

In Defense of Public Language

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....a notion of 'common, public language' that remains mysterious...useless for any form of theoretical explanation....There is simply no way of making sense of this prong of the externalist theory of meaning and language, as far as I can see, or of any of the work in theory of meaning and philosophy of language that relies on such notions, a statement that is intended to cut rather a large swath. (Chomsky 1995, pp. 48-9)

It is a striking fact that despite the constant reliance on some notion of 'community language' or 'abstract language,' there is virtually no attempt to explain what it might be. (Chomsky 1993, p. 39)

....either we must deprive the notion communication of all significance, or else we must reject the view that the purpose of language is communication. ...It is difficult to say what 'the purpose' of language is, except, perhaps, the expression of thought, a rather empty formulation. The functions of language are various. (Chomsky 1980, p. 230)

I have yet to see a formulation that makes any sense of the position that "the essence of language is communication." (Chomsky 1980, p. 80; see also 1992b, p 215)

At frequent intervals over the years, Professor Chomsky has inveighed against both common sense and technical notions of public language or "externalized language," claiming that they are confused, ill-defined, or of no scientific interest. As a scientist, he would be interested in public language only if it were a "real object of the real world"(Chomsky 1993:39) rather than an "artifactual" and "arbitrary" notion (Chomsky 1985:26). I propose to articulate such a notion of public language for him. Chomsky has also denounced the notion that the purpose of language is communication. I will argue, on the contrary, that a primary function of the human language faculty is to support linguistic conventions, and that these have an essentially communicative function.

Despite this bold display of sounded disagreements with Chomsky, however, I agree with his objections to common views of public language completely:

People who live near the Dutch border can communicate quite well with people living on the German side, but they speak different languages in accordance with the sense of the term Dummett argues is 'fundamental'..... (1992a, p. 101)

Public language is a sprawling mass of crisscrossing, overlapping conventions, some known to some people, others to others. It does not divide into discrete portions, German versus Dutch versus French.

What we say is that the child or foreigner has a 'partial knowledge of English,' or is 'on his or her way' toward acquiring knowledge of English, and that if they reach the goal, they will then know English. Whether or not a coherent account can be given of this aspect of the common sense terminology, it does not seem to be one that has any role in an eventual science of language. (Chomsky 1985: 16)

If Peter is improving his Italian or Gianni is learning his...[w]e gain no insight into what they are doing by supposing there is a fixed entity that they are approaching, even if some sense can be made of this mysterious notion. (1992b, pp.16-17),

Languages are not governed by discrete sets of public norms or rules of mysterious origin. There are no "fixed entities" which a child slowly approaches when learning language. On both the above points I entirely agree with Chomsky and entirely disagree, for example, with Dummett.

This 'externalized language' that Jones and Smith share must be an abstract object of some sort, a property of the community, perhaps....Suppose that Smith and Jones have more or less the same shape; we do not conclude that there is a shape that they partially share, and the interactions between Smith and Jones give us no more grounds to suppose that there is a language that they share. (Chomsky 1993, pp. 39-40)

Further, public language is not just some property shared by Smith and Jones. It is not discovered, for instance, by averaging over the idiolects of people in "the community." I agree with all these points against the existence of what some conceive as "public language." I also agree with Chomsky's arguments for the importance of the study of I-language and the language faculty. And of course I agree that language is put to many different purposes. What then am I complaining about?

I will argue that there remains a legitimate way of looking at language as a public object, and also a legitimate way of looking at language function, that Chomsky has not taken into account. Learning language is not merely acquiring an "I-language." It is not just achieving a relatively steady state of the language faculty. Learning language is essentially coming to know various public conventions and, with trivial exceptions, these conventions are around to learn only because they have functions.

What has brought Chomsky to deny these rather mundane truths, hence to embrace an unnecessarily extreme position on public language, may have been, in part, bad philosophical company. In particular, there are, I believe, two dominant but mistaken traditions in philosophy that probably played a role. One of these concerns the nature of language conventions. The other concerns the nature of language functions.

A 'convention' in Lewis's sense, is a regularity 'in action or in action and belief' sustained by the belief that others conform to the regularity. Note that this is a rather restricted sense of the term "convention". There are, no doubt, conventional aspects of language: for example, the fact that one says "Hello" in answering a telephone or calls a chair "a chair." Butregularities in action and belief are quite restricted, at least if we insist that "regularities" have detectable probabilities; there is little reason to suppose that aspects of language that are commonly called "conventional" involve detectable regularities. (Lewis 1969; Chomsky 1980, p. 81)

Chomsky is completely right about this. The conventions of language are not regularities, either de facto or de jure. They are not expressed in actual uniform behaviors, nor in people's beliefs about uniform behaviors, nor in rules or norms prescribing uniform behaviors. But it is exactly because conventions have been taken, mistakenly, to be regularities (Searle 1969; Lewis 1969, 1975; Schiffer 1972; Bach &

Harnish 1979; Gilbert 1983, 1989/1992; Recanati 1987)¹

—and because language is so obviously conventional—that it has been thought that languages must belong to circumscribed social groups. You can't have a regularity unless there is a reference class for the regularity to be in. So there can't be a convention unless it is a convention for somebody—for the Jews but perhaps not for the Christians, for the Germans but perhaps not the French, for you but perhaps not for me. Hence the notion of a "'common, public language' that remains [so] mysterious", of a "'community language' or 'abstract language'," a "shared" language, "a property of the community." Chomsky sees the error in this way of thinking. But the philosophical tradition has supplied no alternative to this way of understanding conventions, hence no alternative reason to think the study of public conventions might be important in the study of language. I will try to remedy this situation by outlining a theory of language conventions that does not take them to be regularities, and then showing why this sort of public conventionality is of the very essence of human language. I know nothing about the language faculties of angels or Martians. They may come with all necessary language wired in so that they do not need to have language conventions. But in humans, I will argue, a pivotal job of the language faculty is to make language conventions possible, and the functions of language conventions are communicative functions.

The second philosophical tradition to which I will propose an alternative concerns the nature of language functions.

What does it mean to say that language has [communication as] an "essential purpose"? Suppose that in the quiet of my study I think about a problem, using language, and even write down what I think. Suppose that someone speaks honestly, merely out of a sense of integrity, fully aware that his audience will refuse to comprehend or even consider what he is saying. Consider informal conversation conducted for the sole purpose of maintaining casual friendly relations, with no particular concern as to its content. Are these examples of "communication"? If so, what do we mean by "communication" in the absence of an audience, or with an audience assumed to be completely unresponsive, or with no intention to convey information or modify belief or attitude? (1980, p. 130)

Chomsky follows the dominant philosophical tradition in assuming that language functions would have to reduce to or be derived from speaker intentions. In fairness, the only alternative that mainstream philosophy has offered is to derive them somehow from language conventions, language conventions being understood, as above, to involve some obscure kind of regularity within some nebulous group. Chomsky is right to reject this latter alternative, but there is no need to accept the former. I will offer a third alternative that I hope he will find more palatable. But given this third alternative, it will become clear that the functions of the overwhelming majority of conventional language forms is to enable various kinds of communication.

¹ Recanati (1987) takes it that conventional language devices "indicate" or, using the linguists' term, "mark" uses of language, that is, conventions mandate that these devices shall be used only for those purposes. This is not explicitly stated, but see, for example, §22.

The argument will be, then, that a central function of the language faculty in humans is to make language conventions possible, and that the functions of conventions are to make communication possible. In this case, I take it, "has as its function to" is a transitive relation. At the same time, I will argue that the web of conventions that forms the mass that is public language is not an abstract object but a concrete set of speaker-hearer interactions forming lineages roughly in the biological sense. These lineages and their interactions with one another are worthy of scientific study. Nor are their properties derivative merely from the properties of I-languages.

Both the thesis on conventions and the thesis on functions to be applied here have been fully stated and defended other places.² Here I can only sketch results and try to ward off the most obvious objections. First, then, some words about conventions.

As Chomsky remarks, it is conventional to say "Hello" when you answer the phone. Moreover, nearly everyone, say, in America, does so. But it is conventional in exactly the same way to call a spigot "a spigot" and also to call it "a faucet" and also "a tap," and clearly there can be no group in which everyone does all three of these things regularly. And of course that is not what David Lewis had in mind when he claimed that language conventions exist only where there are regular behaviors. He didn't mean that spigots are always called "spigots." What he meant was that if someone calls something "a spigot," then it is regular that that thing is a spigot, which looks quite a lot more plausible. Troubles with regularity theories show up not here but, first, with the problem how to delimit the relevant groups within which the regularities supposedly occur. Within what designatable group is the convention to hand out cigars on the birth of a boy regularly followed other than the group that in fact hands out cigars on the birth of a boy? Within what group is the convention that by saying "break a leg" one wishes another luck regularly followed other than the group that in fact uses "break a leg" to wish people luck? Troubles show up with the regularity theory, second, where people use language in ways that do not accord with convention, for example, when they use metaphors, sarcasm and other figures of speech, and when they lie, or make false promises, or demand things they know they won't get, or as Chomsky suggested (though in another context), when they sincerely assert what they know won't be believed, or when they talk only to themselves. There is a voluminous literature on such cases in speech act theory, which tries vainly to solve an insoluble problem. It tries to describe regularities involved over all such uses—very subtle regularities to be sure, usually taken to occur on the level of multiply embedded beliefs that speakers supposedly invariably intend to impart. Since Chomsky apparently agrees that this sort of problem is insoluble, I won't argue the case here.³ I will simply start in and describe a kind of convention that has no connection with regularities, that is not a convention "for" any particular group. And I will try to show that this is a way in which natural human language is conventional.⁴

² The thesis on conventions is in (Millikan 1998a); the thesis on language functions is in (Millikan 1984; 1995; 1998b; 1998c)

³ See, however, (Millikan 1998b).

⁴For more detail, see (Millikan 1998a).

What is conventional in this sense is an activity or a pattern of activities. Exhibition of the pattern may require only one participant or it may involve more. Conventional ballroom dance steps, for example, are patterns involving two participants whereas the pattern that is playing ring a ring o roses generally requires more. To become conventional, an activity or pattern of activity must, first, be reproduced, hence proliferated. (Please do not blanch. "Reproduced" will be used here such that language forms can be reproduced by a language faculty imposing a universal grammar.) Further, it must be proliferated due in part to the weight of tradition, rather than due, for example, to its intrinsically superior capacity to perform some function, or due to ignorance of any superior way to perform it. I will discuss each of these characteristics of conventions in turn.

First let me explain "reproduced." I will use this term in a limited way. A reproduction must be such that had the original been different in specifiable respects the reproduction would have differed accordingly. Inherited traits and behaviors are not "reproduced" in this sense. I have blue eyes not directly because my mother and/or father had, but because of my genes, which were copied from their genes, which were not, however, copied from their eyes. Had my mother's or father's eyes been yellowed from jaundice, that would not have caused my eyes to be yellow.

A reproduction is always a reproduction only in certain respects. The reproduction that comes out of a monochrome copying machine is a reproduction only with respect to pattern of light and dark. The background color and the paper texture are not reproduced, as these depend on the color and texture of the paper put in the paper feeder, not on the color and texture of the original. The color of the pattern is not reproduced because it depends on the color of the ink in the machine, not on the color of the original. Any object can be reproduced in an indefinite variety of ways, since any object has an indefinite number of properties. Nothing is a reproduction of anything else in all respects. Because properties that are reproduced can be relational properties as well as intrinsic properties, and since everything has an infinite number of relational properties, it is not possible to exhaust the variety of reproductions that might, logically, be made of an object. Reproductions that copy relations may be unlike their originals in very striking respects. For example, a painter who reproduces "the style" of an earlier painter may paint quite different subjects matters and use quite different media, while another painter may reproduce this same painter's "style" by painting similar subject matters only. The products of both painters will be "reproductions" as I am using that term. Further, since an object can have many parts and many aspects or properties, it can be a reproduction of a number of different things all at once, borrowing some features from here, others from there, and so forth.

For one thing to be "reproduced" from another, all that is required is that there be a mechanism that produces the second on the model of the first, such that had the first been different in specifiable respects, that would have caused the second to differ accordingly. Under this description, reproducing can of course occur unconsciously. For example, there can be conventional ways of talking or of moving the body, differing for men and women, or specific distances from one another at which it is conventional to stand when talking, that are handed down by being unconsciously reproduced. Also, reproducing need not be direct. If Mother tells Johnny to shake hands when being introduced, rather than, say, telling him to kiss on both cheeks or to sniff noses, granted

that she tells him this only because other folk behave or have behaved in this way, then Johnny's behavior, when he does what he has been told, is indirectly reproduced. Had certain other people been greeting one another in other ways, Johnny's way of greeting would have differed accordingly as a result. Also, if Jim taps a nut to fit Jon's bolt, then Jan makes a new bolt to fit Jim's nut, on this definition, the thread on Jan's nut has been reproduced from Jon's nut. I will call this last kind of reproduction "nuts and bolts reproduction." Nuts and bolts reproduction probably figures in the propagation of certain kinds of conventional language patterns.

Now a preliminary word about the relation of function to convention. Many conventions have no apparent function. It is conventional for a bride to wear a blue garter, and to throw her bouquet to the bridesmaids. It is conventional to dress girls in pink and boys in blue, and to put a wreath on the door at Christmas. But some conventional patterns obviously do serve functions. For example, the convention of driving on the right in the U.S. serves a function. Where a reproduced pattern does serve a function, it is not a conventional pattern unless it is one that would have no particular reason to emerge again, rather than some alternative pattern, if once forgotten. This is because its intrinsic nature makes it no more able than other known or equally knowable patterns to serve its function. Conventional patterns are exemplified rather than other patterns owing only to historical accident, but having occurred, they cause their own recurrence.

A convention of this kind is not tied by definition to any particular group nor is there anyone in particular who must know of it or follow it. Obviously there have to be some people who follow or have followed it or the pattern is not reproduced hence not conventional, but it is not necessary that any particular people should do so, nor that a large number of people should do so.. When conventions are associated with specific groups, this is because it happens to be the people in these groups who know the conventions and happen, for whatever reasons, to follow them. Which independently designated "group" knows that it is conventional to drink green beer on St. Patrick's day? How many who know accord? What else do these people have in common that would form them into a social group or "community"?

A convention does not prescribe that everybody in some predesignated group should follow it. To know a convention is not to know what to do categorically, but only to know what to do if you wish to follow the convention. For example, the conventions, the rules, of chess do not tell you what to do, but only what to do if you wish to play chess. You can get these conventions wrong, of course. You can fail to reproduce the conventional chess patterns faithfully even though you intend to. But the standard that has then been violated was set by your own intention. No public prescriptive rule will have been violated.

The appearance that conventions involve prescriptive rules may result partly from the fact that many conventions are conditional. The convention is to do something in a certain kind of context, or at a certain time, or if you are a certain kind of person, or in a certain situation. The convention is to put up red and green decorations at Christmas time, or to say "Hello" when you pick up the phone, or to wear a ring on a certain finger of your left hand if you are engaged or married. But that the conventional pattern includes a conventional setting does not mean that it mandates itself. A convention is not, as such, a rule that is required to be followed. A convention is not something

having magic times or places or situations where it is mysteriously "in force." If there is some kind of mandate or compulsion to follow a convention (legal, moral, a norm of etiquette) or to follow it under certain conditions, that is a separate thing entirely, and not what makes it a convention, at least not in the sense of "convention" that applies to natural language forms and patterns.

Nor—and this will later emerge as crucial to the case of language conventions—does a convention mandate that its pattern must be finished once begun. More generally, it does not mandate that the whole of the pattern must be reproduced and not its parts separately. One can quit a chess game in the middle, or set up just an end game or a middle game. Although there is a convention to have one's soup first, then one's salad, main course, and last ones dessert, one can follow the convention part way but not have dessert. For all this kind of convention is, basically, is a pattern of activity that gets reproduced.

Soon I will discuss conventions that serve to coordinate actions and thoughts between people, for these are very important to an understanding of language. And I will argue, contra Lewis in Conventions, that like more simple conventions, coordinating conventions too do not, in general, involve regularities. First, however, we should examine some simpler aspects of public language in the light of its conventionality. We can begin with words.

Words, many philosophers have thought, are typed or individuated in accordance with physical form. My guess is that there are no legitimate theoretical purposes for which this way of typing is relevant, but I will not argue that here. Rather, I will examine some ways of typing tokens into "words" on which we commonly rely in ordinary contexts, and which reveal our ordinary sensitivities to the conventional aspects of language as I have described them. According to one way of typing, there are parts of Tennessee, for example, where the word "pen" sounds exactly the way my word "pin" sounds. It's exactly the same word, but it sounds different in Tennessee than Connecticut. "They say many of their words differently in Tennessee." Clearly the same word again need not be made of the same acoustic sounds again. Linguists may say that it must be made of the same phonological segments again, the same phonological segment sometimes taking a variety of forms, there being, for example, different allophones of it. On a similar way of typing, the same word must be made of the same letters again, but the very same letter has quite different shapes when different people write it, while different letters sometimes have the same shape, for example Greek "P" (rho) and Roman "P". Typed in these ways, word types and their elements, phonological segments and letters, are like species.⁵ In biology, what makes a dog a dog is, in the first instance, that it was born of a dog, not that it has some particular shape. Similarly, what makes a shape or sound into a token of a particular word on this way or reckoning is its lineage, what it was reproduced from, on what prior word tokens it was modeled, or alternatively (and this can be different), on what combination of phonological segments or letters, these being typed by their histories, their lineages. The lisping

⁵ I realize that this is not how contemporary linguists define phonological segments, but I am suggesting this as a theory concerning an aspect of their real nature. Similarly, biologists before Darwin thought that all members of the same species had an inner nature or form in common. Modern biologist's don't think so.

child who pronounces the word "red" like "wed" does not pronounce the word "wed" but mispronounces the word "red." If I repeat after a Scotsman, I say the same words, but many of them sound quite different. The same word is spelled "color" in America and "colour" in England. Conversely, the twinearth word "water" is as much a different word than ours as the stuff to which it applies is a different liquid than ours. It is different the way Greek P is different from Roman P (rho). And, of course, comments about the river bank and about the bank & trust contain different words "bank," copied from completely different lineages. These ways of grouping word tokens into types depends on the conventional nature of words, on their reproductive nature, in much the same way that the typing of individual animals depends on the reproductive nature of animals.⁶ And it runs into similar problems. How much can a species change over time without becoming a different species? Is it really so that the word "moan" in "He moaned and groaned" is the same word as "mean" in "He didn't mean to" but a different word than "mean" in "no mean city," as the etymologist is liable to say?

Similarly, the difference between two tokens of a word being used in two different senses and being used once in a literal and once in an extended way, is a question of lineage. Word tokens used in extended ways are reproduced from words used literally. Tokens of the same word that have taken on different senses are words with a common lineage some distance back, but whose lineages have now separated—a matter which can, of course, be one of degree. For example, the question whether the word "red" in the phrase "red hair" has a different sense than the "red" in "red dress" depends on the ancestry of its tokens. Are its tokens currently being reproduced only from other tokens of "red hair"? Or do people individually and independently each stretch the word "red" as used in contexts like "red dress" to cover also red hair? Considered in this light, the conventionality, hence public nature, of words is certainly a real and interesting phenomenon, though often hidden from direct observation in its details.⁷

Besides words, grammatical forms are conventional patterns in the sense we are explicating. Remembering that a reproduction always copies only certain aspects of its model, clearly children reproduce syntax on the model of what they hear. Nor do I mean, of course, that grammar is a matter of patterns in sound. It is the linguist's job to discover exactly what kinds of patterns are materials for the conventions of grammar, to discover what forms of what aspects of speech are the reproduced ones in conventional grammars. The hypothesis of a universal grammar faculty that imposes restrictions on human grammars concerns this matter. Whatever the details, a UG, looked at one way, acts as a more or less complicated filter governing which aspects of what is heard will be reproduced, which aspects will vary depending on models heard and which will not. If there are certain aspects of grammar that are never reproduced at all, but always re-supplied by the language module *de novo*, these act like the color of the ink cartridge in the monochrome copying machine. They are not conventional aspects of grammars. A huge question for linguists, of course, concerns which aspects of grammars are and which are not conventional, in exactly this sense of "conventional."

⁶ This point about the typing of words is put in a broader context in (Millikan 1984, Chapter Four). Much the same point about words is also argued in (Kaplan 1990).

⁷ There is more on all the above matters in Millikan (1984) chapters 3 and 4.

It is important to notice the similarity here between grammatical conventions and others. The perpetuation of any convention requires, categorically, that participants attend to the same aspects of the convention's embodiments and not to others, so that they generalize to new cases in the same manner. Thus the convention is to hang a wreath on the door at Christmas, not a sweet-smelling object, and not to do it at relative-visiting times, or at present-giving times, or on cold Tuesdays. In the case of every convention, there has to be some mechanism, whether accidental, or whether designed by nature or man, that operates to keep copies and copies of copies somewhat uniform. Otherwise there is, of course, no convention at all.

A UG is a mechanism effecting uniform reproduction of syntactic forms, hence the maintenance of syntactic conventions. Maybe UG got there accidentally, as Chomsky has sometimes suggested, or maybe it got there by natural selection, it doesn't matter. My present point is that without something like it, there could be no grammatical conventions. Similarly, if there are inborn mechanisms, as there appear to be, that efficiently accomplish mastery of the phonological structures of languages that the young child hears, these function as another kind of filter that serves to narrowly channel linguistic reproduction, hence to aid the proliferation of linguistic conventions. Phonological mastery of a language yields a generalized sameness-difference schema for the language, dictating what it to count as another correctly executed linguistic utterance of the same type, along one relevant dimension of linguistic reproduction. Alvin Liberman has argued that phonological structure is the fundamental sine qua non allowing for the practical possibility of language innovation (Liberman in press). Without it we could at best be stuck with a limited inborn vocabulary, that had slowly and painfully accrued during the course of genetic evolution. A great deal of attention has been paid to the kind of productivity made possible by a grammar that allows embeddings, so that an infinite number of sentences can be generated with a limited vocabulary. But this kind of productivity would have minimum utility if free to operate only on a tiny vocabulary. The capacity of the language faculty as guardian of phonological structures, thus allowing rapid vocabulary growth not just in the child but also in the public language, is productivity with a significance at least as profound.

This idea [that new speech forms that a speaker has not heard are produced on analogy with those he has heard] is not wrong but rather is vacuous until the concept of analogy is spelled out in a way that explains why certain "analogies" are somehow valid whereas others are not,... We can give substance to the proposal by explaining 'analogy' in terms of l-language, a system of rules and principles that assigns representations of form and meaning to linguistic expressions... but....with this necessary revision in the proposal, it becomes clear that 'analogy' is simply an inappropriate concept in the first place. (1985:32)

"Analogy," in this context, could mean just sameness in abstract or relational form. Producing new speech forms on analogy with old could mean just some sort of reproduction, as I am using the latter term. But what people more usually have in mind when they speak of "analogy" in this context is a fairly free sort of reproduction, that might pick up one aspect of the original or might pick up another. That language learning and use involve analogy in this free sense is something that both Chomsky and I want firmly to deny.

On the other hand, the present perspective on public convention gives us little reason to suppose that "I-language" should consist in something appropriately described as "a system of rules and principles," at least not if "system" implies much systematicity. To view the young child's language faculty as a filter through which language conventions are to be transmitted is to view it not as aiming toward some steady state as the child matures, to view it not, for example, as a process of acquiring permanent parameter settings, but as a faculty engaged in the accumulation of a larger and larger repertoire of conventional patterns it can recognize and reproduce on demand. If it reaches a steady state, that will be only if it runs out of local conventions to learn. It would be likely to reach a steady state only if there really were such a thing as The German Language, The French Language and so forth, to be learned. But there is quite a mass of conventions out there to be learned. These conventions are complex, and not particularly systematic, and sometimes crisscrossing or contradictory, getting in one another's way. Thus, with Italian words you use Italian grammar, with English words English grammar, except that in some cases people do quite a bit of mixing, even in conventional ways. With "expect" you use the infinitive but with "anticipate" the gerund. With most English verbs you add an ".ed," but not with "run" or "swim"—people just aren't doing it that way here these days. And the conventions cross at "Is the missionary ready to eat?" and (when it is spoken) "Gladly, the cross-eyed bear." Because linguistic conventions can be more or less compatible in various ways, and because they are often built on one another, exactly like genes in gene pools, they tend to get together in stable clusters. There are innumerable plant species that hybridize quite readily, but left to themselves in a relatively uniform environment, the genes fall back again into stable clusters, and separate relatively homogenous species emerge again. In the same fashion, German and French and other languages are formed out of compatible strands of convention, and if different peoples are isolated from one another for very long, clear demarcations soon emerge between the language conventions they follow. But the idea that there is at the center of each such language some univocal "system of rules and principles" seems as unlikely as that members of an animal species should be genotypically identical or that the whole gene pool should contain no incompatible genes. Possibly there is no real disagreement with Chomsky here. Maybe it is just that I am much more impressed—overwhelmed?—by the huge number of idiosyncracies and idiomatic elements in any natural language. Perhaps whether "a language" is best idealized as a monolithic structure, or as a relatively loose texture of interlocking crisscrossing conventions, is only a matter of what you are interested in. Surely either way, idealization is involved. Chomsky and I agree, after all, that there actually is no such thing as "a language."

In any event, the phenomenon of public language emerges, I believe, not as a set of abstract objects, but as a real sort of stuff in the real world, neither abstract nor arbitrarily constructed by the theorist. It consists of actual utterances and scripts, forming crisscrossing lineages. What language forms one is using, from the standpoint of public language, depends not only on the settings in one's language module but on what public conventions one is following. Moreover, public language has definite form, granted that it is passed on in a uniform way by people harboring I-languages that are definite in intension, as Chomsky requires.

If you take the genes eye view, Dawkins tells us (1976/1989), the organism is

just a gene's way of making another gene, but, of course, if you take the organism's viewpoint, the gene is just an organism's way of making another organism. Similarly, if you are interested in individual psychology, public language is merely a stimulus to transition from the initial state of the language faculty S_0 to a more steady state S_s . If you are interested in public language forms, on the other hand, the language faculty is merely how public language forms reproduce themselves. A public language is interesting in its own right, I will argue, because it has certain functions that are all its own, that are not merely abstractions gleaned by averaging over speakers' intentions. The study of the functions of public language is a separate discipline, independent of the study of individual psychology.

To show this will require making the second move that I mentioned at the start of this paper, introducing an appropriate theory of language functions. The functions of language conventions are, for the most part, coordinating functions. So I must also show how the existence of conventions, given the way I have described them, can produce coordinations. Coordinations effected through language conventions typically involve communication. The second main argument of this paper will then be complete: A primary function of the human language faculty is to support linguistic conventions, and these have an essentially communicative function. Therefore a primary function of the human language faculty is to support communication.

I will be using "function" here as short for "direct proper function" as defined in Millikan (1984) Chapter One. This notion is a relative of the notion of function that biologists use when they distinguish between functions and mere effects of an organ or trait or activity. Roughly, the function or functions of a conventional pattern are those effects of it that account for its continued reproduction. More accurately, the pattern is proliferated due in part to a correlation between it and certain of its effects. It is selected for reproduction, in accordance with conscious or unconscious intent, owing to its being coincident with these effects enough of the time. Correlations can, of course, be either very high or very low. Many biological items and traits have functions that they perform very seldom, yet just frequently enough to keep the genes responsible for them from drifting to extinction. Similarly, conventional activities and patterns of activity can have functions that they perform only once in a while, yet perform just often enough to keep them from becoming extinct.

Many conventions seem to have no functions. They seem to proliferate only because people are creatures of habit, or unthinking conformists, or because they venerate tradition, and so forth. Similarly, most patterns of activity that are reproduced due to their effects are not conventions, but rather are handed down skills. Conventional ways of performing certain tasks, such as conventional ways of holding eating utensils in various cultures, or of sitting at meals, are proliferated, in a sense, because they serve certain functions. But it is only certain details of these activities that are conventional, namely, details not required to effect the functions that sustain the activities. Other kinds of details would do as well instead. On the other hand, some conventions have functions as conventions. The clearest and most interesting functions that conventions can have are coordination functions. I will call conventions with these functions, "coordination conventions."

Coordination conventions consist of patterns of activity (1) involving more than one participant, (2) proliferated because they serve a purpose had in common by the

participants, (3) where the contribution to the joint pattern that each participant must make in order to reach the common goal depends crucially upon the contribution made by the other(s) and (4) where a variety of equally viable alternative joint patterns would achieve the same goal as well. Coordination conventions are thus patterns which might be said to be suitable to solving "coordination problems," though the sense of the latter phrase would not be quite David Lewis's (Lewis 1969).

Some conventional coordination patterns require partners to do the same as one another, while others require them to do complementary things. Examples of patterns requiring the same include driving on the right, shaking hands with the right hand with an up and down motion, and standing at a conventional social distance when conversing. Examples requiring complementary actions include conventional positions for partners of opposite sexes while dancing, the pattern original caller calls back, original receiver waits when a phone conversation is disconnected (Lewis 1969), the conventional pattern driver on the right crosses, driver on the left waits when arriving simultaneously at a four way stop sign, and the pattern patron puts the flag up when putting mail in, mailman takes the flag down when taking mail out when a letter is mailed in a rural mailbox. The view that conventions require regularities has sometimes been supported in part by the assumption that all parties in a coordination pattern do the same thing. For example, Lewis describes patterns such the telephone convention (above) as though both person's did the same, each following the same conditional rule, if you are the original caller, call back, if not, wait. But this is a vacuous move. Any pattern whatever involving more than one person can be described as though these people all did the same. Even the executioner and the executed do the same thing: if you are the executioner, chop, if you are the executed, relinquish your head.

For coordination conventions, it is important to consider whether in order actually to effect coordinations these conventions require regularities in the sense that all or most in some group should accord with them. The answer depends directly on how observable one partner's contribution to the pattern is at the time when the other or others must make theirs. Consider, first, the telephone convention. Here each partner must make his or her own contribution while completely blind to what the other is doing. For this reason, the coordination will not be achieved unless each partner produces their part of the pattern and before knowing whether the other will produce theirs. In this kind of case, use of the convention will be more or less effective depending on the frequency with which people who interact with one another conform to it, universal conformity producing the best results for everyone. Alternatively, each partner must have prior knowledge which of the various persons with whom they interact is likely to abide by the convention regularly, and if no one abides by it regularly, coordination cannot be achieved. Such a conventional pattern will produce coordinations often enough to encourage its own reproduction only if followed some critical proportion of the time.

The convention of driving on the right is almost as blind as the telephone convention, though not quite. One can see whether a car approaching ahead is driving on the right when the road is straight, but not, of course, around curves. Similarly, the mailman has no way of knowing whether the rural patron has performed his part of the conventional flag-raising pattern without looking in the mailbox to see if there is outgoing mail there. But the point of the convention is, of course, to avoid his having to look if the

flag is not up, at the same time securing that all the outgoing mail gets collected. Again, these conventions will serve their functions better the more people follow them.

Contrast these cases of "blind" conventions with the case of assuming conventional postures for social dancing followed by the joint execution of various conventional dance steps. There are a number of alternative conventional postures that a couple may assume, and many alternative combinations of conventional steps can be taken to a given piece of music. But here the conventional pattern initiated by one partner is immediately known to the other: the conventions are not blind but open. There is no need then for different dancers all to conform to the same postures and ordering of conventional steps. All that is needed is for one partner to lead and the other to follow. What will not work, of course, is for both to lead. And there is a convention that the man leads, but, again, not one that everyone has to follow. Conventionalized social dancing thus involves "open" conventions rather than "blind" ones.

Warming up to the case of coordinating language conventions, here are four more cases of open conventions: (1) I stand behind your car and wave my hands this way and that in a conventional way and you complete the conventional cooperative patterns by backing your car to suit my gestures. (2) While biking, I hold my left arm out and you stay out of my way as I make a left turn. (3) I bid four clubs and my partner bids his strongest suit (the "gerber convention"). (4) I want you to pass the bread whereupon I say, "please pass the bread" and you pass the bread, or, I want you to pass the bread whereupon I say "Brot, bitte" and you pass the bread.

With "open" coordination conventions, there is no need for regular adherence to any one convention among others for achieving a given kind of coordination. Often many alternative open conventions coexist quite compatibly. Recognizing that a leader has initiated a particular conventional pattern and completing it is like chiming in after the first line of a familiar song. Nor is it necessary that the partners who follow should be regular in their responses to conventional leads. Conventional patterns, as noted before, often persist even though quite regularly broken or interrupted in execution, partners being unwilling, or unable, or having other plans in mind, and so forth. If the coordination effected by completion of a conventional pattern even occasionally has enough value to the partners involved, the pattern may be able to survive even though more usually fractured than not. Perhaps the best contribution that Skinner made to psychology was his demonstrations of the effectiveness of random reinforcement schedules even when reinforcement is, on average, very infrequent. Lead portions of conventional patterns also are often turned to secondary purposes that do not accord with their functions as conventions, that is, with the reasons for survival of the conventional pattern. A dancer might lead into conventional dance patterns that he knows his partner can't follow in order to embarrass his partner or to show off. Or the one standing behind the car might jokingly signal a turn that both know leads into a brick wall.

I now want to make plausible that the functions of language conventions are primarily coordinating functions. It is primarily for the service of coordination between speakers and hearers that language patterns are selected to be proliferated as conventions. That is, were it not for the fact that employing its conventions sometimes serves purposes common to both speaker and hearer, language as we know it would

shrivel and die. Indeed, for emphasis I might make a stronger claim. Putting completely to one side the evolution of the language faculty itself, were it not for their roles in the achievement of communicative coordinations, there is every reason to suppose that the individual language faculties of individual humans would atrophy, just as with unfortunate children who are not exposed to human language forms at all. Imagine, for example, a child who hears a perfectly normal assortment of English sentences, but for whom no coordinations are ever achieved through use of conventions involving these. For example, the child never learns anything by hearing these sentences that it is able to confirm for itself as indeed true, and the child is never rewarded in any way for following directions given it. Such a child, I am suggesting, would develop no language at all. That, of course, would be an empirical hypothesis, but I will offer reasons to entertain it seriously.

On the other hand, it is possible that there exist some language conventions that have no functions at all. Saying "uhh..." at intervals may be such a convention. The corresponding German convention is to say "also..." and I am told that in Hungarian one says "öö..." Possibly the use of expletives has no coordinating function. The function of expletives, granted they have functions, may be simply to relieve oneself of, or to objectify for oneself, one's emotion. Thus, people use expletives just as often, perhaps more often, when alone as with other people. It is worth noting, however, that a different part of the brain is involved in the production of expletives than for other speech forms (Pinker 1994: 334).

The best argument that few if any language conventions lack coordinating functions is to discuss some that obviously do have coordinating functions. It will then become clear, I think, how ubiquitous such coordinating functions must be.

We can begin with functions of the grammatical moods. In English, at least, the syntactic forms identified with the indicative mood are proliferated in the service of a number of different coordinating conventions having different functions: conveying information or reminding someone of it ("The Athenians had slaves too"), giving orders ("You will report to the CO at 6 am sharp"), conveying norms ("Johnny, we don't eat peas with our fingers"), and making declarations ("The meeting is adjourned") are four common ones, and undoubtedly there are more. The English indicative mood is like a homonym in this respect. Better, it is like a word that has several distinct though related meanings, instances of each use normally being modeled on prior instances of that same use, where all but one such use can still be heard as a dead metaphor. The use for conveying information is heard as the originating or most "literal" use of the indicative, so let us look first at that pattern.

The pattern begins with a speaker S believing some proposition p and accordingly speaking an indicative mood sentence that expresses p, given the truth-conditional part of the semantics of the language. It concludes when a hearer H, following the truth-conditional semantics for the language, translates the sentence into the thought that p, and accordingly believes that p. The pattern produces a coordination between speaker and hearer under the following assumptions: (1) the speaker is interested to convey information on the subject that p to the hearer, (2) the hearer is interested to gain information on that subject and (3) the proposition p is true. The end that S and H have in common is that H should become informed about p. For the entire pattern to have attainment of this end as its own or proper function, (1) it must be a

reproduced pattern or (the normal case) it must be composed of reproduced patterns (the words, the syntactic form(s)), (2) it and/or its reproduced elements must each continue to be reproduced only because they sometimes make a certain definite contribution in the service of coordinations, (3) and the sum of these contributions, if made in this case also, would effect that H would become informed about p. For the indicative mood form itself to have the transfer of information from speaker to hearer as a function, it must be that the contribution it makes to the whole is to utilize the functions of other reproduced parts of sentences exemplifying it to that end.

"Reproduction" in this case, and in the general case for coordinating functions of language, is mainly by nuts and bolts reproduction (see above p. [00]). The speaker parts of the patterns are reproduced due to the effects they sometime have in the presence of hearers who complete them, and the hearer parts are reproduced due to the effects they sometime have in the presence of speakers who have initiated them. But the whole pattern, involving speaker and hearer, is arbitrary in relation to its function, that is, it is conventional. H responds to the indicative sentence by translating it into belief in accordance with certain semantic rules because, in H's experience, responding selectively to indicative sentences in this way has often enough resulted in the appropriation of useful information. S translates S's belief into an indicative mood sentence in accordance with these same semantic rules because, in S's experience, often enough hearers respond to such sentences by forming beliefs accordingly. Read the "because"es here not as indicating conscious reasons, but as indicating causes. That is, turning the coin over, had H not lived where speakers often enough expressed true beliefs using the indicative pattern with these truth conditional semantic rules, H would not translate from indicative sentences into belief in this way, and had S not lived where hearer's often enough translated from indicative sentences into belief in this way, S would not speak in this way when interested to convey information. Thus speakers and hearers collectively learn from each other how to speak and how to respond to speech in ways that serve purposes for both, each leaning on the settled dispositions of the other. The parallels with the evolution and fixation of symbiotic relations between animal species and with the evolution of animal signal systems should be apparent.

It should be clear from the above description that successful coordinations achieved in this way through use of the English indicative mood help not only to proliferate the indicative mood, but also to proliferate use of and reliance on semantic conventions applying to other elements of indicative mood sentences. That understanding the truth-conditional semantics this way is enabling me often to collect useful information reinforces my use of these conventions for interpreting the semantics, and that my hearers often enough seem to believe what I intend them to believe reinforces my use of these semantic conventions when speaking. If I never had either of these experiences when using or interpreting indicative mood sentences, and if, further, this use of the indicative mood was the sole convention in my language community involving intentional attitudes, hence the only one employing the truth conditional part of its semantics, I could not possibly learn to understand either this function of the indicative mood or any of the truth-conditional semantic conventions of my language. Of course, the use of indicative forms to convey information is not the only convention employing the truth-conditional part of the semantics of any natural language. But the underlying principle here is crucial. It is only through various

communicative uses of language and through the conventions that make these possible that the truth-conditional semantics of a language, which is also conventional, of course, is learnable. I will reinforce this point in a moment by discussing other kinds of conventions that rely on the truth-conditional semantic conventions of languages, and vice versa.

A surprise on this analysis of the conventional nature of the information-transferring function of the indicative, is that believing what you hear said in the indicative turns out to be a conventional act, something one does in accordance with convention. Compare: standing, while conversing, at what happens to be the conventional social distance in one's culture, is something one does in accordance with convention. And one learns to stand at the correct social distance in very much the same way, by unconsciously learning to fit with others who are already standing at that distance. The difference is only that in the case of social distance, the convention requires that partners do the same thing rather than different things. On the other hand, of course, the fact that H's believing p is a conventional outcome of S's telling H that p in no way mandates that H will or should believe p. The fact that a given outcome would be the conventional one in no way implies or mandates that it will be the actual one. As emphasized earlier, pieces of conventional patterns often occur independently. The speaker who lies also illustrates this point. He uses conventional structures in an attempt to induce partial completion of a conventional pattern, but both the beginning and the end of the pattern are missing. He does not translate from a genuine belief into words as required by the convention, nor does the hearer end with a true belief as required.

Similar analyses can be applied to the functions of numerous other language forms, each of which continues to be reproduced due to its occurrence, often enough, in a pattern ending in a certain conventional hearer response. The root function of the imperative mood, for example, is to produce a corresponding action by the hearer, where the speaker is interested in having that action performed, and the hearer is interested in completing the conventional pattern, perhaps because he has a further interest in common with the speaker (hearers often want direction from speakers) or because conforming is sanctioned in one way or another. Performance of this imperative function is accomplished through the hearer's first forming an intention to perform the designated action, an intention formed following the truth-conditional semantic conventions of the language, so that reinforcement of the hearer's compliance tends to reinforce his observance of these semantic conventions as well. The imperative function also proliferates reproductions of indicative mood forms, especially in the armed services. Here the indicative mood functions, as I have said, rather like a dead metaphor. The root function of the interrogative is to get information of a designated kind conveyed to the speaker, and its conventional use when successful also reinforces any truth-conditional semantic conventions used with it. And so forth. On the other hand, elsewhere I have discussed the functions of a number of other language devices (Millikan 1984), claiming that the functions of sentences in which these forms occur do not directly implicate intentional attitudes on the part of either speaker or hearer. These sentences have as their functions to do other things, as it were, to hearer's heads. Similarly, Strawson (1972) claimed that what an identity sentence does is to merge two information files in the hearer's head (see also Millikan 1984, 1993, 1997), and Wilfrid

Sellars (e.g., 1963, essays 4,5,6,8,10) claimed that what the "X" means Y rubric does is to prompt the hearer to use "x" in the way he already knows to use "Y".

It is crucial that the functions of language forms are not the same as the uses to which they are usually put. Effective use of a set of language conventions requires the acquisition of a mass of skills and a good deal of inventiveness well beyond mere grasp of those conventions. Hearers can by no means be counted on to complete the conventional patterns that speakers initiate. They will do so only under special conditions. For example, they must trust the speaker, understand the subject matter, and have interests compatible with the coordination projected by the particular convention used. Moreover, the fact that a conventional linguistic form has a certain function does not prevent a speaker from using it to serve quite different ends. In general, there is no need that a device having a certain function be used to serve that function. A hammer can be used as a weapon, a human hair can be used as a cross hair on an instrument, and the eye blink reflex can be used by the psychologist to demonstrate classical conditioning. Similarly, language forms are often used to serve functions that are not their own. Sometimes these extrinsic ends are ends that also interest the hearer and sometimes they are not. Uncooperative uses of conventional forms include lying to the hearer, embarrassing the hearer, insulting the hearer, purposefully putting the hearer in an awkward position, and so forth. Cooperative uses include pretend uses (acting, joking) and the whole hodgepodge of Gricean implicatures (Grice 1968).

Gricean implicatures are of particular interest because they involve uses of conventional forms to produce nonconventional coordinations. Unlike cases in which, say, the speaker lies or the hearer refuses to comply, so that one frustrates the purpose of the other, a successful Gricean implicature achieves exactly the same sort of coordination that proliferates conventional language patterns. For this reason, Gricean implicatures easily become conventionalized. Speakers soon come to reproduce the relevant language forms directly on the model of previous cases of successful implicature, and hearers also reproduce the intended response that way. Hackneyed examples are "Nice going!", "Where's the fire?", and "can you....?", "could you...?" (as contrasted with "are you able to?") as used to make requests. The effect is exactly the same as when metaphors enter "the language" (sic!) and become literal. The conventionalized use may continue to be associated with the original use more or less strongly, the strength of association differing also from person to person. It was only recently, for example, that I came to associate the idiom "going haywire" with tangled hay wire, and perhaps most people, excepting farmers, never do.

For both dying metaphors and conventionalized Gricean implicatures, entrance into "the language" is thus a matter of degree. How widely spread a conventional usage is is always a matter of degree. Language conventions can develop between just two people, as frequently occurs with identical twins, or develop and proliferate widely within just one generation, as in the case of certain Creoles. It does not follow that the distinction between the conventional functions of language and individual uses of language is the least bit arbitrary or trivial. Whether or not a person is dead can also, occasionally, be a matter of degree. All of the conventional functions of public language are as much its meanings as are its satisfaction conditions. The distinction between the meanings of linguistic forms and the meanings of speakers who use them is entirely real

and important.

Davidson (1986) claims that there is no boundary around the information on which a hearer may need to draw in order to interpret a speaker, hence that there is no use for the notion that a language serves as "a portable interpreting machine set to grind out the meaning of an arbitrary utterance." He concludes from this that not only must we "abandon...the ordinary notion of a language, but we have erased the boundary between knowing a language and knowing our way around the world generally." Chomsky is right (1992a, 1992b) that Davidson has produced here no reason to abandon the distinction between the internal systems that know language and the systems that use this knowledge. On the other hand, the systems that know language must grasp or "represent," (as Chomsky rather puzzlingly puts it) more than just phonetic form (PF) and logical form (LF) if the latter is understood narrowly. They must also grasp conventional function. If one draws the semantics/pragmatics distinction with the purpose of cutting between meaning and use, between linguistic or "grammatical competence" and "pragmatic competence...relating intentions and purposes to the linguistic means at hand" (Chomsky 1980:224), then the functions of all linguistic conventions fall on the semantics side of the dichotomy.

On another point Chomsky agrees with Davidson: we must "give up the idea of a clearly defined shared structure which language users acquire and then apply to cases." If we substitute "structures" for "structure," however, Davidson would surely be wrong. Language users acquire various shared structures, knowledge of public conventions, knowledge of the functions of various real world lineages of idiom and form, without which they could not use language to communicate, nor for any of its myriad alternative uses that ride piggyback on public truth-conditional semantic conventions and conventions of "function" in a more classical sense. There is a very simple way to grasp this point. In order to communicate with language, I must be able to predict how other people will react to my language. But no such predictions could possibly be made were it not for the possibility of conventions of use and response. These are merely repetitions of prior usage and response, including both truth-functional semantic conventions and conventions of "function" in a more classical sense. The human language faculty plays a critical role in making it possible readily to proliferate such conventions. Whatever its history, its currently central functions are profoundly involved both with external language and with communication.

Returning to Chomsky's own views, I am not sure whether I am really one of "his critics." I have turned things a somewhat different way and introduced a somewhat different vocabulary to make my points. What I mean by "public language" is not the same as Chomsky's target when he decries "public language," and I have put a different gloss on language "purpose" or "function." I have used tools he himself has fashioned at the center of my argument, claims concerning the unique capacities of the human language faculty. There are very few points here on which I feel confident either of his agreement or his disagreement. I am therefore eager to learn his response and grateful to the editors of this volume for making it possible for me to speak with him at this length so directly.⁸

⁸ I am enormously grateful to Louise Antony for so patiently, thoroughly and insistently misunderstanding an earlier version of this essay, forcing me, kicking and screaming, into actually saying what I meant in many places. Indeed, many places she even forced

me into knowing what I meant. Without question, she is the most brilliantly dense reader I have ever had and I hope and think that the essay was immeasurably improved by her interference.

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