Knowing Subject and External Object in Language and Linguistic Analysis

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A<small>BSTRACT</small>: The claim of linguistics to be a 'science' is connected to its 'objectivity'. The same is true of the philosophy of language. This implies a clear distinction between the language analyst as a 'knowing subject' and linguistic phenomena as an 'external object'. The picture of everyday verbal communication contains the idea of speakers as 'knowing subjects' of verbal signals as 'external objects'. Also, the correspondence theory of truth for natural languages presupposes that the language analyst is a 'knowing subject' who can assess the truth of objectified statements in relation to the factual world. The paper questions those ideas, and suggests that the objective orientation in linguistic analysis is a convenient fiction. It is suggested that analysts and speakers are components in a complex communicational totality, and can never be external objective observers of the verbal communication process. Consequently, a coherence theory of truth is more appropriate for language analysis of all types and for our understanding of speaker behaviour.

K<small>EYWORDS</small>: Coherence – correspondence – external object – knowing subject – objectivity.

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1. Scientific objectivity and language

Linguistics has long claimed to be a 'science' and to have a 'scientific' approach. Linguists of an earlier generation, such as the American structuralists or the Danish theoretician, Hjelmslev (1953), very explicitly tried to put linguistics on a 'scientific' footing, and the 'scientific', nature of linguistics continues to be asserted to this day, for instance on the website of the Linguistic Society of America (online[2]) and in too many works on linguistics to name. This claim seems to rest on the alleged objectivity of linguistic analysis. A typical view is that of Martinet (1989, 6), who says,

> Une étude est dite scientifique lorsqu'elle se fonde sur l'observation des faits et s'abstient de proposer un choix parmi ces faits au nom de certains principes esthétiques ou moraux.[3]

In various contributions to the *Quora* website (online[4]), a number of linguists justify the 'scientific' nature of linguistics by reference to the use of the 'scientific method' in linguistics. Numerous linguists have presented versions of 'scientific method' (Bloomfield 1933, Cook 1971, Sampson 1975, Mulder 1989 among many others). By this, they seem to mean that observation, hypothesis, and testing, controlled by explicit theory (inductive or hypothetico-deductive), ensure that linguistics is a 'science' in the same way that other disciplines are considered to be sciences—and, indeed, those characteristics, along with quantification (found in some areas of linguistics, but rarely relevant in central, qualitative, linguistics), are often met with in expositions in the philosophy of science in one form or another. Such views are so widespread in linguistics that they can be considered dogma. This 'scientific' view implies that there is an observer distinct from, and observing, facts, phenomena, or data. The 'knowing subject' is usually taken to be a being with unique consciousness and/or unique personal experiences or an entity that has a relationship with another entity that exists

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[2]   https://www.linguisticsociety.org

[3]   'A study is said to be scientific when it is based on the observation of facts and refrains from choosing between these facts on the basis of aesthetic or moral principles' (trans. PR).

[4]   https://www.quora.com/why-is-linguistics-considered-a-science

outside itself (various such definitions are easily found in reputable sources online). An observer is a 'knowing subject' in those terms. Linguists, then, are claiming to be objective observers of external phenomena, who can apply 'scientific' methods to arrive at representations, and explanations, of verbal 'reality'. Presumably, philosophers concerned with language hold a similar position. Does this claim stand up to scrutiny? Are language users or observers 'unique', and is language 'external' to them?

This widely held view of the scientific status of linguistics is similar to that in well-known pronouncements on the nature of science, or the scientific point of view, of philosophers of science such as Popper, who asserts, in a similar way to Martinet, that objectivity implies that 'scientific knowledge should be *justifiable*, independently of anyone's whim' (1972a, 44). While Popper denies that any scientific theory can be absolutely justifiable (any theory might be refuted), the objectivity of scientific statements can be supported by 'intersubjective' testing. Objectivity in linguistics, as elsewhere, rests on the impartial observation and recording of speech phenomena and its associated behaviour in speakers as well as on intersubjective agreement about those observations. It also involves the application of clear and reasoned criteria in the analysis of the said phenomena and behaviour to produce descriptive and explanatory models for the understanding. Linguistics has always been concerned with its methods of analysis (or 'procedures' in earlier versions). In all of this, there is the implication that one can distinguish between the linguist-observer and the observed phenomena (and/or behaviour). That is, that the linguist-observer is external to the process of communication, which is 'objectified' or 'reified' for the purposes of analysis. However one conceives of the communication process—in terms of a Saussurean 'speech circuit' (1972/1916), Bühler's <Organonmodell> (1934), or some version of Shannon and Weaver's communication process model (1949)—, the linguist-observer is taken to be an impartial and objective onlooker, and the phenomena are the objects of study. Alternatively put, linguistic analysis involves a radical dichotomy between the knowing subject and the object of study. That, of course, could be said of any science,[5]

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[5] This paper is not concerned with natural sciences. Both linguistics and natural sciences employ models and theory-based reasoning, but using and observing language involve being *internal* to the process under observation.

but we may ask whether the analysis of verbal phenomena is really so objective.

Popper's intersubjective agreement replaces a single knowing subject with a plurality of knowing subjects, which may remove the individual whim or allegations of inaccuracy (as well as some of the uniqueness of the experience or consciousness of language), but it is clearly not a sufficient condition of agreement on the nature of phenomena, let alone of the correctness of a statement or theory, since our theories and statements (or even observations) may prove wrong, however many people agree to them—and, of course, it is well known that linguists can, and do, differ in their interpretations of the 'same' phenomena. The notorious case of the morphological status of *cranberry*—i.e. does it consist of a single component or a combination of signs?[6]—(the arguments around which are well discussed by Harris 1973, 66*ff*) is a case in point, as are differences over the phonemic status of affricates, such as [ts]/[c], [tš]/[č], (the problem of 'un où deux phonèmes'—whether a phenomenon is to be analysed as 'one or two phonemes'), or the analysis of syntactic constructions as combinations or dependencies. Nor is intersubjectivity a sufficient condition of objectivity, since the selection of data and methods may also be distorted by current or favoured trends or paradigms. Popper also, of course, puts scientific knowledge in the realm of the '3rd World' (or 'World 3') of rational ideas allegedly existing separately from any knowing subject (1972b, 153 *ff*). Popper's view seems to be an extension of the idea of 'subject invariant' qualities (Harré 1976, 160) leading to an objectivity which is fundamentally quantificational. Most linguists would insist on the subject-invariance of their data, although most linguistic analysis is *qualitative*. When we set up phonemes or grammatical relations for the purpose of accounting for communicational behaviour, it is the transparency of the theory and methods applied to agreed data sets which is supposed to overcome subjectivity. Linguists (and others) typically overlook what Harré calls 'the contribution of the knower to the known' (1976, 21*ff*). In language analysis, that contribution comes from the *selection* of data, theory, and methods, as well as from the position of the linguist-observer (which accounts for differences in interpretation in the cases listed above). That is, linguists also tend to

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6   And, of course, *mutatis mutandis*, for many other expressions. *Cranberry* was a test case.

ignore the arbitrariness of their theoretical positions (noted by Hjelmslev 1953, Ch. 5) and, hence, the theory-laden nature of observations and descriptive or explanatory pronouncements (Rastall 2006a, 2011). This raises the problem of the relationship of the knowing subject to verbal phenomena.

Part of the linguistic conception of language is the view, or observation, that participants in the communication process (human speaker-listeners, sender-receivers) *also* adopt an objective viewpoint with respect to speech signals and their associated messages. That is, the participant in a speech act considers, however briefly (and almost certainly unconsciously before conscious awareness), any speech signal and its message from a number of points of view for the purposes of understanding ('meaning-making') and appropriate response, and, where deeper thought is required, the speaker-participant considers the form and content of speech more extensively. One imagines, then, that the speaker-listener treats the speech signal as an objective fact.

When the poet, Robert Burns, addressed a field mouse as a 'wee, sleekit, cow'rin', tim'rous beastie', we can consider the line from various points of view—a grammatical whole, a compilation of adjectives and their appropriateness, the use of dialect, the metre of the line, the connection to the rest of the poem, etc. In each case, the line is objectified for consideration (see Rastall 2006b for further discussion). It is this objectification, or reification, of a verbal signal or text which is needed for the 'self-referential' or 'meta-linguistic' function of language—using language to discuss other language products.

Mulder (2005, 74) points out that in practice all linguistic analysis and participation in speech acts involve such a reification of verbal products, but that objectified verbal products of whatever kind (sentences, words, references, register effects, etc.) are the creations of our brains engaged in communicative acts. Much linguistic philosophy and logical analysis of propositions similarly presupposes the objectification of sentences. Thus, Strawson's analysis of simple propositions into identifying subject expressions and characterising predicates (1968, 5*ff*) or any other analysis of sentences such as *Snow is white, Mary is Australian*, etc. presupposes the reification of the sentence for the purposes of discussion—in effect, it becomes (as a counter in discussion) a citation form. Again, there is a clearly implied distinction between the speaker-participant, as a knowing subject,

and the speech signal/message as an object or objectified action external to the speaker.

That distinction seems to be inherent in the Shannon and Weaver model of communication (1949) or its variants—a 'sender' forms and transmits a 'signal' to a 'receiver' who decodes it.[7] The linguist, in observing and analysing speech acts, is the knowing subject observing this subject-to-object signalling relation between senders and receivers as itself an object for study, usually abstracting the signal and its message, the text or utterance, for analysis. Similarly, the text or utterance can be analysed in relation to the situational or discoursal context. This position is common in linguistics, and seems to be inevitable for the purposes of analysis, although we may know that a speech act is not a static 'thing' but a dynamic process or event taking place in time with complex transformations of energy and informational state in the participants related to also complex situational and discoursal contexts. The objectified verbal product comes into being through our cognitive processes (as Mulder observes in the same article). But its interpretation also depends on our integration into the speech community.

2. Is there a clear subject-object dichotomy for language and language analysis?

Now, it would be reasonable to ask then whether the relation of subject to object is really so clear-cut both in the case of the linguist-observer and in the case of the real-life participant in a speech act, when we consider that any verbal product is the creation of our brains and is reified as a representation to us. While the objective orientation is useful for the development of understanding and is central to the Cartesian model of rational enquiry, it should be clear that the subject (linguist or participant) and the object (verbal signal/message) are both parts of an inter-connected totality. Viewed, as it were, from the perspective of an alien spaceship, earthbound subjects and verbal objects (texts, utterances) are just components in a complex and interacting whole. Indeed, an *isolated* individual is not part of the

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7   Lakoff and Johnson (2003,140*ff*) criticise the view that 'the speaker puts ideas (objects) into words (containers) and sends them (along a conduit) to a hearer who takes the ideas/objects out of the words/containers' as inappropriate 'objectivism'.

social organism of communication, however much he or she might engage in internal dialogue. Internal dialogue is in part a substitute for social interaction necessary to humans.[8] Human communicative interaction could then be seen as a very complex single organism consisting of interacting individuals, rather as we can see a colony of ants as a single organism of communicating individuals, where acts of communication are a means to the functioning of the whole community by coordinating and integrating individuals into it, and where the individual's orientation and needs are met through communicative integration. We can see that in daily acts of communication, for example in making purchases in shops or requesting and receiving directions, or in the maintenance of social relationships.

The neuroscientist, David Eagleman, makes the point (2015, 133) that, while each individual feels independent from all others, 'each of our brains operates in a rich web of interaction with one another… an enormous amount of brain circuitry has to do with other brains'. Verbal communication, from this perspective, would be a property for the functioning of a community, which determines our speech and its interpretation. The objective viewpoint of the linguist or language analyst would then be just a useful fiction for the purposes of discussion and explanation.

Such would be the view of idealist philosophers such as F.H. Bradley (1897, 99*ff*), who emphasised the difference between the appearances of our lived experience and the inter-connected oneness of underlying reality (in common with a long line of oriental and western monists[9]). The physicist, Carlo Rovelli, makes a similar point about the interconnectedness of the physical universe (2016, 22). The signals and messages of texts and utterances appear to us to be external objects which we know as isolated individuals, but we ignore our integration into a wider social whole and the acquired and unconscious verbal processing which make communication possible. That processing requires the connectedness of individuals into a communal totality. Communication links human organisms into a social whole. That integration into the social organism implies interpretations and appropriate behaviours which come from being *part of* the social totality,

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[8]   It is also the normal means to the construction of reality and our representation of it, but that is a different issue.

[9]   E.g. practitioners of Daoism and Zen in the east or from Parmenides through Spinoza on in the west.

not separate from it. Bradley says in the same context, 'the secondary qualities must be judged to be merely appearance' (1897, 15). The imagined clear distinction between knowing subject and external object is one of those appearances, and our awareness of the qualities of speech (phonological, grammatical, semantic, social/aesthetic), which are the products of our cognition (whether as speakers or analysts), are also appearances—i.e. they are the way verbal products and behaviours seem to us at an everyday level, not the real, unobservable, cognitive processes giving rise to our awareness of language. As Bradley says in the same chapter, the 'arrangement of given facts into relations and qualities may be necessary in practice, but it is theoretically unintelligible' (1897, 22). The knower and the known, on this view, are parts of a single totality[10] but in which an 'objective orientation' is a useful fiction. All of our judgements, as speaker-participants, about the nature of language involve 'secondary qualities' that are inevitably just the way things appear to us from a given perspective and through the prism of our cognitive processes.

The idea of an 'internal mental model' is relevant here (see e.g. Kintsch & van Dijk 1983, and Johnson-Laird 1983, 2006). Any perceived event or experience, including verbal products, is seen as a 'reality' by reference to, and constructed by, unconsciously formed cognitive 'models'. In the case of verbal products, their reality arises from 'models' as organised expectations from the mass of verbal associations in many dimensions in the brain. Each individual's mental model is different, and so each verbal product is constructed differently. That would partially explain the variations in response to verbal products. The theory that mental models play a major role in constructing reality suggests that the construction of verbal products by the speaker-participant is a matter of secondary appearances rather than objective orientation; they arise via our brain processes. For the language analyst, one must imagine both the integration of the analyst into the communicational totality and an additional layer of anticipations due to his or her preferred analytical model—itself a function of mental modelling through education and experience.

A major issue here is the limitation which, as Bradley (above) suggests, is imposed on us by our senses. The appearances of our lived experience

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[10] 'The absolute is not many; there are no independent reals' according to Bradley (1897, 99).

are created through the mediation of our senses. Our cognitive processes which make sense of the physical input to our perceptions, noted by philosophers from at least Berkeley (1710/1910) onwards, further partly determine our representation of the world. The theory of internal mental models is a modern version of this long-standing philosophical viewpoint. Thus, it is a commonplace of science that the real 'ultimate' reality is not as we perceive it (e.g. Rovelli 2016). For example, we can know that grass is not actually green, however counter-intuitive that may seem to the Dr Johnsons among us. While our senses and cognitive processes tell us that grass is an object which has the property of being green in colour, we know that what we perceive is reflected light in the 'green' portion of the spectrum. Chlorophyll in grass absorbs the other wavelengths in the light spectrum. What we see as green is the reflected light, not an inherent property of grass, but that light is interpreted by our cognitive processes as 'green'. If our brains worked differently, we might see that light as another colour in the way that insects see yellow evening primroses as 'blue' in ultra-violet light. The point is that the objective viewpoint of the knowing subject is dependent on both the interaction of the subject with the object and on the interpretation of that interaction by the processes in the subject's brain. This suggests that the state of affairs is no different in the case of the speaker-participant or the linguist-observer; i.e. we must expect that any ultimate verbal reality is not as we perceive or represent it. So, we must ask, is the alleged objective orientation of the linguist-observer or speaker-participant justifiable?

In the case of the linguist-observer, it is obvious that the linguist is not generally a participant in any communication process and is, therefore, in that sense external to it. For example, in considering the structure and communicational functions of imperatives or discourse counters, such as *Pass me that hammer, will you?* or *So, what next?*, the *linguist* is not the recipient of the request or expected to respond with a suggestion. The linguist is concerned with observing what participants in the communication exchange say and do, i.e. having an 'objective orientation'. This is also the (rather simplistic) idealisation described by Quine (1961, 29*ff*) in his account of how a field linguist might learn the meaning of *gavagai* as 'rabbit' in an otherwise unknown language.

The most extreme position adopted by any linguists of the external observer approach was that of American structuralists, notably Zellig Harris

(1951, 1-24). They effectively claimed that the linguist was a kind of ob-
server-analyst who would experiment with speech like test-tube specimens,
i.e. applying 'procedures' to a 'corpus of data'. That involved the claim that
linguistic analysis could be carried out by purely distributional means and
without reference to 'meaning'. It is well known that this idealised approach
was never even remotely attainable, or in fact attempted in the extreme
ideal form. The reasons for the failure lay in the fact that the recognition of
speech components and relations, and their understanding, require aware-
ness of speech functions, the social values of speech, and the diverse pa-
rameters of meaning—Quine's idealised picture is closer to the reality of
the field worker. Even in a known language, our construction of a relation
between *Fred* and *left* in *Fred left*, for example, requires such an aware-
ness—we intuit the connectedness of the signs, which we interpret as a
grammatical relation connecting the component signs into a complex sign
consistent with the patterns in other combinations. The connection is not
overt or formally signalled in either the proper name or the verb—as indeed
is the case with most grammatical relations.[11] Furthermore, the determina-
tion of where grammatical constructions begin and end (and hence what
relations we set up), however, is frequently quite difficult and a matter of
arbitrary decision (Rastall 2003). For instance, how many 'sentences' are
there in utterances such as: *It's going to rain, I think; Two for the price of
one—a good deal, that!* among many others? One's answer depends on
one's theoretical and methodological stance; not least, how we define 'sen-
tence'. We 'know' that Burns' mouse is a *wee beastie,* a *sleekit beastie*, a
cow'rin' beastie, and a *tim'rous beastie*, because we recognise the separate
connection of each adjective to the noun, and that implies that the linguist-
observer or speaker-participant is *internal* to the communication of the
poem; one needs to be an English speaker to recognise the grammatical and
semantic connections in Burns' line. All grammatical connections are, in
fact, intuited from our knowledge of the language. Furthermore, even the
recognition of speech sounds involves our construction of them through
cognitive processes. What we hear as [p] or [a] is constructed from our
perceptions of sound energy. In analysing Russian, we must be able to

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[11]   Juxtaposition/sequencing plays a role in the identification of patterns, but not all
juxtapositions are interpreted as grammatical relations. In *Fred never left*, *never* is
grammatically associated with *left* but not with *Fred*.

recognise and interpret the difference between palatalised and non-palatalised consonants, and in Chinese the different tones as well as the distinction between aspirated and unaspirated consonants, whereas similar features in English are ignored as not communicationally relevant. Conversely, we ignore the clear differences between the consonants in *tea* and *too* or *key* and *coo*, and treat them as communicationally 'the same'. This ability to deal with the specificity of languages comes from becoming internal to the communication process, not from a purely 'objective stance'. Acquiring a language involves becoming communicationally integrated into a community.

We must add that the analysis carried out by the linguist depends also on the theoretical and methodological approach selected by the linguist, and involving many 'short-cuts' which in fact betray the linguist's direct knowledge of the data, such as the intuiting of grammatical connections or what was a relevant phonological difference (as became obvious in the old American structuralist approach; the short cuts undermined the claim to work only with objective procedures). Any theoretical approach (distributionalist, functionalist, etc.) is justified not by observation (which would lead to circularity of argument) but by its logic and general reasonableness. The classification of 'words' into categories such as 'adjective' or 'noun' presupposes the definitions of those terms and methods for assigning words to categories. The identification of phonemes as separately relevant to communication presupposes a theory of communicational relevance, etc.[12] In other words, the linguist-analyst is not in the same position as the laboratory chemist or biologist (as in the old American structuralist ideal)[13] even where the linguist is external to the communication process in the above sense. In addition to perceptual filtering, and cognitive processing of signals, there is the added layer of theoretical and methodological processing of the interpreted signals—applying criteria involving secondary qualities. This is part of the contribution of the knower to the known. In what sense can we then arrive at an ultimate language 'reality'?

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[12] Depending on one's theory: the analysis may not involve 'words' or 'phonemes', 'communicational relevance' etc. at all, but may invoke other concepts.

[13] Natural scientists also use model-dependent reasoning (as noted above), but one does not have to be a fruit-fly to study fruit-flies, whereas we need to be language-users to discuss language.

Among philosophers, the tendency to objectivise language and to adopt an external objective stance is most obvious in the case of the logical atomists, logicians, and empiricists. Wittgenstein in the *Tractatus* (1921/1971) develops the idea of propositions as 'pictures'—'models of reality' which can either agree or not agree with facts (propositions 2.12, 2.21, 4.03). The philosopher in this approach, as knowing subject-cum-observer, must adopt an external viewpoint to judge the agreement or non-agreement of the proposition with reality (and hence empirical truth). Similarly, Ayer (1936/1974) takes the same position with his verificationist theory of meaning. He says (p. 48), for example,

> The criterion which we use to test the genuineness of apparent statements of fact is the criterion of verifiability. We say that a sentence is factually significant to any given person, if, and only if, he knows how to verify the proposition which it purports to express—that is, if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false.

Apart from the obvious (and absurd) restriction of meaningfulness to sentences with a propositional content, it is clear that verificationism (or indeed falsificationism of the Popper variety in scientific statements) implies a clear distinction between the knowing subject and external reality.[14] The same is true of the much less extreme position (noted above) of Strawson (and other language philosophers) in which there are judgements about the 'identification' of the subject and the 'characterisation' of the predicate and their connection (Strawson 1968, 6*ff*). The knowing subject is either the philosopher-analyst verifying the testability of sentences in relation to observable fact, or is the participant in a communicational exchange. In both cases, there is the presupposition of a correspondence theory of truth for ordinary language utterances. Tarski's standard example:

'snow is white' is true if and only if snow is white

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[14]   It seems to me that Popper's idea of a *World 3* to provide 'epistemology without a knowing subject' (1972: 106*ff*), however useful in other respects, does not remove the need for *someone* (i.e. a knowing subject) to judge whether a proposition is true or false.

is a summation of that position, to which we shall return below. The sort of truth-conditional semantics advocated by logicians such as, among many others, Soames (2005) is a continuation of this approach.

In certain types of investigation, of course, the linguist is internal to the communication process. This is most obvious where interview techniques are used or there are interactions, as in some developmental studies. In the latter cases, investigators must avoid introducing bias or unduly influencing the behaviour of an informant, and adopt an 'objective' stance towards their data. Clearly, on the one hand there have been tendencies to minimise the involvement of the analyst in the communication process and, on the other, to accept the need for that involvement, but to allow for it in arriving at conclusions (everyone adjusts verbal behaviour to that of their interlocutor(s)).

In the case of the speaker-participant who is internal to the communication process, it seems clear that the formation and interpretation of speech signals involve several parameters. This is particularly clear in the processing of verbal signals and written text. In general, the more complex the signal, the more perspectives that are possible on it. Thus, when the poet, Thomas Gray, wrote:

> *Far from the madding crowd's ignoble strife*
> *Their sober wishes never learnt to stray.*
> *Along the cool, sequestered vale of life,*
> *They kept the noiseless tenor of their way.*

we can, among other things, consider the stanza from the point of view of its central meaning, or place in the overall context of the (philosophical) argument of the *Elegy Written in a Country Churchyard*, or its position in 18th Century thought, or we can consider how the grammatical structure and balanced patterns support the rhetorical purpose, or we can look at the iambic metre and vowel lengths to consider their phonological effect in 'lengthening' the lines to correspond to the meaning and improve the poetic effect, or we might consider the different register effects of the lexis. This does not exhaust the list of perspectives, obviously more than for the single line of Burns. On a more everyday level, a speaker referring to a postal delivery (and considering it worthy of comment) might say any one of: *The postman's been, The post's come, Can you check the mailbox?, There's*

some mail for us, etc. The particular utterance will depend on a variety of social and contextual circumstances and motivating factors, along with the construction of a reality (the appearance of a postman and his actions in relation to one's residence). The interpretation and response or attitude to the utterance by the receiver will similarly be varied and involve a range of attitudinal factors.

We can see then that both linguist-observers and participants in communication events can, and do, adopt an apparently objective orientation towards speech signals and messages as a matter of 'lived experience'—i.e. the way verbal reality appears to us.

However, our 'lived experience' of language exists at the 'macro-level' of our everyday reality and in the world of appearances. It is the world in which we see postmen and grass, and recognise actions such as deliveries of post, and in which utterances or written text are objectified as events or things. Our verbal productions also seem to us to be realities as speech signals, and they create realities through the messages that are conveyed. It is a mistake to think that language and reality are somehow separate. The kind of correspondence theory of truth for ordinary language, which we noted above, depends on a separation between the verbal product, utterance, or sentence and some external state of affairs (as Strawson pointed out, 1971, 1*ff*). This may be convenient from some points of view, but it ignores the role of language in *creating* our understanding and social orientations, and it ignores the *conventionality* of language. Furthermore, it ignores the role of our unconscious cognitive processes in forming the macro-level appearances that is our (everyday) 'reality'. The division of language, on the one hand, and 'reality' on the other is a myth.

As we have said, our macro-level reality is a construction which relies on the particular nature of our cognitive processing (including verbal processing). Our everyday sense of reality, including the reality of verbal signals and messages, is built up from micro-level processes- untold millions of tiny neuro-transmitter signals in response to physical inputs such as light photons or sound waves. That construction and representation in consciousness further depends on the way our brains work. From this point of view of the unconscious processing of perceptual information, including the perception of verbal signals, the objective viewpoint in relation to language is also a macro-level representation arising from micro-level processes and complex determining factors of which we are unaware in

everyday life. (Previously deaf people who receive cochlear implants, for example, have to learn to discriminate speech sounds.) Furthermore, the representation and interpretation of verbal signals and their messages depends also on linguistic processing—on the mass of verbal associations in different formal, semantic, and social/aesthetic dimensions. What we take to be the objectified verbal production—sentence, word, etc.—is the result of a complex process of interaction and set of verbal conventions in a totality or communicational world. One might say that the objective viewpoint which seems to involve such a clear-cut distinction of knowing subject and external object is also a part of the appearance world, and hence illusory.

3. The speaker-participant

For the speaker-participant, the interpretation of sound waves as speech and its analysis into apparent 'speech sounds' is an illusion created by our cognitive processes. We know that there are, in reality, no discrete speech sounds.[15] They are our constructions from the perceptual input and our interpretative processes. Similarly, the identification of words and their combinations is a matter of unconscious construction as well as considerable socialisation and education. Meaning associations, speech functions, social values of speech, rhetorical and aesthetic dimensions of verbal signals all depend on unconscious (multiple and parallel) processing. All of the language phenomena that we experience on a macro-level have a coherence and are useful in our social relations and representations of experience, but what all this suggests is that the subject-object dichotomy in relation to language is illusory. Our macro-level representation of the everyday reality of language is the final product of a complex (and unconscious) interaction involving multiple processes adapting communicational means to specific circumstances, and connecting and interpreting physical signals in relation to social or other discoursal contexts and observable reality. But those contexts and realities are themselves the products of unconscious cognitive processes—as is the comparison of language and external reality as it

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15   Our understanding of the relation of acoustic input to perceived speech sounds is too a matter of modelling.

appears to us. In that sense, the radical distinction of subject and object disappears into a complex connectedness. But this also means that the objective stance towards the relation of language and reality is also a product of unconscious processes. Thus, the idea that 'truth' can be characterised for each language 'relative to a time and a speaker' (as Davidson 2005, 225 suggests), while an improvement on the usual correspondence approach (at least for natural languages), still depends on the assumption of a subject-object dichotomy. It is striking, of course, that our separate constructions of verbal reality broadly coincide for the purposes of communication; that can be taken as a function of our integration into the wider social totality, which cannot happen if we 'do not know the language'.

If we take away the appearance of a subject-object dichotomy and treat the objective stance as a convenient illusion, each participant is a component in a dynamic totality of the communicative act, and each participant is a 'node' in the wider network of all those who share the same communication means. Our individual experiences and representations of language differ because our individual brains differ, but we cannot have any verbal construction or representation without being part of that totality. Similarly, the comparison between language and reality-as-it-appears-to-us is a convenient representation of our orientation in the physical and social world. To illustrate the point, we can observe the communication of ants, but cannot be participants in their communication—we cannot enter the 'ant world'. Conversely, ants cannot be participants in human communication. Ants and humans operate in different totalities- obviously of quite different orders of complexity—, but in both cases communicative interaction is a means to orientate the individual in the social world and in relation to physical reality,[16] and in both cases the communicative interaction involves unconscious processes.[17] As a verbal example, we can ask *how* we know that an utterance such as *I'll be there at eight o'clock* is a promise (or commitment, threat, or prediction, as the case may be)? We must be internal to the communication process for the purposes of recognising and interpreting

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[16]   Work on ants at the University of Würzburg by Franck *et a*l. (e.g. 2017) is instructive in this regard.

[17]   Of course, some limited human-animal communication is possible in fixed contexts and for specific functions, and vocalisations and behaviours can be indices for other species.

the utterance in its context, and in order to respond and act accordingly.[18] This cannot be known from a purely external viewpoint of the observer. The interpretation and response of the individual in a communication process depends on multiple unconscious cognitive processes (preceding conscious awareness) and integration into the communication community, so the appearance of an objective judgement about an utterance is the brain's representation of the individual's orientation to a verbal signal.

4. The linguist-observer or language analyst

When we come to the linguist-observer, it should be clear that similar points can be made. Linguistic analysis is concerned with the macro-level reality of language, but the recognition and interpretation of sound as speech with its many dimensions of meaning requires that the linguist be internal to the processing of the speech signal. If I acquire recognition of a sound as [õ] in a French utterance, I must use similar cognitive processing of sound as French speakers, but I must also be able to recognise the communicational value of [õ] in French for the purposes of communication in French.[19] This means being internal to French speech communication conventions, even if I am not a participant in a French speech event. Similarly, for the identification of [sõ] as a word, I must be internal to French speech communication to distinguish the [sõ] in *son frère* ('his/her brother') from [sõ] in *le son* ('the sound'), and the latter from [ləsõ], *leçon* ('lesson'). As we come to more complex issues of speech functions, connotations of meaning etc. as in the examples from poetry or pragmatic meaning (above), this need to be internal to verbal processing, even if not a direct participant, becomes increasingly obvious. We cannot operate as purely external observers. Being internal to the communication process means being able to operate with the conventions, associations, grammatical patterns, and social-aesthetic values of the language under consideration and being able to

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[18] An interesting case is Mao Zedong's's aphorism *wang3 qian² zou³* ('go forward') which is ironically exactly homonymous in tones and characters with 'go for the money'. One needs the full Chinese background to get an appreciation of the expression.

[19] Non-French speakers might recognise the sound as different from their own repertoire.

recognise the functions of an utterance in its context. We delude ourselves if we believe that an understanding of language is possible without being internal to the process or that it can be achieved in some purely objective manner through external observation only. That means that the linguist-observer is also not a purely external knowing subject. Observation implies being part of a communicational totality, even if we are not active participants. The same goes for Quine (1961, 13*ff*) when he presents us with an observer's view of 'how words are learnt'. His ideas (however useful), while apparently a matter of empirical observation, are possible only because he understands English- i.e. he is internal to the processes he is 'observing' (and describing).

What the linguist-observer or philosopher can add is, of course, a descriptive/explanatory coherence to the representation of language, but that is achieved through further stages of interpretation in relation to some theoretical or methodological viewpoint. Any such viewpoint is not only in need of justification, it arises from complex processes of education and training as well as unconscious cognitive processes and preferences, which we represent to ourselves in the form of reasoned argument. Those representations of theory and method are themselves, however, the endpoints in a complex communicational totality, rather than a matter of purely impartial decision. Furthermore, as will be obvious, our rationalisations of verbal communication are themselves verbal and, thus, also part of our integration into a complex verbal totality. The fact of needing language to discuss language means that one can never escape the 'loop of language' (Rastall 2000, 215*ff*) to an external, objective viewpoint. That we may be persuaded by an argument or consent to an observation or description is not a sufficient argument for objectivity; it is a matter of reasonableness in our current state of knowledge. Paradigms change.

A connected way of looking at that is to note that the adoption of an objective viewpoint carries with it the idea that objectivity leads to truth or at least an increasingly close approximation to it. That is obvious from Ayer's words (above). Thus, the linguist-observer, the philosopher, or speaker-participant aims to use the 'objective' position of the knowing subject to arrive at truths concerning the nature of language (its 'reality') and/or the veracity of particular utterances. The ideas that verbal representation and understanding depend on participation in a communication process and the unconscious operation of linguistic cognitive processes, and that our

verbal world is produced through verbal conventions not only throw doubt on that objective position, but also on our ability to determine truth through verbal means in ordinary language behaviour. Truth in natural languages will depend on how we look at the world, our attitudes, and verbal conventions, and—for the linguist-observer applying rationally argued but essentially arbitrary procedures linked to a given theory and methodology—the picture of language will be a matter of presenting a coherent construct within a particular type of discourse, rather than an objective real-world truth. As Saussure wrote (1916/1972, 23) concerning the nature of the object of study in linguistics:

> D'autres sciences opèrent sur des objets donnés d'avance et qu'on peut considérer ensuite à differents points de vue; dans notre domaine, rien de semblable. Quelqu'un prononce le mot français *nu*; un observateur superficial sera tenté d'y voir un objet linguistique concret; mais un examen plus attentive y fera trouver successivement trois ou quatre choses différentes, selon la manière dont on le considère: comme son, comme expression d'une idée, comme correspondant du latin *nūdum*, etc. Bien loin que l'objet précède le point de vue, on dirait que c'est le point de vue qui crée l'objet, et d'ailleurs rien nous dit d'avance que l'une de ces manières de considérer le fait en question soit antérieure ou supérieure aux autres.[20]

This means that our linguistic understanding is a set of constructs determined by the theoretical-methodological starting points for analysis. (This seems to be also Hjelmslev's (1953) conception of a constructed reality.) For the speaker-participant also, the objective stance is the creation of a virtual world of constructs. We must now confront head-on the basic tenets of the correspondence theory of truth for ordinary language which is part

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[20] 'Other sciences operate with objects given in advance and which one can then consider from different points of view; in our field, there is nothing of the sort. If someone pronounces the [French] word, *nu*, a superficial observer will be tempted to see in it a concrete linguistic object, but a closer inspection will reveal successively three or four different things: a sound, an expression on an idea, a correspondence with the Latin *nūdum*, etc. Far from the object preceding the point of view, one would say the point of view creates the object, and furthermore nothing tells us in advance that one of these ways of considering the fact in question is prior or superior to the others.' [trans. PR]

and parcel of the division between the knowing subject and the external object.

5. Truth as the correspondence of language and fact

Let us consider Tarski's standard (and much debated) example above. We have on the one hand a verbal expression, *snow is white* and on the other the factual question of the colour of snow. The verbal expression is said to be true if and only if the entity named by *snow* indeed has the property of being white. This apparently common-sense position seems to imply that we can recognise as a matter of fact, and without verbal mediation, the entity, snow, except insofar as the expression, *snow*, directs us to an entity in external reality—the real-world value of a variable.[21] Furthermore, we should similarly be able to recognise, again without verbal mediation, what it is to be white, when directed to that property by the expression *is white*. If there were verbal mediation—i.e. if our recognition of real-world snow and the property of being white were dependent on linguistic convention—, then at best we would only be able to determine the truth of *snow is white* for a particular verbal meaning in a particular language. This would be 'truth' for a particular interpretation, and it seems to be Davidson's position (above). Truth in this sense would depend on the particular conventions of particular languages. We could not arrive at any sort of 'ultimate truth' about the non-linguistic world, because the non-verbal entity and property would be identified via an arbitrary verbal definition or meaning. The distinction between the knowing subject and the external object would be far less clear-cut, because the recognition of the external object would depend on the language conventions of the knowing subject's community. We must ask, is there nevertheless an entity, snow, which can be identified separately from an area of experience referred to by the word, *snow*? Indeed, can we identify what it is to be white without the verbal mediation of the word, *white*? And can we specify the connection between

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[21]   Of course, the same comments apply to white as to green above, i.e. that it is a secondary quality which is a matter of appearance rather than an inherent reality, but Tarski's example is clearly intended as representative of any veridical judgement.

the putative entity, snow, and the property of being white? (And, of course, *mutatis mutandis*, for any other assertion.)[22]

The problem revolves around the conventional nature of language. In English, we find a range of expressions, *snow, slush, sleet, hail*, which refer to similar phenomena. The identification of a meteorological phenomenon as specifically snow (and not slush or hail, for example) seems to depend on verbal conventions in English (and the judgements of individual speakers in speaking), rather than on clear differences between entities. The indeterminate nature of the reference of linguistic signs is well known. It was discussed by Bühler (1934/1990, 75-76) long ago, but its implications have not always been thought through. The 'fuzzy edges' around the reference of *snow* suggest that there is no discrete entity, snow, but rather that there is an indeterminate range of phenomena which can conventionally be referred to by *snow*. In terms of our internal models, we accept as snow whatever meets something in the range of possibilities covered by the English expression, *snow*, i.e. is consistent with our everyday understanding and experience

Furthermore, although there is some dispute over the number of words for snow in 'Eskimo' languages, it is known that there is no general word ('hyperonym') for all types of 'snow', and that there are different verbal conventions from those in English. In one dialect, we find *aput* 'snow on the ground', *qana* 'falling snow', *piqsirpoq* 'drifting snow' and *qimuqsuq* 'snowdrift', all of which would correspond to 'snow' in English, but which would not be 'the same thing' in this variety of Inuit—the internal model would have a reality in which there were four entities. So, can we identify a unique entity, snow, without verbal mediation? It would seem not. We need our knowledge of English to tell us what counts as snow. In other words, our factual world is partly verbally constructed.

The fact that all languages make different conventional distinctions is well-known and obvious to anyone with experience of different languages. Colour terminology is an obvious (if contentious) case in point, but the Russian distinction of *goluboj* ('pale blue') / *s'in'ij* ('dark or intense blue') with no hyperonym for all cases of 'blue' is well established, for example.

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22   For a further discussion of Tarski's correspondence theory and the 'deflationary theory of truth' touching on connected issues to the ones here, see Stoljar & Damnjanovic (2014) in the *Stanford Encyclopedia of Philosophy*.

Can we, then, identify what it is to be white without verbal conventions? We might point to a range of wavelengths in the visible spectrum, although that hardly corresponds to our lived experience of white.[23] Anyone who has done some home decorating will know the range of possibilities for white paint—rose white, peach white, lace white, grey white, etc. Which, if any, of the interpretations of *white* is intended for snow?[24] Similarly, it can be difficult to match clothes or furniture with different whites. Would *snow is white* be untrue under the interpretation 'rose-white', or would rose-white not be white? 'White' is, of course, a secondary quality, and therefore a matter of appearances—the way things seem to us because of the way our brains work, rather than an ultimate reality, so again it seems we cannot recognise the property of being white without those cognitive processes and the conventions of English.[25] Of course, we could say that anything we judge to be within the range of indeterminacy of *white* can be attributed to whatever we judge to be snow, but that view does not escape, but actually embraces, the verbal contribution to the construction of reality. Furthermore, we are left with the arbitrariness of the distinction between white and grey, or rose-white and pale pink.

While on the subject of conventionality, one must point out that the verb *to be* in English also covers a range of possibilities including universality (*water is necessary for human life*), permanence (*the arctic is in the northern hemisphere*), classification (*gold is a metal*), specification (*Fred is the winner of the race*), definitional (*two and two is four*), temporary state (*the postman is outside*), equivalence (*the morning star is the evening star*), existence (*there is a tree in our garden*), or a combination of functions, etc. Other languages can, and do, have different words for these cases (e.g. in Spanish there is a distinction between permanent and temporary states) and many languages have specific expressions for existential assertion, French

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[23] Bronowski (1979, 126) makes a similar point about 'red'.

[24] The enormous complexity of colour terms and their associations is well illustrated by Jacquet-Pfau in the series, *Dictionnaire de la couleur*, e.g. *Le gris*, 2015. Colour terms and their application are not simply matters of asserting an objective quality.

[25] Russell's empiricist use of 'sense data' (1912, 1-12) does not solve the problem here; it retains the knowing subject and replaces the external object with the brain's response to its appearances while taking no account of linguistic conventions in their organisation.

il y a, German *es gibt*, Chinese *you*[3], etc., which are not parts of the verb 'to be' in those languages.[26] While in English one might *be 22 years old*, in French *quelqu'un a 22 ans*, while in Russian *jemu 22 goda* ('to him 22 years'), and Chinese has different ways of asking the age of children (*ji*[3] *sui*[4]*le*), older children and peers (*duo*[1]*da*[4]), and older people (*gao*[1]*shou*[4] as a term of respect). *Be* also has a conventional range of indeterminacy. It is an unspoken assumption of correspondence theorists that there is only one relation expressed by the verb, *is*, or that it is conveniently the one that logicians use in logic. Again, it seems, we need the verbal interpretation of *snow is white* to understand which facts might be relevant and how they are to be found. We can add that snow—of any sort—can look blue, or even red, in certain conditions, and—as anyone will know—it can look distinctly grubby and grey or black at the end of winter (or at night). It seems the Tarskian approach to truth depends on our being internal to English communication to know what is referred to and predicated (at least in English), and on an assumption of some inherent property of whiteness in a supposedly identifiable entity, snow. This is hardly a sound basis for a correspondence theory of truth—at least for the macro-level reality of language and the macro-level realities it refers to. Rather, it suggests that the verbal product (such as *snow is white*) is *consistent with* at least some (or many) experiences of the things we call (in English), *snow*. Similarly, *the postman is outside* would be consistent with the experience of seeing someone we designate with the term, *postman*, and his location relative to us. Of course, one can add that the lived reality of *outside* is different for all of us, i.e. where we place the postman in our local environment depends on our particular reality.

The conclusion that we cannot determine the truth of a sentence without being internal to the communication system in order to identify entities, properties, and relations again brings into question the dichotomy between the knowing subject and the external object. The appearance of an objective stance for a judgement of correspondence of language with fact ignores the role of conventional verbal mediation in determining what are the relata of the correspondence. One is left with a coherence theory of truth[27] for

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[26]   Of course, there is no such thing as a universal verb, *to be*. There are similarities of usage across languages.

[27]   Described by, for example, Ewing (1951, 55*ff*).

natural languages and language analysis. Furthermore, the view that language determines the nature of our everyday reality implies that we must reverse the standard doctrine that meaning implies truth. Rather, what we consider to be truth implies meaning, because we cannot assess the coherence of a statement with our model of reality without knowing the meaning of the statement and how it contributes to our model of reality.

6. Conclusions

We have questioned the dichotomy of the knowing subject and external object in the cases of the speaker-participant and the linguist-observer/language analyst. In the case of the speaker-participant, the objective stance of the speaker as a knowing subject towards the signal message is an appearance created by cognitive processes as part of our representation of reality. Whether acting as a sender (with awareness of one's own verbal productions) or as a receiver of verbal signals/messages from others, one must be 'internal' to the communication process; our awareness of language depends on verbal associations, cognitive processes, and the construction of speech which are well beyond individual control, and which are acquired from and consistent with one's language community. The 'knowing' of the knowing subject is a product of those processes and the integration of the individual into a complex totality. That is, the speaker or analyst is neither 'unique', nor 'external'; they are integrated into both the communication process and into the language community on which they are dependent for verbal understanding and activity. Language products as we know them are not 'external objects' but the creations of cognitive processes.

The focus on the objective stance of the speaker-participant is a concern with the verbal behaviour of the individual dissociated from the activity of the individual as a part of a social body and from the socially acquired and non-conscious verbal associations and processes in the brain. All verbal processes are connected to other sets of constructs of the perceptual world, memories, concepts and attitudes. The objective stance, itself in need of closer analysis, allows a representation of the comparison of verbal constructs with non-verbal constructs, insofar as they can be disentangled. This could be seen as the assessment of truth for the individual at the macro-

level of conscious experiences. It is presumably helpful for our social orientation and behaviour.

In the case of the linguist-analyst, similar points apply. Language analysis is not possible unless the language analyst (as knowing subject) is internal to the communication process for the construction and recognition of verbal signals and messages with similar cognitive processes to those of speaker-participants. The objective stance of the language analyst is to that extent illusory. The selection of theory and methods as well as the selection of relevant observations allows a basis for rational discussion, but those selections themselves—i.e. the determination of which parameters of communication are relevant, and which theories and methods to select—are themselves matters of long-term training and subconscious preferences. They can be justified inter-subjectively as appropriate, but cannot be regarded as leading to 'ultimate' truths about the nature of language. The descriptions and explanations of analysts are constructs for the understanding with claims to reasonableness, but indefinitely many perspectives are possible on the same sets of data- as Saussure (above) pointed out.

Furthermore, the macro-level understanding of language is concerned with linguistic reality as it appears to us and the focus is on the language of the individual, rather than on language as a communicative mechanism of the social totality. In looking at natural language statements from the perspective of truth, philosophers have underestimated the conventionality of language and the latitudes of indeterminacy of natural languages involved in the interpretation of sentences, and hence the assessment of their truth. The allegedly objective stance of the philosopher seeking truth as a correspondence of language with fact is again that of the knowing subject observing an external verbal object and comparing it with states of affairs and entities in the non-verbal world (or comparing reified verbal objects for consistency). At least for natural languages and their macro-level appearances in the form of sentences, philosophers, like linguist-observers, are internal to verbal communication for the recognition and construction of verbal products. But the recognition and construction of verbal products involves the implicit application of arbitrary conventions for the reference of linguistic signs and allowance for their indeterminacy of reference. What we regard as snow or white is not simply a matter of facts about the world; what we regard as snow or white involves a large measure of verbal convention and indeterminacy. We thus arrive at truth as it appears to us from

a range of perspectives; but that truth is a matter of consistency of appearances within a given language community, not correspondence with fact—at least for natural languages. If this is correct, then the linguist's claim to scientific objectivity is greatly undermined, and a coherence theory of truth is needed. That is, the 'scientific' status of linguistics cannot rest on a correspondence theory of truth, as it currently does. Its alleged objectivity is illusory. (See also Rastall 2011 for discussion of this point from a different perspective.) A coherence view of truth for our macro-level everyday purposes and in a 'model dependent reality' implies that our notion of truth is dependent on meaning; i.e. our informational model of reality. Hawking and Mlodinow (2010, 216-217) explain 'model-dependent realism' as follows for physical and perceptual systems:

> According to the idea of 'model-dependent realism'...our brains interpret input from our sensory organs by making a model of the outside world. We form mental concepts of our home, trees, other people, the electricity that flows from wall sockets, atoms, molecules, and other universes. These mental concepts are the only reality we can know. There is no model-independent test of reality. It follows that a well-constructed model creates a reality of its own.

Our verbally constructed reality in communication can also be considered a model which can be compared with other models for coherence in terms of its state and predictions. Thus, *Snow is white*, Burns' description of a fieldmouse, Mulder's (1968) description of Chinese phonology, or Popper's *Objective Knowledge* are verbally constructed realities that can be compared with perceptual and other verbal constructs for consistency in multiple dimensions. In everyday practical interaction, that test of consistency applies 'in normal circumstances' for the language under consideration (like boiling point at standard temperature and pressure). 'Coherence' might be seen in terms of 'resemblance' or 'tolerance'—sameness in a relevant respect. Hume's (1748/1968: 192*ff*) account of our sense of constancy of the world and the need for the explicability of change is similar, and also implies a comparison of mental with sensory models. This position implies (as does that of Hawking and Mlodinow) that we may improve or correct our models, but we can never escape models for the understanding (of language or anything else), although Popper's idea of

intersubjectivity provides a further test of coherence with a wider community of thought.

Above we compared human communication with that of ants. Are humans just very complex (and rather self-important) ants? At the least, we should give more attention to the role of language in the totality of human communities and organisation, and to the position of the individual as a component in that totality. That implies a dynamic relationship in which a sense of reality is created in multiple dimensions through a combination of verbal and perceptual experiences with verbal and non-verbal associations and expectations in the internal models. This is a form of 'reality as interaction' (Rovelli 2015, 18). That sense of reality in each individual allows the integration of the individual into the social totality.[28] The linguist's (or language analyst's) job would then be to find coherent accounts of that dynamic.

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[28] This view is consistent with the idea that consciousness is an 'emergent property' and the brain's representation of its activity to itself as part of a connected single totality; this would address the so-called 'paradox of subjectivity' ably discussed by Carr (1999) in the work of Kant and Husserl. The subject 'in the world' and 'for the world' are parts of a single totality.

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