence will not play an essential role in linguistics either. Error rates, processing speed, order of acquisition: these are exciting findings in the psychology of language, but are irrelevant to the nature of the Platonic languages themselves. Hence, this second option for the metaphysics of public languages equally conflicts with (a) and (b).

The critique rests on a dilemma. It is granted, at least for the sake of argument, that public languages really do exist outside the mind. However, either they are concrete behaviors or Platonic abstracta. Both options violate key methodological canons, themselves derived from observation of successful science. Therefore, one should not pursue a *science* of public languages. My rebuttal is obvious. These are not the only metaphysical options. There is a middle ground, namely that public languages are humanly-individuated types. On this view, a public language is a system of symbols. Each symbol, whether primitive or complex, has a variety of aspects: phonetic, phonological, morphosyntactic, semantic, pragmatic. There are rules that operate over these linguistic units: for forming complexes from primitives (some of the former actually tokened, some not yet tokened, some untokenable in practice), and for relating the elements at different levels. Not only what they operate over, but these rules themselves are abstracta. So are whole languages. Like numbers, there are physical aspects that linguistic symbols and rules, understood as types, lack: colour, odour, location, weight; unlike numbers, however, the nature of the symbols and rules are individuated in relation to human beings—just as novels, constitutions, dances, religions, corporations, and the Ford Focus are.¹

Does this ontology for public languages lead to violations of norms (a) and (b)? No, for two reasons. Though a system of symbols, a language so construed is by equal measures something people know and use. One can, therefore, get empirical evidence about these humanly-individuated abstracta from their deployment; from ordinary linguistic actions. Equally, being known, theorists can learn about public languages from *recherché* psychological findings of the sort Soames eschews. Already, then, the evidence base is to be distinguished from the object of investigation. A second, deeper, point is this: because of confirmation holism (according to which it is whole theories, themselves embedded in masses of background

¹ My own inclination is to simply speak of humans creating languages, of their nature depending upon us. Purists, however, may find fault with such talk. Instead, following Lewis (1975), they would have us say that a person merely brings it about that she is related to a certain human-transcendent systems of symbols. I don't wish to enter into the debate here, and thus speak vaguely of "humanly-individuated abstracta". Given space, however, I would urge that Lewis' approach is wrongheaded. First, it can lead one all too easily back into Katz/Soames style Platonism, and its violation of (a) and (b). Second, the view faces a serious internal tension: if a person cannot create linguistic items because they are abstract, how can she bring into being relations between symbols and herself, since such relations are themselves abstract sets of ordered pairs?

commitments, that are (dis)confirmed), the methodological default is that one should let in whatever seems relevant. The study of public languages is then a case in point. In general, investigators do not know how things are connected—so, as elsewhere, one shouldn't assume lack of connections between our linguistic symbols/rules (understood as humanly-individuated abstracta) and, say, processing speed or clinical deficits. Indeed, there is little doubt that there are nomic connections between languages and human psychology. It may well be, furthermore, that features of the system of symbols supervene on psychological states. (See Antony 2003; Laurence 2003 and Stainton forthcoming for discussion.)

This second reason is immensely important, so I'll put it another way. Both sides take onboard an assumption: that the metaphysical status of languages fixes the proper linguistic epistemology. Granting the conditional, the Quine-Katz-Soames side performs a *modus ponens*, and endorses a restrictive epistemology. What I've loosely called "Chomskyans" perform a *modus tollens*, and reject the externalist ontology (and often plump for conceptualism/mentalism, on just such methodological grounds). However, taking seriously confirmation holism, and our ignorance about human language(s), we should be suspicious of the ontology-to-methodology conditional even given a concrete or Katz-style Platonist ontology for language. The inference is certainly fallacious once we construe public languages as humanly-individuated abstracta.²

In sum, the first two arguments fall flat. Despite the manifest failings of certain "E-language" approaches (as Chomsky 1986 calls them), scientific canons (a) and (b) do not exclude the scientific study of shared public languages (nor, I think, the study of semantic relations). Given the ambiguity in the term, that languages, linguistic expressions, etc., are "human mental constructs" does not do so either.

4 The hybrid argument

I end with a more subtle and sophisticated critique of public languages, and of their scientific study.

Because it builds on the previous two, the initial statement of the argument can be brief. Revisiting the quotations above, two points about the ontology of public languages emerge: first, their boundaries are vague, and insofar as they are precisified, this cannot reasonably be done in terms of "physical properties"; second,

² I said I wouldn't respond to all critiques of public languages. Still, there is another, also grounded in philosophy of science, which comes up frequently enough that it warrants mention, namely that appeal to public languages (and externalist semantic relations) doesn't explain *anything*. This greatly overstates things. That it is very easy to talk about puppies using the Spanish word 'perrito', but very hard to refer to chainsaws thereby, is partly explained by the fact that the public word 'perrito' is semantically related to puppies. That a person who says 'I promise to plant two beeches in your yard tomorrow' in English cannot satisfy their commitments by planting two elms is partly explained by... And so on. Thus, referential semantics explains something. Public languages do too. That I, Rob Stainton, can very easily order beer and fish stew in Santo Domingo, but not in Port au Prince, can be explained, in part, by the fact that I speak Spanish but not Krèyol. (A less pedestrian case: the superior economic development of the Dominican Republic as compared to Haiti has been explained, in part, in terms of ready access to a Hispanic trading zone.)

what unites the complex amalgams is peculiarly human: our psychology, institutions and norms. Notice, this is not to say that such things fail to exist. Nor is to say that they exist within our minds. The point is that public languages are human mental constructs in terms of their supervenience base. That is, the argument has shifted from a crude eliminativist metaphysics to something broadly neo-Kantian. Revisiting philosophy of science, and the precept of paying attention to what successful sciences actually do, it seems that chemistry, physics, and such do not treat of, nor even quantify over, such vague anthropocentric neo-Kantian constructs. QED

To anticipate, my response is that the hybrid critique proves too much. It excludes large swaths of successful science.

Very few things have precise boundaries. Brains and neurons don't; planets, mountains, continents and rivers don't; species and ecosystems don't. (Similarly, to issue a sort of *tu quoque*, individual idiolects don't have precise boundaries either.) Few things are "individuated physically", if this means individuated using only terms of fundamental physics: not diseases, soil types, planets or ecosystems, for instance. Thus, demanding precise and/or physically specifiable boundaries is clearly too strong.

We may equally set aside the worry that the boundaries drawn around a public language will vary with the *scholarly* interests of the scientific investigator. This is correct, but holds pretty much across the board. What counts as a brain depends on what research questions are being asked: Do jellyfish have brains? Do tape worms? How one answers depends upon one's research interests. Similarly for whether now-inert cells still count as neurons. Or, whether this is the same kind of bee; whether expletives are nouns (e.g., 'It' in 'It is raining'); and so on.

The soul of the third critique thus cannot be vagueness nor non-physicality; nor teleology in the weak sense scouted above. It is all too obvious that abandoning a science of public languages on these grounds would prove far too much. Nonetheless, there is something deep and valuable that several of the quotations highlight. The sense in which public languages are "constructs" seems importantly different from the way that brains, soil types and mountains are. What is metaphysically special about public languages such as English, about the word 'Wyoming', and about its alleged referent the State of Wyoming is that—like Hinduism, jazz, Tuesdays, yarmulkes, dirty laundry, teaching awards and modernism in literature—these are only objects for us.³ All are value-laden; all are tacitly suffused with human free will. In brief, all pertain to Sellars' (1962) Manifest Image. In sharp contrast, continues the argument, a science aims to afford a human-transcendent, value-free, law-governed description of certain phenomena.

That, I think, is the heart of the hybrid critique.

My reply rests on a broadly Moorean distinction (1925) between possessing a philosophical analysis of such-and-such phenomenon, and granting its existence.

³ This connects to a very important insight, one in the vicinity of the hybrid critique and frequently stressed by Ray Jackendoff. Unlike the other authors discussed here, he repeatedly stresses, quite rightly, that genuine science is not exhausted by physics. He adds, however, that given the kind of individuation conditions posited, languages and word-world relations cannot be studied in complete abstraction from human psychology, because the kinds involved make essential reference to our mental states and processes.

I confess that I lack a philosophical analysis capable of explaining how there can be sciences of the neo-Kantian world of norms, free actions, objects-for-us, etc. I do not know how a discipline can lie in between “hardest science” à la physics, and mere common sense. I doubt anyone does. Yet, with Moore, I refuse to conclude on these grounds that there are no such sciences. For, I have observed lots of them: not just anthropology and political science, but also archeology, criminology, ecology, economics, epidemiology, gerontology, social psychology, etc. As these are sciences in good standing, though their objects of inquiry are vague, interest relative, etc., there is no obstacle to a science of public language.

Let me put the rebuttal another way, one which my Chomskyan opponents can hardly object to. Methodological naturalism’s key tenet is: Look at actual science, and apply its canons only; do not impose extraneous constraints on thriving sciences on the basis of arch metaphysical scruples. What I am urging as a reply to the hybrid argument, in effect, is this: looking at actual sciences in the plural, not just at physics, and ignoring philosophical blinders, the injunction against a science of neo-Kantian objects, in linguistics and elsewhere, is unmotivated.

5 Summary

A brief summary is in order. Though a bit heavy handed, it highlights the connections among the three critiques.

The first, repeated here in its schematic form, pressed a startling metaphysical conclusion, namely that shared public languages do not exist at all.

P1: Shared public languages, along with linguistic expressions and their denotations, are supposed to be objective things “out there in the world”.

P2: Numerous examples show that public languages, linguistic expressions, and many objects of ordinary experience are human mental constructs.

P3: Human mental constructs are not objective things “out there in the world”.

P4: There cannot be a viable science of what fails to exist.

C1: Public languages, along with linguistic expressions and their denotations do not exist. [By P1, P2 and P3]

Main Conclusion: The study of public languages is not a viable scientific project. [By P4 and C1]

It failed because of equivocation on ‘mental construct’.

The second critique, summarized below, highlighted perfectly reasonable methodological canons from post-positivist philosophy of science, namely (a) distinguishing a science’s object of inquiry from its evidence base and (b) not restricting that evidence base a priori:

P5: Observation of successful sciences shows that they conform to (a) and (b).

P6: Granting that public languages exist, they are either concrete material things or Platonic abstracta.

P7: If public languages are concrete material things, then any attempted scientific study of them would violate (a) and (b).

P8: If public languages are Platonic abstracta, then any attempted scientific study of them would violate (a) and (b).

C2: Granting that public languages exist, any attempted scientific study of them would violate (a) and (b). [By P6, P7 and P8]

Main Conclusion: The study of public languages is not a viable scientific project. [By P5 and C2]

It failed because one can study public languages and semantic relations without violating these canons—by taking the objects in question to be humanly-individuated abstracta.

Taking a leaf from P2, the hybrid argument proposes an ontology for languages et al. which is more plausible: *pace* the first critique, they exist, and are not themselves ideas; but they are individuated in terms of peculiarly human interests, values, institutions, etc. Added to this, and taking off from P5, is another observation about actual scientific practice. The result is P9 and P10:

P9: Granting that they all exist, public languages, linguistic expressions, and many objects of ordinary experience are human mental constructs in the sense that:

(i) their boundaries are vague;

(ii) insofar as these get precisified, it cannot reasonably be done in terms of “physical properties”;

(iii) what unites the complex amalgams is peculiarly human: our psychology, institutions and norms.

P10: Observation of successful sciences shows that sciences do not treat of human mental constructs in sense (i)–(iii).

C3: Granting that public languages, linguistic expressions, and many objects of ordinary experience all exist, there can be no science of them. [By P9 and P10]

Main Conclusion: The study of public languages is not a viable scientific project.

Broadening our gaze beyond physics and chemistry to successful sciences generally, however, the argument’s second premise is exceedingly implausible—even if we do not understand how such sciences are possible.

I end by re-emphasizing my aims. Exegesis was no part of my goal. Rather than sticking to one figure or one text, I have tried to rebut an entire family of related lines of reasoning by distilling them into three interrelated critiques. Second, there certainly are arguments against public languages which I have not addressed. Finally, it was no part of my aim to criticize any disciplines wishing to call themselves ‘linguistics’ or ‘semantics’. May a thousand flowers bloom.

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