TRUTH AND THE SENTENTIAL HIERARCHY

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There are three terms used to describe the different levels of language – *utterance, sentence,* and *proposition*. I shall use the term *expression* to refer collectively to any or all of these when distinguishing between them is unimportant. Usually, however, the distinction is an important one, and thus worth setting out early on.

An *utterance* is a specific instance of a piece of language with a given time and given context. If two different speakers produce the same set of words at different times (or even the same time), they have each produced a different utterance. They have, however, both produced the same *sentence*. Sentences are abstract grammatical elements obtained by filtering out certain contextual information (specifically phonetic details). By further filtering out the grammatical elements, one arrives at the *proposition*, an abstract

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Word count: 2,170

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representation of the meaning of an expression, which ignores things like information structure. Propositions, then, are descriptions of states of affairs that many see as the basic element of sentence meaning. Together, these three levels of abstraction form what I shall call the *sentential hierarchy of an expression*, or simply, the hierarchy.

Despite the basic and commonly accepted nature of this organization, particularly in the linguistic community, it opens the arena for debate in Philosophy of Language. The question should be asked, 'at which level do we judge truth?' Frege thought that sentences in themselves cannot be either true or false. His argument was that sentences can have different meanings when uttered on different occasions – a valid observation, leading him to conclude that truth must be assessed at the level of the thought (possibly interpreted as the level of the proposition, or perhaps outside the sentential hierarchy entirely).[2] Tarski attacked Frege's claim that truth was an indefinite entity by substantiating it in the realm of the sentence, defining it in terms of semantics:

> The predicate '*true*' is sometimes used to refer to psychological phenomena such as judgments or beliefs, sometimes to certain physical objects, namely, linguistic expressions and specifically sentences, and sometimes to certain ideal entities called 'propositions.' By 'sentence' we understand here what is usually meant in grammar by 'declarative sentence'; as regards the term 'proposition,' its meaning is notoriously a subject of lengthy disputations by various philosophers and logicians, and it seems never to have been made quite clear and unambiguous. For several reasons it appears most convenient to *apply the term 'true' to sentences*.[3]

Tarski here is extremely skeptical of the 'proposition' and anything abstract, preferring to ground his conception of truth in 'physical objects', i.e. sentences. He makes no mention of the utterance. At first it seems as though he has conflated the terms

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[2] G. Frege, 'The Thought: A Logical Inquiry', in *Basic Topics in the Philosophy of Language*, ed. Robert M. Harnish (Englewood Cliffs, NJ: 1994), 517-535.

[3] A. Tarski, 'The Semantic Conception of Truth and the Foundations of Semantics', in *Basic Topics in the Philosophy of Language*, 537.

sentence and *utterance* in error, but he elucidates his definition of 'sentence' in a footnote to this passage, claiming they are "not individual inscriptions, but classes of inscriptions of similar form (thus, not individual physical things, but classes of such things)."[4] This can only refer to utterances. Tarski is not ignorant of the utterance; rather, he flatly discards it in favor of his own notion of truth.

The arena is set. Frege believes truth must be judged at the level of the thought, or at least the proposition; Tarski denies Frege and claims truth must be judged in terms of sentences; and neither gives credence to the utterance as a sound evaluator of truth. The question becomes, 'at what level are we justified in evaluating truth?' I propose that neither Frege nor Tarski were correct, and that the only safe place to evaluate truth is at the level of the utterance in pragmatic context. This is a normative claim: truth may sometimes be assessable at other levels of the expression, but only the utterance is *always* a reliable point at which to evaluate truth and it is there we *should* do so.

Truth here shall be defined in terms of Correspondence Theory, thereby immediately (possibly) making Frege's argument irrelevant, if his claim is that truth exists outside the sentential hierarchy. Instead we shall take Tarski's claim: "The truth of a sentence consists in agreement with (or correspondence to) reality."[5] Thus any bearer of truth (whether proposition, sentence, or utterance) must be in accordance with the facts. Another formulation which will be important later is to say 'an expression is true if it designates an existing state of affairs'.

Where does this correspondence exist? In terms of meaning, the answer is fairly

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[4] Ibid., 565
[5] Ibid.

obvious. An interpretation of a meaning is a statement of facts, and truth is the correspondence between that interpretation and the actual facts as they stand. There are three types of meaning – linguistic, speaker, and hearer. The only reliable type of meaning from which one should make an interpretation is speaker meaning. Clearly, the speaker knows exactly what she wants to express, while linguistic meaning consistently underspecifies the meaning of the expression, forcing the hearer to enrich that meaning to get the correct interpretation. Because of this, the truth of an expression should be evaluated in terms of speaker meaning, at the earliest point at which we, as objective observers, are able to interpret it.

At what level of the sentential hierarchy is speaker meaning expressed? Knowing this tells us where to evaluate truth. To obtain a correct and objective interpretation of speaker meaning requires certain types of knowledge.[6] The three relevant types are linguistic knowledge (the language used; e.g. English or Arabic), the local contextual information (such as who is speaking and the time of utterance), and background knowledge (e.g. cultural practices). Which of these types of knowledge is required to correctly and objectively interpret a speaker's meaning? Further, at which point of the sentential hierarchy does the required type of knowledge become salient? Answering these two questions will tell us where truth is to be evaluated.

As to the first, speaker meaning requires – at the very least – local context. How does one interpret an expression without knowing the context of deictic expressions or the reference of nominals (in short, the place and time of the utterance)? Linguistic

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[6] I use 'objective' to distinguish our investigation from the typical process of interpretation which a hearer undergoes. We are assumed to know a little more about the communicative act than the hearer.

knowledge – i.e. the lexical entries and syntactic character of the words in an expression – leaves out information vital to a correct interpretation. Certainly, this is not always the case. Take the typical expression *snow is white*. In the traditional formulation, the expression *snow is white* is true if and only if snow is white. The linguistic character of this expression tells us all we need to know to interpret it correctly and seek a match in reality. Nothing prevents evaluation of its truth value. But expressions like *I saw that yesterday* lack the needed context, making evaluation of truth value impossible. Who is the speaker? What time is it? What object is picked out by *that*? Having this contextual information gets us much closer to an understanding of what the speaker means. If *I* refers to John, *that* refers to the latest James Bond movie, and *yesterday* refers to April 23, 2006, the speaker's meaning has been elucidated, and we can evaluate its truth value. The expression *I saw that movie yesterday* is true if and only if John saw the latest James Bond movie on April 23, 2006. Other types of deixis exist as well, including spatial and even social deixis (common, for instance, in Japanese).

Next, is background knowledge needed for an adequate assessment of the truth of speaker meaning? One might argue no, that background knowledge is necessary for *interpretations* of meaning, not their truth value. It is precisely that discord between truth value and interpretation which allows for Gricean implicature. Knowing its local context is enough to tell us that the expression *Max lit up the stage* is false (unless Max is a human light bulb). But background knowledge tells the hearer that human beings aren't light bulbs, so the hearer assigns an alternate true *interpretation*.

This does not rule out background knowledge entirely. Consider the set of expressions below:

John chased the dog with the stick.

John chased the dog with the bone.
John chased the dog with the trombone.
John chased the dog with the broom.
John chased the dog with the black spot.[7]

These expressions ought to be syntactically ambiguous between an interpretation S_1 and S_2, but this is only true of the first, possibly due to our background knowledge of the items involved. Interestingly, local context is capable of overruling these judgements in certain (often fantastical) situations. Indeed, at the level of the sentence, where grammatical information is salient (at least to the speaker), the ambiguity vanishes. The speaker knows she is using S_1 as opposed to S_2, and the expression is clearly defined in terms of syntax. This implies that background knowledge is not always necessary, so local context is the only trustworthy way of determining speaker meaning, and that shall be my stance here.[8]

Determining at what level local context is present should indicate where truth is to be properly assessed. We begin with the level of the sentence.

The issue revolves around deixis. If deictic information is present at the level of the sentence, truth should be evaluable at this level. It is true that at least some deictic information is grammaticalized in either the syntax or lexicon. For instance, the verbs *come* and *go* contain deictic information about the relative location of the speaker. But is all deictic information communicated in this way, or are some expressions truly 'hollow' at the level of the sentence?

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[7] Examples taken from Saeed, John I., *Semantics*, 2nd ed., (Malden, MA: Blackwell), 193.

[8] Some might see the issue of background knowledge as irrelevant: if we already know local context is necessary to determine the truth of speaker meaning, then we only need to know at what level local context is present to know where to evaluate truth. But this is not true, for one can have background knowledge without having knowledge of the local context. One still knows *He chased the dog with the trombone* probably doesn't mean the dog was holding a trombone, because our background knowledge tells us this is not usual, *even though* the pronoun *he* is vacuous. Different types of knowledge tell us different things about an expression.

De Gaynesford (2006) offers sound evidence that the latter really is the case. Taking *I* as a deictic expression, De Gaynesford says, "[*I*]'s significance (i.e. the contribution its uses make to the truth-conditions of the sentences containing them) depends on the existence of referential relations between its *uses* and individuals existing in *extra-sentential reality* and salient in that context" (emphasis added).[9] Clearly deictic expressions need context to be understood. Further, they gain that context through individual uses of the sentences, i.e. utterances. Even if one wishes to deny *I* as a deictic expression, De Gaynesford's arguments for pronouns still hold:

> The difference between anaphoric and deictic uses shows up clearly when we try to evaluate the contribution they make to the truth-conditions of the sentences containing them. In the anaphoric use of *she*, that contribution is evaluated by appeal to the sentential context in which the source-term occurs. In the deictic use, the contribution is evaluated independently, by appeal to its extra-sentential context.[10]

The truth value of deictic terms needs extra-sentential context to be evaluated. Thus local context does not exist at the level of the sentence, and we must look elsewhere.

Tarski is right when he says that the notion of proposition is unclear. Nonetheless: a proposition is the ideal representation of the meaning of an expression, innocent of grammar, information structure, phonetic details, etc. It is not, however, necessarily void of local context. Using symbolic logic as the metalanguage into which propositions are translated, one can say *Dx* (*x is a dog*), or say *Da*, where a = Andy, meaning *Andy is a dog*. This can be communicated with varying shades of meaning (e.g. *what Andy* is *is a dog*), but the proposition remains the same.[11] Further, the proposition is in situation *v* at

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[9] De Gaynesford, Maximilian, *I: The Meaning of the First Person Term*, (Oxford: UP), 108.

[10] Ibid., 90.

[11] The fact that propositions fail to capture these shades of meaning is a failure to capture background knowledge, not local context.

time *t*, so it contains all necessary contextual information. It is, as stated earlier, a description of a state of affairs. Remember this was also the exact wording of one of the formulations of Correspondence Theory. Not only can propositions carry local context, but *by definition* they fit the requirements for the evaluation of truth according to Correspondence Theory. But we are overlooking a very important point.

Propositions are represented by means of *translation into a metalanguage*. That metalanguage, symbolic logic, is a language in its own right, and therefore falls prey to the same issues as English or any other natural language. Specifically, it too contains different levels of analysis—the syntactic level devoid of local context (*Dx* above); the semantic level where terms are given meaning (*Dx = x is a dog*); and the expression in context, equivalent to the utterance (*Da* in situation *v* at time *t*). Of course we would expect symbolic logic to be capable of evaluating truth if it encompassed all three levels. It is merely a convenient mode of translating expressions for formal analysis, and has less to do with the sentential hierarchy than with the expression as a whole. What makes symbolic logic so convenient, however, is that it *exactly represents speaker meaning*. If a proposition translated into symbolic logic is true, the speaker's meaning must also be true, and false if false. Again, that the interpretation might be true when the speaker meaning/proposition is false should not concern us – that is how implicatures operates.

The proposition is now sufficiently illuminated. It does *not* contain local context, for the speaker does not need context to know what she wishes to express, and semantic concepts do not contain it. The purely semantic mental notions which a speaker has do not require context until produced. By process of elimination, truth should be evaluated at the level of the utterance.

Consider again the formulation of Correspondence Theory: an expression is true if it designates an existing state of affairs. By state of affairs is meant the entities and actions involved at a given time and place, plus other immediately relevant contextual information. State of affairs does *not* refer to background knowledge. Sentences are 'hollow', i.e. their deictic expressions lack salience in reality. Since deictic expressions partially describe the relevant state of affairs, sentences cannot be valid as a vehicle for judging truth. Likewise, propositions are purely semantic entities in the mind, devoid of grammatical or contextual information. It is impossible that a semantic item (lexical entry) includes local context, so any proposition containing deictic items would not be a good place to judge truth.[12] The only level which contains local context is the one that *exists* in a context – the utterance.

If one must look to speaker meaning when evaluating truth, and speaker meaning requires local context for evaluation, then truth ought to be evaluated at the level of the utterance, because this is the only level of the sentential hierarchy where local context exists.

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[12] In order for a semantic item to contain deictic information, there would need be a separate lexical entry for *every possible occurrence* of a deictic term, in all situations at all times. This clearly is impossible.