THE METAPHYSICS MARKET

4   PUSHING LANGUAGE AS PLATONIC
(NOT TO MENTION POPPERIAN)

by

Rudolf P. Botha

CONTENTS

4.0   Levitating Language

*Good, clean philosophical fun --- can we have some of that
here, please! Not that we're demanding anything, Downbeat
Buyer, beyond what we doubly deserve. No, make that "triply
deserve". After all, didn't we have to face the Philistine
fatuousness of old-fashioned physicalism? Didn't we have to
bear to the full the boredom of barren behaviourism? Didn't
we have to submit to the mystery of modern mentalism? So
here's what I suggest. We go right on up the Abstract Axis,
making the ascent to its apex, because there we will be
epistemically entertained by Magician Metaphysicists who con-
jure up (an image of) language as something absolutely ab-
stract. The sight of languages being plucked out of top hats
like so many realist rabbits, or Platonist pigeons, should
go some of the way at least towards meeting our need for
metaphysical amusement. And rest assured, the magic will be
strictly white. Ah yes, it's quite some time now since
Occult Ontologists were once and for all banned from prac-
tising their murky magic on The Metaphysics Market.*

*The choice, basically, is between two shows, Dear Shopper.
For connoisseurs of conjuring --- on the one hand ---
capable of appreciating refined routines, the Athenian Ab-
stractists will advance the most amusing answer to the
question 'What is language in essence?'. If you haven't
already guessed it, the founding father of this philosophi-
cally fleet-fingered family performed under the stage-name
of Plato the Perfectionist. Ancient Audiences were capti-
vated by this conjurer and his distinctive transforming
trick: taking nothing that they could notice, and then
turning it into --- hey Plato! --- an abstract object.
And it is after this philosophical fashion that more than
two millennia later a couple of our contemporaries, the
Magicians of Manhattan, carry on their cultivated conceptual
crafts.*

*Philosophically less sophisticated folk --- on the other
hand --- may go for the sort of wizardry that is worked in*

*a more worldly way. Such more mundane meta-amusement is
provided by World 3 Wand Wavers, Popperian Prestidigitators
and assorted Common Conceptual Contortionists. Being not
really interested in just any abracadabra conception of lan-
guage, we won't, however, seek our epistemic entertainment
in the fare offered by philosophical fork benders and fire-
eaters. Nor will we let ourselves be enticed to attend such
metaphysical one-man shows as those staged by Montague the
Magnificent, Hans-Heinrich the Handy and sundry other solo
sorcerers.*

*(Incidentally, many a Master Metaphysicist uses assistants-
in-training for such menial metaphysical tasks as oiling
hidden philosophical flaps and springs, opening and closing
secret conceptual compartments, keeping epistemological es-
cape ways clear and marking metaphysical cards. Only Thin-
gumajig Magicians,though, conceal in their audiences concep-
tual confederates, stooges whose job it is to make their
masters' mediocre magic work.)*

*But now let us sneak a peek at how Platonists and Popper-
ians practise their profession: levitating languages so that
these float, as it were, above time and space.*

4.1   Performing Platonist Passes

Language is an abstract object. This is the ontological
core of a conception of language that has been alternatively
called 'realism', 'Platonism' or 'Platonic realism'. The
best-articulated version of this linguistic ontology is due
to Jerrold Katz and his associates Paul Postal, Terence
Langendoen and Thomas Bever. As noted by Katz (1981:19,
n. 17), various other linguists and philosophers have been
attracted to realism but have refrained from developing
it in a systematic way or from accepting its full implica-
tions.[1]

Before considering the Platonist conception of language, let
us briefly look at Platonism from a more general philosophi-
cal perspective. As noted by Ryle (1967:334), it is not
easy to capture the 'essence' of Platonism since it comprises
a variety of doctrines: ontological, epistemological, ethi-
cal and so on. In quite general terms, however, Ryle charac-
terizes Platonism as a metaphysical philosophy concerned
with a transcendent reality. With this, Ryle observes, goes
a rationalistic belief in the power of thought to grasp
transcendent realities directly. But let us consider some
of the specific ontological and epistemological doctrines
that have been dubbed 'Platonist'.

Central to our concerns is the Platonist ontological theory
of universals. Known as 'realism', the essence of this
theory in the words of Woozley (1967:195) is that

> '... universals exist in themselves and would
> exist even if there were no minds to be aware
> of them ...'

Realists consider universals to be 'public somethings' that
would be available for discovery even if there were nobody
to discover them. Conceptualists, by contrast, believe
universals to be in the mind: if there were no minds, there
could be no universals. Universals, on a conceptualist con-
strual, have the same status as thoughts, memories, mental
images and dreams, none of which can exist in a mindless
world.

The realist theory of universals can be understood against
the background of a distinction drawn by Plato between what
Popper (1977:43) has called three 'worlds': a world of
'visible objects', a world of 'affections or states of the
soul' and a world of 'intelligible objects'. This last
world is a transcendent one; its 'intelligible objects' ---
called also 'forms', 'ideas' or 'essences' --- are those
objects which general or universal concepts denote. The
Good, the Beautiful and the Just are in Popper's (1977:43)
phrasing 'the most important essences in his [i.e., Plato's]

world of intelligible forms or ideas'. In addition, this world contains the natural numbers. Plato's world of intelligible objects is not man-made: he conceived of it as timeless, immutable and of divine origin.

Associated with Platonic realism is an epistemological theory that provides for a faculty of (intellectual) intuition. The function of this faculty is to acquire a priori knowledge of whatever it is that makes up transcendent Platonic reality. Conventional Platonists have considered the knowledge acquired by this faculty to be infallible. This Platonist epistemology goes back to Plato's postulation of an 'eye of the soul'. For Plato, as noted by Popper (1977:44), this 'mental eye' is the seat of the faculty of intellectual intuition. It can 'see' an idea, essence or object that belongs to Plato's intelligible world. And, in Popper's (1978:44) phraseology,

> 'Once we have managed to see it, to grasp it, we know this essence: we can see it in the "light of truth". This intellectual intuition, once it has been achieved, is infallible.'

Against this background we can now go on to explore the Platonist conception of language.[2]

In par. 4.1, we will focus on Katzian Platonism, the version of realism that has been explicitly and energetically promoted by the so-called New York School as superior not only to Chomskyan mentalism but, indeed, to all other linguistic ontologies.[3] The basic questions we will consider are the following: What does it mean to say that language is an abstract object? Why is language considered abstract by Katz and his associates? What form of science is linguistics, given the view that language is something abstract? What methodology has been adopted by Platonists for investigating language as an abstract object? What are the merits and shortcomings of the Platonist conception of language?

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4.1.1   Concealing Conceptual Compartments

Platonist linguistic reality is populated by sentences, indi-
vidual languages and, possibly, something called '(natural)
language (in general)'.[4]   And these entities are abstract
objects, objects that are not physical, mental, biological
or social. In slightly less negative terms, Katz (1981:181)
characterizes abstract objects as being 'objective, timeless,
placeless entities that we discover and learn about'.[5]   An
abstract object is 'objective', Katz (1981:186) explains, in
the sense that 'no one person has a special relation to it'.
That is, no person has privileged access to it in the way
that he/she may have to psychological states, events, etc.
that occur in his/her consciousness. Abstract objects, more-
over, are changeless in the sense of not 'being different at
different times'. Rather, abstract objects are cohesive in
the sense of 'having logically inseparable basic properties'.

But let us consider the three kinds of abstract linguistic
entities mentioned above. As for sentences, Katz (1984:18)
believes that they can be thought of in the same way that
Platonist mathematicians conceive of numbers. This means to
Katz (1984:18) that

>'Sentences ... are not taken to be located here or
>there in physical space like sound waves or depos-
>its of ink, and they are not taken to occur either
>at one time or another or in one subjectivity or
>another in the manner of mental events and states.'

Rather, Katz takes sentences to be 'abstract' and 'objec-
tive'. Sentences, he (1984:18) claims, are 'entities whose
structure we discover', not entities that we create. And,
on Katz's view, we discover the structure of sentences 'by
intuition and reason, not by perception and induction'.

On the Platonist view, because sentences cannot have either
spatial or temporal location, they cannot have material
properties either. This timeless and 'spaceless' nature of
sentences Katz and Postal (1989:7) illustrate with reference

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to the sentence <u>Flying planes can be dangerous</u>. They ob-
serve, that is, that it is just as impossible for this sen-
tence to occur on Christmas day in A.D. 2000 as it is for
this sentence to be in Bethlehem. And since sentences are
not located in either time or space, Platonists believe,
they cannot be involved in causal interactions: sentences
are not caused by anything and sentences cannot cause any-
thing.[6] Concretely, what this means to Katz and Postal
(1989:8) is that, for example, the sentence <u>Flying planes</u>
<u>can be dangerous</u> cannot be caused by vocal-tract movements.
Nor can this sentence cause crystal to break.

Continuing to clarify the abstract nature of sentences, Katz
and Postal invoke Peirce's distinction between types and
tokens. As timeless and 'spaceless' entities not involved
in causation, sentences are types in terms of this distinc-
tion. As an abstract type, however, a sentence may have
various concrete tokens that take on the form of written or
spoken utterances. The text above, for example, includes
two written utterance tokens of the sentence type 'Flying
planes can be dangerous'. In contrast to sentence types,
utterance tokens are material objects located in space and
time. The properties of utterance tokens, moreover, are
caused --- by vocal-tract movements in the case of spoken
utterances. And utterance tokens can act causally on things
--- produced at a sufficiently high pitch they can, for
example, cause crystal to break.[7]

To further clarify the nature of abstract objects, Katz and
Postal have drawn a distinction between Platonic abstract
objects and abstract(ed) or ideal objects of the kind con-
structed in empirical inquiry.[8] In terms of a definition
given by Katz (1981:55),

> 'An ideal object is a construction resulting from
> the idealization of actual objects and it is used
> to make statements about them [= the actual ob-
> jects, R.P.B.] without undue complication.'

Completely frictionless planes and perfectly rigid rods are

typical examples of the ideal objects constructed by physi-
cists. These ideal objects abstract away from those fea-
tures of actual surfaces and bodies, respectively, which
would unnecessarily complicate the statement of the laws of
physics governing these actual objects. In linguistics,
likewise, Chomsky's ideal speaker-listener is an ideal ob-
ject too: it abstracts away from actual speaker-listeners
by leaving out of consideration, for instance, so-called
performance features that would needlessly complicate the
statements of 'grammatical laws'.[9]

Platonic abstract objects, by contrast, are not idealiza-
tions or ideal objects. That is, they are not the products
of any abstracting away from the complicating features of
actual objects. And they are not constructed as the means
by which to simplify the laws of a discipline. Katz (1981:
56) emphasizes the point that Platonic abstract objects dif-
fer in ontological kind from the physical and psychological
objects represented in ideal objects. Platonic abstract ob-
jects, he contends, are like the *actual* objects of empirical
science in that they are things of which the statements of a
science may be true.

This brings us to the second kind of objects populating Pla-
tonist linguistic reality. The status of being components
of this reality has been explicitly assigned by Platonists
not only to sentences but also to individual languages.[10]
Recently Katz and Postal (1989:29), for instance, have re-
iterated the Platonist position that 'NLs (= natural lan-
guages) are taken to be real things.' But beyond portraying
languages as abstract, Platonists have had relatively little
to say about their distinctive ontological properties. In
an early characterization, Katz (1981:9) depicted a language
as 'a timeless, unchangeable, objective structure'. And, in
a more linguistic vein, he (1981:172) also described different
languages as 'different systems of expressive forms associated
with an invariant semantic structure ...' More *recently*,
Platonists in their characterization of individual languages

have replaced the earlier notions of 'structure' and 'sys-
tem' by the notion of 'collection'. Katz and Postal (1989:
27ff.), for example, have portrayed languages as being
'collections of sentences understood [or regarded] as ab-
stract objects'. And certain mathematical properties of
such collections have been discussed at length by Langendoen
and Postal (1984).[11]   But the question whether there is an
ontologically significant difference between a 'system' or
'structure' on the one hand and a 'collection' on the other
hand has, as far as I know, not been considered explicitly in
recent Platonist writings. The clarity of the Platonist
notion of 'a natural language', of course, has not been en-
hanced by this.

The ontological status and properties of a third kind of ab-
stract object that may form part of Platonist linguistic
reality is rather unclear. Certain formulations by Platonists
suggest that, in addition to sentences and individual lan-
guages, '(natural) language (in general)' is also a component
of this reality. For example, Katz (1981:76) states that

> 'The second, and stronger claim [of Platonism] is
> that sentences and language are abstract objects
> and thus linguistics is about abstract objects.'
> [emphasis mine]

This formulation may be read as indicating that language, as
opposed to individual languages, may form a distinct part of
Platonist linguistic reality.   Other formulations, however,
seem to suggest that sentences and languages are the only in-
habitants of this reality. Thus, characterizing linguistic
theory, Katz (1984:24) uses the phrase

> '... linguistic theory, being about natural lan-
> guages collectively ......'.

Formulations such as this leave the ontological status of the
putative Platonist object 'language' rather less than clear.
This object, that is, may be something derivative in being
nondistinct from 'natural languages collectively'.

The matter is not made any clearer by Katz's (1981) discus-

sion of the 'nature of language', 'the essential properties
of natural languages', and 'linguistic universals'. In his
(1981:229) words, Platonism has 'an alternative conception
of the nature of language and linguistic universals' [empha-
sis mine]. Elaborating on this point, Katz (1981:229)
switches, however, from 'language' to 'languages':

> 'We claim that the essential property of natural
> languages is that their grammatical structure
> constitutes an effable correlation of sentences
> with senses.'12

And in his formulation of the Platonist notion of 'linguis-
tic universal', Katz (1981:229) uses the expression 'every/
a natural language' rather than '(natural) language (in
general)':

> 'A grammatical feature F is a linguistic univer-
> sal if every natural language has F and a natural
> language could not be effable without having F.'13

But, in an earlier passage, Katz (1981:225) states that prop-
erties such as effability require

> '... another conception of the nature of language,
> one on which the properties conceived to be part
> of the nature of language are properties without
> which language would not be what it is.'14 [all
> emphases mine]

In a technical ontological discussion, one must assume, the
use of 'language' instead of 'languages' is not a matter of
arbitrary terminological variation. Katz, however, has not
divulged the reasons for his choice of terminology.

There is a particular formulation which suggests more strong-
ly that Katz (1981:231) considers 'language' to be something
distinct from 'languages':

> 'Some [properties] are definitional, entering into
> our concept of the abstract object natural lan-
> guage, while others, no less inseparable, are not.'
> [emphasis mine]

But Katz has refrained from indicating the respect(s) in which
'the abstract object natural language' is ontologically dis-
tinct from individual natural languages regarded as abstract

objects. He (1981:222) does state that 'the ontological category for natural languages taken collectively cannot be different from the ontological category for them individually.' This remark seems to say no more than that both individual languages and 'languages taken collectively' are abstract objects. It does not answer questions such as the following: Is 'the abstract object natural language' an entity that is distinct from 'individual languages taken collectively'? In ontological terms, what does it mean 'to take individual languages collectively'?, etc.

It is possible though that the answer to the question 'What is "the abstract object natural language"?' is a quite straight-forward one. Namely: 'the abstract object natural language' is whatever it is that is described, characterized, etc. by a Platonist linguistic or grammatical theory. Adopting this approach to find out what 'the abstract object natural language' really is, one 'simply' has to get to the bottom of the Platonist conception of 'a linguistic or grammatical theory'. Let us attempt to do just this, taking as our point of departure the distinction drawn by Katz and other Platonists between a (generative) grammar and (a) linguistic/grammatical theory.

Katz's (1981:55) characterization of a (generative) grammar is unambiguous in regard to ontological import:

> 'A generative grammar for a language L is a theory of the grammatical structure of the sentences of L, and these are abstract objects.'[15]

By constrast, the various characterizations that Katz and other Platonists have given over the years of (a) linguistic/grammatical theory and, thereby, of linguistic or grammatical universals are much less transparent.

Consider first a relatively early characterization given by

Katz (1981:55):

> (C1)   'A linguistic theory is a theory of the gram-
>   matical universals of language, that is, a
>   theory of the essential common structure of
>   natural languages.'

If 'the abstract object natural language' were identical to
what a linguistic theory is a theory of, this object would
in terms of (C1) be exhaustively made up of grammatical uni-
versals. And grammatical universals are equated with the
essential common structure of natural languages, a point which
may be represented as follows for the sake of later reference:

> (E1)   'grammatical universals = the essential common
>   structure of natural languages.'

This relatively simple picture is complicated, however, by a
later characterization given by Katz (1984:43) of 'linguistic
theory' and 'a correct linguistic theory':

> (C2)   'Linguistic theory, on the Platonist view, is
>   a theory of the invariances in the grammatical
>   structures of all natural languages ....   A
>   "correct linguistic theory" states all in-
>   variances and essential properties of natural
>   language in the simplest way.'

As for its first statement, the characterization (C2) differs
from (C1) in two respects: in (C2), 'language' is replaced
by 'languages' and, significantly, in (C2) the idea of essen-
tiality appears to have lost its status as a criterion for
linguistic universals. The latter point, in a nutshell, may
be represented as follows:

> (E2)   'grammatical universals = the invariances in
>   the grammatical structures of all natural
>   languages.'

The second statement of (C2), however, reintroduces the idea
of essentiality but, through the use of 'and', it neverthe-
less broadens the Platonist notion of linguistic or grammati-
cal universals. In the form of an equation:

> (E3)   'grammatical universals = all invariances and
>   essential properties of natural language'.

In terms of the characterization (C2), 'the abstract object
natural language' would be made up of 'all the invariances in
the grammatical structures of all natural languages' plus
'all essential properties of natural language'. The characte-
rization (C2) seems therefore to have (at least) two conse-
quences. Firstly, it does not seem to matter whether or not
the intended 'invariances' concern essential or non-essential
aspects/features of the grammatical structures of natural
languages. Nor, secondly, does it seem to matter whether or
not the intended essential properties are invariant. What
these two consequences of (C2) may mean is unclear to me.

But the Platonist notions of 'grammatical/linguistic theory'
and 'grammatical/linguistic universals' have been made even
more opaque by the following recent characterization offered
by Katz and Postal (1989:13):

(C3)   '... grammatical theory on the realist view is
        an explication of NL universals. It is a theory
        of the principles which hold for all sentences
        of all NLs and of those holding for all full
        collections of such sentences.... The universal
        grammatical principles are either clauses of the
        definition of "NL sentence" or [clauses] of the
        definition of "NL" ...'

The characterization (C3) differs from (C2) in various re-
spects. First, in terms of (C3), 'the abstract object natural
language' --- if (C3) did in fact provide for the existence
of this object --- would be made up not of 'invariances in
grammatical structure' and 'essential properties of language'
but of 'principles which hold for all sentences of all NLs
and of those holding for all full collections of such senten-
ces'. It may be that the expression 'principles ...' is
intended to be synonymous with 'invariances ...' and 'essen-
tial properties ...'. But Katz and Postal do not say so.
Second, 'universal grammatical principles' are portrayed not
as parts or properties of a distinct abstract object some-
where 'out there' in a Platonic reality but as clauses of the
definition of the notion 'NL sentence' and the notion 'NL'.
This, obviously, is ontologically significant. In terms of

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an equation-like formulation, the essence of (C3) boils down
to the following:

(C4)   'NL universals = the principles which hold for
        all sentences of all NLs and those holding
        for all full collections of such sentences =
        clauses of the definition of "NL sentence" or
        of the definition of "NL".'

We can now return to the question that triggered our examina-
tion of the Platonist notions of '(a) grammatical/linguistic
theory' and 'grammatical/linguistic universals', namely: Is
the entity called by Katz 'the abstract object language'
something distinct from 'all natural languages taken collec-
tively'? The various characterizations offered by Platonists
of the notions of '(a) grammatical/linguistic theory' and
'grammatical/linguistic universals' do not provide a clear
answer to this question. On the contrary: given these
characterizations, one may conclude that the Platonist no-
tions of '(a) grammatical/linguistic theory' and 'grammati-
cal/linguistic universals' are themselves in need of clarifi-
cation.

Katz, of course, has anticipated modifications of the Plato-
nist conception of 'linguistic universals'. Thus, referring
to 'effability', he (1981:231) has stated that

        'Since there is no reason to think that this prop-
        erty alone defines natural language, completion
        of the definition of natural language, like the
        enumeration of the full set of lingusitic univer-
        sals, is a matter for future studies'.

But Platonists have refrained from explaining and justifying
the various changes that they have made in (the formulation
of) their characterization of the notion of 'grammatical/lin-
guistic universals'.

In sum: Platonist linguistic reality incorporates sentences
and individual natural languages. Whether this reality, in
addition, includes '(natural) language (in general)' or 'the

abstract object language' as a distinct entity is unclear.
So are the properties that may individuate this entity on-
tologically.

*Thing Theurgy performances such as the one we have just
watched essentially involve two tricks being done in tandem,
Spell-bound Buyer. First, just to get the show on the road
an alchemical act is presented by means of which, to the roll
of realist drums, what ordinary ontologists would consider
to be nothing is transmuted into sentences by Prime Practi-
tioners of the Neoplatonist Arts.[16] Next, muffled by the
strains of metaphysical music, follows a magical move in
which levers are thrown so as to set in motion the revolving
realm of Platonist linguistic reality. And so, metaphysical-
ly mesmerised by its rapid rotation, the audience soon becomes
unable to see whether, like sentences and like languages,
'language (in general)', though concealed in some third com-
partment, is also an inhabitant of this linguistic reality.
It is this now-you-see-it-now-you-don't realist routine,
Benumbed Blue, that induces the state of stupefaction in
which many a seeker of the essence of language is unable to
make out the ontological obscurities of the Platonist object
'language (in general)'.*

4.1.2 Motivating the Magic

Why would Katz and other Platonists like to think that (a)
language is an abstract object? Among the beliefs in which
the Platonist conception of language is rooted, four are
basic:

(B1)   A conception of language or foundational posi-
       tion must account more adequately than its
       rivals do for all the facts of 'linguistics
       proper'.

(B2)   The facts that fall within the domain of 'lin-
       guistics proper' include the fact that, if
       certain sentences are true, certain others are
       necessarily true, and also the fact that cer-
       tain sentences are true in virtue of their
       meaning.

(B3)   For facts such as those mentioned in (B2) to be
       accounted for, the laws of logic have to apply
       to the senses of sentences.

(B4)   The laws of logic cannot apply to the senses of
       sentences unless these senses and laws have the
       same ontological status, namely the status of
       abstract objects.

The beliefs (B1)-(B4) have been discussed in various Plato-
nist studies, the most recent of which is a joint paper by
Katz and Postal (1989).[17]

As for (B1), it is a meta-belief expressing a general condi-
tion that should be met by any foundational position, lin-
guistic ontology, or conception of language. As formulated
by Katz and Postal (1989:5), (B1) actually represents only
the tip of submerged meta-mountain. That is, underlying
this belief there are various more basic assumptions, not all
of which are stated explicitly by Katz and Postal. The more
basic assumptions include:

(A1)   It is in principle possible to state a priori
       the (categories of) facts that fall within the
       domain or scope of a discipline.

(A2)   Linguists, or at least a majority of leading
       linguists, agree that certain (categories of)
       facts fall within the scope of 'linguistics
       proper'.

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(A3)   The linguists referred to in (A2) agree that it
       makes sense/is wise, in a foundational context,
       to draw a distinction between 'linguistics
       proper' and whatever forms of linguistics this
       has to be distinguished from.

(A4)   The linguists referred to in (A2) agree about
       what it is --- simplicity, deductive or expla-
       natory depth, etc. --- that makes one linguis-
       tic account of 'the facts' more adequate than
       the alternatives.

To some of these assumptions we will return below.

As for (B2), the facts included in the domain of 'linguis-
tics proper' are on Katz and Postal's (1989:4) view

> '... facts about NL sentences, covering every as-
> pect of sentential structure, *viz.* syntactic,
> morphological, phonological and semantic. They
> are revealed in the judgments that fluent speak-
> ers make about their structure.'

And, as specified in (B2), these facts include facts about
semantic relations like 'analytic entailment' and semantic
properties like 'analytic'.[18] The relation of analytic
entailment is illustrated by Katz and Postal (1989:4) with
reference to the sentences *John killed Bill* and *Bill is dead*
between (the senses of) which it holds. If the first of
these sentences is true, then in virtue of natural language
the second is necessarily true. The property of analyticity,
in turn, is illustrated by Katz and Postal (1989:4) with
reference to the sentence *Whoever is persuaded to sing in-
tends/decides to sing.* The proposition expressed in this
sentence is, on Katz and Postal's formulation, 'a truth of
meaning independent of empirical fact'. In short, then, the
facts referred to in (B2) are facts involving necessary truth.

Regarding (B3), the semantic theory developed over the years
by Katz and his associates has always assumed what Katz and
Postal (1989:9) call 'a substantive relation between NLs and

logic'.[19]   They observe that definitions of semantic prop-
erties like 'analytic' and of semantic relations like 'analy-
tic entailment' provide an account of one class of facts
about logical implication. And since analytic entailments
are valid, Katz and others have found it reasonable to sup-
pose that the senses of natural language sentences contain
semantic information essential to the theory of implication.
The semantic theory in question has assumed, in other words,
that senses provide at least part of the propositional
information on the basis of which logical laws apply to
natural language sentences. That is, it is assumed that
there is an overlap between what Katz and Postal (1989:9)
call 'aspects of grammatical form' and 'logical principles',
respectively.[20]

As for (B4), it is closely interlinked with the assumption,
just mentioned, of there being an overlap between the senses
of sentences and the laws of logic. Thus, Katz and Postal
(1989:9) state:

> '... acceptance of an overlap between the senses
> of NL sentences and logical objects involves
> linguists in foundational issues at least to the
> extent of committing them to a *common* ontologi-
> cal position for linguistics and logic. For the
> objects to which logical laws apply and those
> laws themselves can hardly belong to different
> ontological realms.'

For example, if logical laws are not psychological, the ob-
jects to which they apply cannot be psychological either, and
vice versa.

Following Frege (1967), Platonists have argued that logical
laws cannot be psychological. If they were, they could not
be the laws of necessary connection that they are. As Katz
and Postal (1989:10) put it:

> 'If logical laws were "laws of thought", that is,
> empirical laws about contingent things, they
> would be contingent and, like laws in physics
> and other natural sciences, could possibly be
> false. But, being necessarily true, logical laws
> could not possibly be false.'

Rather, laws of logic have conventionally been assigned a
realist status. That is, these laws have been considered
abstract objects: objective, timeless, placeless entities
not involved in causation. But if laws and the objects to
which they apply must have the same ontological status, then
(senses of) sentences have to be considered abstract objects.
This is the core of the justification furnished by Katz and
Postal for their Platonist conception of language.

In terms of Chomskyan conceptualism, Katz and Postal (1989:
10) claim, the senses of sentences have to be psychological
(or biological). To account for facts about analyticity and
analytical entailment, Chomskyans would therefore have to
adopt a psychological conception of logic too. Katz and
Postal (1989:10), however, consider 'Frege's arguments
against psychologism too compelling to contemplate defending
a psychological view of logic'. Consequently, they (1989:15)
contend, Chomskyan conceptualism cannot explain such facts
as the validity of analytic inferences like that from *John
killed Bill* to *Bill is dead*. And so, according to Katz and
Postal, Chomskyan conceptualism fails to satisfy the condi-
tion embodied in the belief (B1).[21]

Katz and Postal (1989:11) maintain that the inability of con-
ceptualism to provide an explanation for the logico-semantic
facts in question springs from a particular 'mistake'. This
mistake takes the form of a 'failure' which is parallel to
the failure by American structuralism to draw a distinction
between the knowledge of a natural language (competence) and
the exercise of that knowledge (performance). The failure
to draw the competence-performance distinction has led to an
'adulteration of grammar' with such 'extraneous facts' as
memory limitations. Katz and Postal (1989:11-12) go on to
argue that

> 'Conceptualism's mistake is the parallel failure to
> draw the further distinction between knowledge of an
> NL and the object it is knowledge of, the NL itself.'

Without this distinction, they claim, grammar is still being

adulterated by various extraneous factors. These are the
particular features of information representation and proces-
sing in the human mind/brain. By taking grammars to be
theories of epistemic states, Katz and Postal (1989:12) con-
tend, conceptualism makes everything about a natural language
a contingent matter of human psychology. Consequently, there
is no place for necessary connection in grammatical structure.
Given, however, the distinction between knowledge of a natural
language and the natural language that is known, the gramma-
tical structure of sentences can be specified in a way that
enables them to play a role in logic, Katz and Postal argue.
And, they go on (1989:12) to comment,

> 'Just as C's [= Chomsky's] competence/performance
> distinction provided a basis for a psychological
> formulation of the foundations of linguistics,
> the distinction between linguistic knowledge and
> its object provided one for a realist formula-
> tion.'

Accordingly, Katz (1981:77) considers his main criticism of
conceptualism to be parallel to Chomsky's main criticism of
nominalism (as embodied in American structuralism): 'the
constraints imposed put too low a ceiling on the abstract-
ness of grammars for them to be optimal'.

Katz (1981:77-78, 1984:34) has noted that the fundamental
distinction drawn by Platonism between the knowledge that
speakers have of their language and the languages that
speakers have knowledge of is simply a special case of a
more general epistemological distinction: the distinction
between the knowledge that we have of things and the things
that we have the knowledge of. Various disciplines provide
for special cases of this distinction. In mathematics, for
example, a distinction is drawn between an ideal calculator's
knowledge of the natural numbers and the natural numbers
themselves. And in logic, a distinction is drawn between an
ideal reasoner's knowledge of implication and the implica-
tion relations themselves. Katz (1984:34) observes that

> 'Platonism is in part an attempt to be consist-
> ent in our treatment of the special sciences by
> drawing the same distinction between knowledge
> and its object in the case of linguistics that
> we draw, as a matter of course, in the parallel
> cases of logic and mathematics.'

In Katz's (1981:78) view, the Platonist position thus does
not have to produce a justification for treating linguistics
differently from mathematics and logic, a justification that
to him 'seems not to be available'.

*You are right, Dear Buyer. The justification put forward by
Platonists for their conception of language has about it, un-
deniably, a ring of reasonableness. But, Buyer, beware: in
the end, magic owes its power to what is hard to hear or see.
And in keeping with this counsel, alas, adroitly articulated
justifications too have to be closely consider for what they
may conceal. So it is of some interest that, in justifying
their Abstractist Act, realists have kept the assumptions
(A1) and (A4) cleverly out of sight. But before contemplating
the consequences of this concealment, we need to attend to
another matter first.*

4.1.3   Siting the Show in Science

What kind of discipline is linguistics? This is one of the
questions engendered by the Platonist distinction 'language
vs knowledge of language' and by the assumption that lan-
guages are abstract objects. Like other sciences that study
an object as opposed to knowledge of this object, Platonist
linguistics is construed not to be a form of psychology.
Thus, with reference to mathematics and logic Katz (1981:78)
observes:

> 'There is no temptation to conflate the psycho-
> logical study of the ideal calculator's knowledge
> of number with the mathematical study of numbers,

> Or to conflate the psychological study of the
> ideal reasoner's knowledge of implication rela-
> tions with the logical study of implication
> relations.'

And he goes on to ask rhetorically:

> 'But, if there is a clear distinction in these
> disciplines, why conflate psychological study
> of the ideal speaker's knowledge of a language
> with the grammatical study of the language?'[22]

Accordingly, one of the two basic claims made by Platonism is,
in Katz's (1981:76) words,

> '... that linguistics is not a psychological
> science, that its theories are not about states
> of mind, mental events, or their neurological
> realizations, but about sentences and languages
> directly in the way that we ordinarily take lin-
> guistics to be about sentences and languages.'[23]

In arguing that linguistics is not a psychological science,
Platonists do not mean to question the legitimacy of the
study of knowledge of language or linguistic competence. Thus
Katz and Postal (1989:13) remark:

> 'Naturally, realists acknowledge the legitimacy
> of questions about competence, just as concep-
> tualists acknowledge the legitimacy of questions
> about performance. But according to realism,
> the study of competence belongs to the empirical
> field of psycholinguistics rather than to the
> formal discipline of linguistics.'

Note that the second one of the statements just quoted con-
tains inter alia the core of the positive part of the Plato-
nist answer to the question 'What kind of discipline is lin-
guistics?'. Given the distinction between knowledge of
language and language, and given the assumption that lan-
guages are abstract objects, linguistics is a formal science.
But what does this mean?

To begin with, Katz (1984:27) assigns linguistics the status
of 'a branch of mathematics'. Like the mathematician, Katz
(1981:212-213) maintains, the linguist sees his task as that
of constructing a theory 'revealing the structure of a set
of abstract objects'. Linguistic theories, on the Platonist

view, are 'a priori systematizations' of facts about natural language sentences.[24] This means that linguistics is not an empirical enterprise.[25] But this does not mean to Platonists that linguistics is not 'scientific', is 'devoid of intellectual interest' or does not pursue truth.[26] Thus, reacting to a criticism voiced by Chomsky, Katz and Postal (1989:19) remark:

> 'The last phrase of (14), which mentions "true theories", amounts to the gratuitous conclusion that failure to interpret talk about NLs as talk about psychological structures abandons interest in true theories. This has as little ground as would a claim that failure to interpret talk about real numbers as talk about psychological structures abandons interest in true (mathematical) theories. In linguistics, as in logic and mathematics, realists abandon interest in true theories of *psychology*, but this does not mean they abandon interest in true theories. True theories of psychology are abandoned in order to pursue true theories of NLs, implication and numbers.'

This brings us to the epistemological means adopted by realists for the pursuit of true theories of natural languages. If these means are not the means of empirical science, what can they be? How is it possible to obtain a priori knowledge of abstract objects, objects neither located in time and space nor involved in causality? The essence of the answer given by Katz (1981:193) is that

> 'Platonists invoke intuition to play essentially the same role in their account of a priori knowledge that perception and introspection play in accounts of a posteriori knowledge.'

On Katz's (1981:195) view, perception, introspection and intuition are mental faculties 'issuing in acts of apprehension'. That is, these three mental faculties provide people with basic knowledge. These three faculties differ on his view principally in terms of the kinds of objects about which they provide such knowledge. In perception, he contends, people observe physical objects: objects in the external world. In introspection, people observe objects of subjective experience: their own thoughts, feelings, emotions,

etc. And in intuition, Katz asserts, people grasp abstract
objects: numbers, sets, sentences, etc. On his view, both
intuition and perception involve internal representations of
objects. These representations he considers to be the source
of knowledge. But, he believes, neither in the case of per-
ception nor in the case of intuition do they represent some-
thing psychological. What is represented in both cases, Katz
(1981:196) claims, is 'something objective'. Introspection,
by contrast, he considers to be a matter of obtaining 'mental
meter readings'. The important point to Katz (1981:196),
therefore, is that

> 'Though the source of an intuition is psychological,
> its import concerns objective matters of linguis-
> tic, logical, or mathematic fact.'

Finally, Katz (1981:199) assumes that, like perception and
introspection, intuition is fallible: there can be genuine
instances of erroneous intuition.[27]

Katz's (1981:200-202) Platonism differs in an important re-
spect from traditional Platonism in regard to the way the
faculty of intuition 'works'. Traditional Platonism has
modelled its account of intuition on perception: intuitive
knowledge depends on the knower's establishing some form of
direct contact with the objects of knowledge. That is, the
traditional Platonist account requires a causal relation
between a perceiver and the perceived object. Katz (1981:
201), however, notes that abstract objects could not occur
in such a causal relation:

> 'Being objective, abstract objects do not occur
> as a constituent of the conscious experience
> of a knower, and, being aspatial and atemporal,
> they cannot act on a knower through a causal
> process to produce a representation of them-
> selves in the manner of sense perception.'

Hence, Katz (1981:202) prefers an alternative, Kantian, ac-
count of intuition. On Kant's account, Katz observes, in-
tuitive awareness is not conceived of as a causal effect of
an external event. Rather, intuitive awareness is considered
'the effect of an internal construction'. Katz (1981:203)

stresses that what is 'internally constructed' is not ab-
stract objects themselves, but rather internal representa-
tions of abstract objects. The internal representations
may or may not correspond to the abstract objects outside
people. It is for this reason that Katz considers intui-
tions to be fallible.

Like research in mathematics and logic, linguistic research
begins according to Katz and Postal (1989:36) with 'a finite
number of basic facts provided by intuition'. And each type
of research generalizes to infinite collections. In logic,
for instance, research begins with intuitions about implica-
tion relations among propositions, consistency relations
among propositions, and so on. These intuitions, they claim,
involve a very small, finite number of cases which are gene-
ralized to principles about all propositions, principles such
as those involved in Modus Ponens. Likewise, Katz and Postal
(1989:36) maintain, linguistic research begins with 'a finite,
in fact extremely small number of facts', facts such as those
about analyticity and analytical entailment considered above.
And these facts, similarly, are generalized to infinite col-
lections of sentences. The grammars that result from the
'projection' of the initial or early facts are, as Katz
(1984:23) notes, 'revisable in the light of later intuitions
and canons of theory construction'. Truth or correctness in
the case of Platonist grammars is assumed by Katz and Postal
(1989:31) to be essentially 'a matter of factual coverage
and simplicity'.

*Sure, Bottled-up Blue, let fly and speak your mind about what
you term 'tricky talk about intuition'. Indeed, the thought
has occurred to me too that what is involved in the grasping
of abstract objects is not intuition but rather illusion.
But don't expect Manhattan Magicians to buy the suggestion
that their Abstractist Act is an exercise in illusionist
magic. Indeed, a certain Performing Platonist going by the*

cryptic stage-name of J. the Fey has various ways of handling mistrustful members of an audience who dare to doubt the existence of intuition. For instance, on one occasion --- I recall it vividly --- this Resourceful Realist turned dramatically to the wings and summoned on to the stage a wit- ness, Ram the Ham, reputed to be able to receive mathematical messages broadcast to us (or should that be 'beamed down'?) from the Platonic Plane:

> *'People without first-hand experience [of mathemat- ical intuition] or people with doubts about the interpretation of intuition can examine the re- markable case of Ramanujan, an Indian postal clerk who discovered huge amounts of mathematics for himself without even a rudimentary knowledge of mathematical proof.'   (Katz   1981:193-194)*

You find the Indian connection disconcerting? Well, so do I, so do I. But I won't go so far as to say that resorting to the establishment of a New York-New Delhi Axis has reduced Platonist epistemology to a realist rope trick. Not just yet, anyway.

4.1.4   Appraising the Abstractist Act

So far, there has not been a coherent debate about putative merits and flaws of the Platonist conception of language. On the one hand, this conception of language has been criticized by a variety of scholars who cannot be considered Chomskyans. Strangely, though, Platonists on the whole have failed to re- spond to these criticisms. On the other hand, Chomsky himself has so far refrained from directly subjecting the Platonist conception of language to systematic criticism. The rather cryptic critical comments that he has made on this conception of language have the character of asides scattered about in his various accounts of the foundations of conceptualism. Curiously, Platonists, notably Katz and Postal (1989), have taken great pains to collect and rebut these insufficiently explicated criticisms.

Below we will consider six of the more important points of criticism against the Platonist conception of language.[2B]

1.   Several aspects of Platonist linguistic ontol-
         ogy have not been sufficiently well explicated.

Two examples should suffice to illustrate this point of criticism. First, Dillinger (1984a:17) has observed that Katz (1981) does not specify the possible relations between the 'three independent kinds of reality: material, mental and mathematical'. Dillinger does not consider it suffi-cient for Katz to say that mental and mathematical objects can be linked by the 'knowledge of' relation which is 'sim-ply left undefined'. Nearly ten years after the publication of the book reviewed by Dillinger, Katz and Postal (1989:34) still find themselves obliged to observe that

> 'It is, of course, hard at present to say what
> this relation consists in [i.e., the relation in
> which internal rules representing knowledge of
> language stand to the collection of sentences
> as sound-meaning-pairs], because the "knowledge
> of" relation is as complex as the "exercise of"
> relation linking competence and performance.'

Second, as we noted in par. 4.1.1 above, the Platonist notion 'the abstract object natural language' is obscure in regard to ontological import. Specifically, it is unclear whether a Katzian Platonist linguistic reality, in addition to in-cluding sentences and languages, also includes '(natural) language (in general)'. And it is equally unclear what the individuating properties of this putative object might be.

2.   It is dubious whether particular individual
         languages denoted by terms such as 'English'
         or '.French' can be taken to exist as abstract
         objects of a Platonist sort.

Versions of this criticism have been offered by both Pateman (1983:283, 1987:51) and Carr (1990:122-123). It is based on

the observation that 'the act of intuition' does not yield
direct judgements about languages such as English or French
considered as wholes. In this regard, then languages are
unlike sentences: there are no direct data on the basis of
which particular individual languages can be linguistically
defined. To put it another way: in terms of the 'knowledge
of' relation, there are no intuitive data for the explanation
of which a linguistic theory has to use concepts such as
'English' or 'French'.

Carr (1990:123) contends, accordingly, that Katz (1981:77,
79) is mistaken in using the 'knowledge of' relation to
justify 'French', etc. as linguistic objects. One can take
the 'knowledge of' relation as having sentences and their
properties as its object, Carr maintains, without having to
claim that 'French', etc. are linguistic objects. And he
(1990:123) concludes:

> 'In having knowledge of a given set of sentences
> and their properties, or the grammar which
> underlies these, it is an arbitrary matter
> whether we refer to that grammar as "French",
> "Spanish", or whatever.'

Note, incidentally, that if the existence of an abstract lin-
guistic object has to be justified by means of invoking the
'knowledge of' relation, it is dubious whether what Katz has
called 'the abstract object natural language' can be claimed
to exist in the realm of Platonist linguistic reality. No
evidence has been offered that non-linguists, through 'acts
of intuitive apprehension', have knowledge of this putative
Platonist object.

3.   The idea that languages are sets or collections
      of sentences is flawed in fundamental ways.

This point embodies Chomsky's criticisms of the conception of
'E(xternalized)-language'. In terms of this conception, a
language is something external to the mind/brain. As Chomsky
(1986:20) puts it, 'E-language' is a 'construct' that is

'understood independently of the properties of the mind/
brain'. On this conception, Chomsky (1986:19) observes, a
language has been viewed as a collection or system of actions,
events, utterances or linguistic forms such as words or sen-
tences.[29]

Chomsky's various criticisms of the notion of 'E-language'
have been taken by Katz and Postal (1989) as applying to the
Platonist conception of language as well. And they have at-
tempted a systematic rebuttal of these criticisms. For the
purposes of the present discussion, Chomsky's criticisms of
the notion 'E-language' may be reduced to the following
three:

(a)   E-language is 'artificial' or 'epiphenomenal' in that
it is too far removed from the psychological, ultimately
biological, mechanisms involved in the acquisition and use of
language.[30]   As a consequence, an E-language can be charac-
terized in various ways. Hence, Chomsky (1986:26) contends,
'there is no issue of correctness with regard to E-languages'.
No questions of truth or falsity, he (1986:20) maintains,
arise here.

Katz and Postal (1989:34) consider Chomsky's (1986:27) re-
mark that 'E-language, however construed, is farther removed
from (psychological) mechanisms than I-language, at a higher
order of abstraction' to be 'incoherent':

> 'If E-languages do not exist ("are not real-world
> objects"), then they cannot be further removed
> from anything, and no distance measure can relate
> them to (presumably psychological) mechanisms.
> And if they do exist, the realist claim is granted
> and it hardly matters that E-languages represent
> "a higher order of abstraction".'

And to Chomsky's point that there is no issue of correctness
with regard to E-languages, Katz and Postal's (1989:31) overly
brief response is 'that correctness is a matter of factual
coverage and simplicity'.

(b)   In terms of the notion of 'E-language', languages are
ill-defined in having no determinate boundaries.[31]   In a
more superficial sense, it is unclear in the case of many
expressions or sentences --- e.g. *Give it me* whether
they are contained by a particular E-language or not. In a
deeper sense too, E-languages are vague and indeterminate.
Chomsky (1987a:33) argues this point by referring to 'semi-
grammatical sentences' such as *The child seems sleeping*.
He asks whether this expression is in the language or outside,
and maintains that either answer is unacceptable. All of
this makes the status of E-language quite obscure in Chomsky's
(1986:25) opinion:

> '... the bounds of E-language can be set in one
> way or another, depending on some rather arbi-
> trary decisions as to what it should include.'

As regards the more superficial sense in which Chomsky con-
siders E-languages to have indeterminate boundaries, Katz
and Postal (1989:38) reply that 'the problem is the same for
conceptualist and realist alike because it lies at the level
of linguistics proper [as opposed to the study of the founda-
tions of linguistics]'. On their view, many cases of ap-
parent indeterminacy 'reduce to questions about distinct
closely related NLs sharing many sentences'. So, they pre-
sume, everyone would judge that British English contains this
sentence and American English does not. Katz and Postal's
response to Chomsky's point that E-languages are indeterminate
in a deeper sense as well is too detailed to represent in
full here. The essence of their position, however, is that
there is no dispute about the fact that *The child seems
sleeping* is ill-formed. Realists, consequently, say that
this string is not part of the relevant E-language. And to
account for the interpretation of such 'semi-sentences',
Katz and Postal argue, both they and Chomsky would have to
appeal to auxiliary hypotheses of a nongrammatical character.

(c)   The concept of E-language is too far removed from
what is real; that is, it is not sufficiently close to the
common-sense notion of language. In support of this claim,
Chomsky (1986:27) observes that when people speak of a per-
son knowing a language they do not mean that he or she knows
an infinite set of sentences or sound-meaning pairs (taken
in extension) or a set of behaviours or acts. Rather, they
mean that the person knows 'what makes sound and meaning
relate to one another in a specific way, what makes them
"hang together".' Katz and Postal (1989:34) consider these
remarks by Chomsky as being 'not really relevant to the is-
sues between conceptualism and realism'. In any event, they
contend, these remarks are based on a misconception, 'the
illicit supposition that the fact in which knowledge of an
NL consists is nonrelational'. For, they argue, if this
fact is relational, 'then knowing an NL does mean knowing an
infinite set of sound/meaning pairs'.[32]

4.   Platonists have not given a satisfactory ac-
      count of how people can come to have knowledge
      of abstract objects.

On Katz's view, let us recall, abstract objects are objective.
This means that they do not form part of a person's subjec-
tive, conscious experience. Hence, a person cannot come to
know anything about abstract objects by means of introspection.
Katz believes moreover that abstract objects, being aspatial
and atemporal, cannot act causally on a person's senses.
Hence, a person cannot come to know anything about abstract
objects by means of perception. These points, Katz (1981:201)
summarizes as follows:

> 'Being objective, abstract objects do not occur
> as a constituent of the conscious experience of
> a knower, and, being aspatial and atemporal,
> they cannot act on a knower through a causal
> process to produce a representation of themselves
> in the manner of sense perception.'

The question then is: How can a person, e.g. a linguist, pos-
sibly get to know anything about abstract linguistic objects?

This, of course, is a question about the epistemology needed
by Platonists for investigating abstract linguistic objects.
And various scholars, e.g. Itkonen (1983:242) and Carr (1990:
120-121), have argued that the epistemology proposed by Katz
is unsatisfactory.

As observed in par. 4.1.3 above, the epistemology proposed
by Katz (1981:201 ff.) for acquiring knowledge of abstract
(linguistic) objects is essentially a Kantian theory of pure
intuition. In terms of this theory, we have seen, intuitive
awareness is not a causal effect of an external event, but
the effect of an internal construction.[33] That is, on a
Kantian theory, a person is able to construct a mental repre-
sentation of an abstract object.

To flesh out the Kantian conception of pure intuition for
the special case of the apprehension of the grammatical
structure of sentences, Katz proposes three further 'compo-
nents'. The first is a Chomsky-like nativist theory of how
speakers of natural language acquire their knowledge of its
grammar. On this theory of Katz's (1981:204), there is an
a priori source for the universal conditions that must be
sufficient (a) for the construction of the abstract notion
of a sentence of a natural language and (b) for the construc-
tion of the less abstract concepts of 'English sentence',
'French sentence', etc. as well as for their intuitive in-
stantiations.

Given the distinction between knowledge and its object, Katz
(1981:204) contends, the mental representation of the gram-
matical structure of a sentence may diverge from the gramma-
tical structure of the sentence in the language. In Katz's
(1981:205) phrasing

>   'such mental representations can, and probably do,
>   contain errors of omission and commission about
>   the structure of sentences of the language.'

In order to explain how intuition compensates for such er-
rors or misrepresentations, Katz proposes two further compo-

nents for his theory of intuition. *One component* --- the
second component of his 'fleshed out' theory of Kantian in-
tuition --- corrects for such errors on the basis of what
Katz (1981:205) depicts as 'an innate notion of the "know-
ledge of" relation'. He assumes that the faculty of intui-
tion has access to this innate notion and that it utilizes
the distinction between knowledge and its object 'to compen-
sate for [mental] misrepresentations of grammatical struc-
ture'. The other 'corrective' component --- the third com-
ponent of Katz's 'fleshed out' theory --- is based on the
assumption that people have an innate idea of an abstract
(linguistic) object. *Intuition, in Katz's (1981:205)* termi-
nology, 'sculpts' a person's innate idea of the abstract
object 'sentence' into the concept of a sentence *in concreto*.[34]
So what Katz assumes is, in short, that the ontological
characteristics of the object that grammatical knowledge is
knowledge of are specified by the innate idea of an abstract
object.

The interaction between the three components of his epistemo-
logy is depicted as follows by Katz (1981:205):

> 'Using both the "knowledge-of" relation and the idea
> of an abstract object, the faculty of intuition can
> operate on principles reflecting the form tacit
> grammatical rules take in humans and depsychologize
> them, reconstructing representations of sentences
> as concrete concepts of abstract objects. These
> two further components seem sufficient, since they
> can rectify the respects in which a speaker's tacit
> rules misdescribe facts about the language and con-
> struct concepts of abstract objects that properly
> describe sentence structure.'

As outlined above, Katz's theory of intuition accounts for
only those intuitions based on tacit knowledge. He (1981:
205-206) 'extends' this theory by assigning also to explicit
knowledge, i.e. 'knowledge acquired in scientific pursuits',
the role of 'input to the faculty of intuition'. Katz (1981:
206) believes that

> 'Intuitions based on tacit knowledge come first onto-
> genetically but as soon as explicit knowledge is
> acquired it feeds back into the faculty of intuition.'

By means of this extension Katz provides for a source of in-

tuitions about abstract objects postulated in the context of
'advanced theories'.

Katz's theory of intuition is problematic in various respects.
First, Katz's explication of this highly intricate theory is
at a level of generality and abstraction that leaves many
specific points unclear. It is because of this, it appears to
me, that Itkonen (1983:242) has maintained that this 'rather
exotic apparatus' of Katz's does not give a satisfactory ac-
count of how people can come to have knowledge of something
that has no causal relation to them. Thus, Itkonen remarks,
Katz's account does not explain 'why there should be so good a
fit between abstract objects, on the one hand, and innate
ideas and internal representations, on the other'. Recourse
to 'the innate idea of an abstract object' does not really
contribute much to a solution for this problem. For, as Carr
(1990:121) has observed, Katz leaves it unclear how people are
supposed to come to possess their innate knowledge of the con-
cept 'abstract object'. This is a problem for Carr (1990:121),
'especially when one considers that abstract objects are not
available for causal interaction during the evolutionary pro-
cess'.

Second, Katz (1981:206) does not see his account of the opera-
tion of the faculty of intuition as representing 'an actual
model'. His account is, on his own view, the product of
having performed the 'philosophical task' of explaining 'how
we can have inner representations of grammatical abstract ob-
jects without there having to be a causal relation of some
sort between the subjective representation and the objective
sentence'. Katz considered it 'fanciful' to think of pro-
viding 'at this time' an 'actual model' of the set of 'oper-
ating rules' of the faculty of intuition. Accordingly he was
not obliged to present any factual evidence in support of his
theory of intuition.

Ten years later, however, Katz has still not presented an 'ac-
tual model' which could be subjected to empirical appraisal.
In the absence of such an 'actual model' supported by factual

evidence, Non-Platonists will remain skeptical about the abi-
lity of people to come to have knowledge of abstract objects.
And this skepticism will, understandably, extend to the exis-
tence of such objects. It is the absence of such an 'actual
model' that has made it possible for Allan (1983:679) to
'remain skeptical of his [Katz's] refurbishment of the immor-
tal soul'. And possible for Dillinger (1984a:302) to pose the
rhetorical question: 'How is intuition to be distinguished
from delirium, religious enlightment or dreams?'.[35]

5.   The Platonist conception of language is heuris-
     tically not relatively fruitful.

In terms of Non-Platonist linguistic ontologies such as con-
ceptualism, languages are acquired and used (utterances in
them are produced and perceived), languages are subject to
change and variation, languages are influenced by contact with
other languages, and so on. That is, languages are believed
to be ontologically integrated in a wider linguistic reality.
Given this belief, it is required that a conception of lan-
guage should be heuristically fruitful in the sense that its
adoption leads to a better understanding of phenomena such as
language acquisition, speech production and perception, lan-
guage change, linguistic variation, language contact and so
on. Conversely, such phenomena are viewed as potentially
valuable sources of independent evidence about the nature and
structure of language and languages. In sum: a conception
of language that forms the core of such a Non-Platonist ap-
proach is epistemically exposed to the corrective pressure and
substantiating impact of evidence from a wide variety of
sources.[36]   On the Platonist conception of language, by con-
trast, it is not languages that are involved in the processes
or phenomena indicated in the list above. Rather, it is know-
ledge of languages. Witness Katz (1981:9):

> 'The language is a timeless, unchangeable, objec-
> tive structure: knowledge of language is tempo-
> ral, subject to change and subjective.'

> 'Language acquisition and language change thus in-
> volve a change in people's knowledge of language,
> with concomitant changes in their relationship to
> the linguistic structures in this infinite range
> [of languages].'

Katz (1981:9) considers the study of languages to be 'the
study of these linguistic structures'. And he considers this
study to be 'distinguishable from the study of human (or other)
knowledge of them, its acquisition, use, or change'. The
former study he labels 'linguistics (proper)'; the latter,
'psychology'.

On the Platonist view, then, languages are ontologically rela-
tively isolated and claims about language(s) epistemically
relatively insulated. Against this background, it is under-
standable why the Platonist conception of language has not
been instrumental in linguists' gaining a better understanding
of the linguistic processes or phenomena listed above.[37]
Moreover, data about such phenomena have not been used as
independent evidence in support of the idea that languages
are abstract objects. These observations, probably, form the
basis for Fodor's (1985:160) view that

> '... unlike the Platonistic linguist, the psycho-
> linguist thinks that other kinds of data can
> constrain the choice of grammars too. He is
> therefore professionally interested in how lan-
> guages are learned, how utterances are understood,
> whether there are linguistic universals, whether
> transformations are innate, how cognition affects
> language, how language affects cognition, aphasic
> speech, schizophrenic speech, metaphorical speech,
> telegraphic speech, dolphin speech, chimp speech,
> speech production, speech acts, and, in short,
> all that stuff that got people interested in
> studying languages in the first place. Go ahead,
> be a Platonist if you like. But the action is all
> at the other end of town.'

As a consequence, Fodor (1985:159) states, 'deep down nobody
is remotely interested in it [= Platonism]'.

Platonists may contend that it does not follow from their be-
liefs that languages are ontologically isolated in an absolute
sense. Nor, they may maintain, is it the case that their con-

ception of language is epistemically insulated or heuristically unfruitful. In support of these contentions they may argue, for example, that, via knowledge of language, abstract linguistic objects are indirectly 'involved' in the above-mentioned linguistic processes or phenomena. And data about these processes or phenomena may be brought to bear indirectly, via theories of linguistic knowledge, on the Platonist conception of language. In this connection, Katz and Postal (1989: 13) have stated that

> '... realists can entertain the possibility of inferences from features of competence to features of NLs [= natural languages], just as conceptualists can entertain the possibility of inferences from features of performance to features of competence.'

How it is possible to draw inferences from features of competence to features of natural languages, however, is not explained by Katz and Postal. Specifically, what is unclear is how data, facts, etc. obtained by conceptualists in the *empirical* study of competence can, as a matter of principle, be used by Platonists in the *formal, non-empirical* study of natural languages. Katz and Postal's analogy in the remarks quoted above breaks down in a crucial respect. The study of features of competence, and the study of features of performance, are both taken to instantiate empirical inquiry. This means that, unlike inferences from features of competence to features of natural languages, inferences from features of performance to features of competence do not have to 'leap across' the epistemological divide separating empirical science from formal science. In the final analysis, Platonists have to show that Dillinger (1984a:302) is wrong in claiming that

> '... interpreting linguistic theories in terms of abstract objects unrelated to mind or matter [and thereby turning linguistics into a branch of mathematics --- R.P.B.] makes all the rest of science, from anatomy to zoology, absolutely irrelevant to linguistics.'38

6. In developing and defending their linguistic
ontology and in criticizing alternative ontol-
ogies such as conceptualism, Platonists make
use of stipulation at crucial junctures.

Let us consider four examples of the meta-practice mentioned
in 6. The first example involves the way in which Platonists
go about defining the 'subject matter' or fixing the 'scope'
of a discipline. Recall that in par. 4.1.2 above we saw that,
in arguing for Platonism and against conceptualism, Katz and
Postal proceed from the implicit assumption (A1): It is pos-
sible to state a priori the (categories of) facts that fall
within the domain or scope of a discipline. In line with this
assumption, they state that all linguistic theories have to
account for, amongst other things, facts about analyticity and
analytic entailment. And they proceed to argue that, whereas
linguistic theories based on a conceptualist conception of
language cannot do this, linguistic theories based on a Pla-
tonist conception can. Therefore, they conclude, the Plato-
nist conception is to be preferred to the conceptualist one.

This line of argumentation embodies what Fodor (1985:147-148)
has called 'the Wrong View' of linguistics. On Fodor's charac-
terization the Wrong View maintains

'(a) that there is a specifiable data base for lin-
guistic theories; (b) that this data base can be
specified antecedently to theory construction;
(c) that the empirical content of linguistic
theories consists of what they have to say about
the data base; and (d) that the data base for
linguistics consists of the corpora of utterances
that informants produce (or, in some versions,
would produce given specified forms of prompting).'

Fodor suggests that if (d) were modified so as to read 'the
data base for linguistics consists of the intuitions (about
grammaticality, ambiguity and so on) that informants produce
or would produce', then one gets the view of linguistic in-
quiry common to Stich (1985) and the later Katz (1977).

Fodor (1985:150-151) proceeds to argue that the view that the

scientist can stipulate what data are to count as relevant to
the (dis)confirmation of his theories is simply not plausible,
given the way that real science is conducted. He takes this
to be a point of the utmost methodological importance since it
implies that 'either the *Wrong View* misdescribes linguistics
or what linguists do is somehow an exception to the methodolo-
gical principles that other sciences endorse'.

Of course, if the assumption (A1) is to be disallowed, and if
facts about analyticity and analytical entailment do not
necessarily bear on the adequacy of linguistic theories and
on the conceptions of language underlying these, then Katz
and Postal's main argument for a Platonist linguistic ontology
loses much of its force.

The second example of the use of stipulation by Platonists
concerns the relevance of the evidence they use for the justi-
fication of linguistic theories. Recall that this evidence
consists of linguistic intuitions of native speakers. Katz
(1981:71) has even assigned intuitive evidence the status of
'direct evidence', saying thereby that it takes priority over
other kinds of evidence.

Fodor (1985:151), however, has argued that any science is
under an obligation to explain why *what it takes to be* data
relevant to the justification of its theories *are* indeed data
relevant to the justification of its theories. A scientist
typically meets this condition by exhibiting a causal chain
that runs from the entities that a theory posits, via the in-
struments of observation, to the psychological states of the
observers. If the scientist is unable to connect the observa-
tions to the postulated entities by means of such a causal
chain, he has no warrant to appeal to those observations as
evidence for (or against) his theories.

Fodor (1985:152), moreover, observes that these general con-

siderations apply, *mutatis mutandis*, to linguistics:

> 'In particular, an adequate linguistics *should ex-*
> *plain why it is that the intuitions of speaker/*
> *hearers constitute data relevant to the confirma-*
> *tion of grammars.* The Right View meets this con-
> dition. It says "We can use intuitions to confirm
> grammars because grammars are internally repre-
> sented and actually contribute to the etiology of
> the speaker/hearer's intuitive judgements." The
> Wrong View says only: "We do it because we have
> always done it", or "We do it by stipulation".'[39]

Being unable to establish a causal chain between abstract enti-
ties and native speakers' linguistic intuitions, Fodor observes,
Platonists have to *stipulate* that linguistic intuitions are
relevant to the justification of their linguistic theories. The
ontological belief that linguistic entities are abstract, thus,
forces Platonists to introduce an arbitrary element into their
epistemology.

The third example of the use of stipulation by Platonists con-
cerns the conditions on the basis of which conceptions of lan-
guage or foundational positions should be appraised. In the
introductory section of their paper, Katz and Postal (1989:5)
have the following to say about these conditions:

> 'To establish the superiority of any foundational
> position, one would have to meet the following
> general condition:
>
> (10)   Show that the position
>
> > a.   provides a coherent account of the
> >   nature of the objects linguistics
> >   proper is about;
> >
> > b.   offers a more adequate account than
> >   its rivals of all the facts in lin-
> >   guistics proper.
>
> (10a) requires a consistent account of the founda-
> tions of linguistics. (10b) requires that the
> account sacrifice a minimum of unchallenged facts
> in the domain of linguistics proper.'

Katz and Postal's (10a) and (10b), needless to say, are not the
only conditions that may be used for appraising a conception of

language or foundational position. Of the various other con-
ditions that have figured prominently in foundational debates,
I mention two only:

(C1)   A conception of language/foundational posi-
        tion should be heuristically fruitful.

(C2)   A conception of language/foundational posi-
        tion should not necessitate the adoption of
        an obscure or obviously flawed epistemology.

(C1) played an important role in Chomsky's incisive critique
of Bloomfieldian physicalism and (Skinnerian) behaviourism.
He argued persuasively that, if these conceptions of language
were adopted, no progress could be made in gaining new in-
sights into/a better understanding of important aspects of
linguistic structure, language acquisition and language use.[40]
Platonists such as Katz and Postal, of course, have accepted
Chomsky's criticisms of physicalism and behaviourism.[41] It is
therefore strange that they do not consider a condition with
the gist of (C1) when embarking on a comparative appraisal of
realism and conceptualism. They simply stipulate that their
(10a) and (10b) are the conditions pertinent to their critical
exercise.[42]

Turning to (C2), this condition --- as we saw above ---
has been invoked by various scholars in their appraisal of
Platonism. And Katz (1981:193) himself has noted that 'chief'
among the 'doubts' about the respectability of the philosophi-
cal basis of Platonism 'is the fear that Platonism does not
mesh with an acceptable epistemology'. Accordingly, he uses a
whole chapter of his 1981 book in an attempt 'to mitigate
these doubts as much as possible by developing an [intuition-
ist] account of how humans obtain a priori knowledge of ab-
stract objects'. But when selecting conditions for esta-
blishing the 'superiority' of foundational positions, Katz and
Postal (1989:5) simply stipulate that these should be their

(10a) and (10b), making no mention of a condition with the
general thrust of (C2). It is tempting to speculate that Katz
and Postal's refraining from the use of either (C1) or (C2)
in their comparative appraisal is somehow linked to the fact
that Platonism has not turned out to be heuristically fruitful
or to be associated with an 'acceptable epistemology'.[43]

For the fourth example of the objectionable use of stipulation
by Platonists, we consider yet again Katz and Postal's condi-
tion (10b). This condition gives rise to a question: What it
is that makes one (grammatical/linguistic) 'account' of 'the
facts' more adequate than its rivals. That is: What are the
criteria of adequacy for a comparative evaluation of rival
grammatical/linguistic theories? Elaborating on (10b), Katz
and Postal (1989:3) mention one such criterion, which may be
restated as (CA1).

> (CA1)   An account A1 is more adequate than an ac-
>   count A2 if A1 'sacrifices' fewer unchal-
>   lenged facts in the domain of 'linguistics
>   proper' than does A2.

In discussing the 'issue of correctness' as it arises in Plato-
nist linguistics, Katz and Postal (1989:31) state that 'cor-
rectness is a matter of factual coverage and simplicity'. Pre-
sumably, by 'factual coverage' Katz and Postal mean a criterion
of adequacy such as (CA1) and by 'simplicity' one that may be
stated as (CA2).

> (CA2)   An account A1 is more adequate than an ac-
>   count A2 if A1 is (in some sense) simpler
>   than is A2.

But Katz and Postal give no reasons for choosing (CA1) and (CA2)
from among the stock of criteria that have been used by present-
day linguists for appraising grammars and lingusitic theories.[44]
It is sufficient to cite here two other criteria belonging to
this stock, criteria which Chomskyan linguists have considered

to be particularly important:

> (CA3)   An account A1 of linguistic facts is more
> adequate than an account A2 if A1 has greater
> deductive depth than does A2.

> (CA4)   An account A1 of linguistic facts is more
> adequate than an account A2 if A1 uses uni-
> fying principles whereas A2 uses superficial
> generalizations.

Both (CA3) and (CA4) are keyed to gaining deeper insight into
or better understanding of facts rather than to providing wider
coverage of them.[45] Why Katz and Postal prefer the criteria
of adequacy (CA1) and (CA2) to alternatives such as (CA3) and
(CA4), they do not explain. They simply stipulate (CA1) and
(CA2).

*Which brings us back to The Market and, this time, to the
Theatre of Thaumaturgism. Reviewing a sizzling solo show by
Katz (1981), the disrespectful detractor called Dillinger
(1984a:301-302) has dressed down this Master of Miraculous
Metaphysics for dexterously dealing himself diverse criterial
cards in order to demonstrate that Platonism is the 'proper'
ontological interpretation for linguistic theories:*

> *'Essential to this argument is that the sense of
> "proper" remain obscure, as it does, throughout
> the book. "Proper" can thus be made to indicate
> a set of criteria specific to logical and mathe-
> matical theories and which, of course, no factual
> theory will be able to meet, e.g. maximal abso-
> lute simplicity and abstractness. With the cards
> stacked in this way, the conclusion is inevitable:
> the argument holds, abstract objects must exist,
> and linguistics is a kind of mathematics. This is
> what is touted as "an approach [that] can expect
> to settle ontological controversies non-arbitra-
> rily and without begging philosophical questions"
> (pp. 12-13)!'*

Being a trumping trick in Katzian Conceptual Cards, then ---

as Catching-on Customer, you have anticipated all too accurate-
ly --- Stacking by Stipulation amounts to pure magic. Dil-
linger (1984a:302), incidentally, felt that our Artist-at-
Arcanery would have done better to perform a spell binding
speech act:

'Abracadabra would surely have been more to the point.'

4.2   Practising Popperian Prestidigitation

The ontology propounded by Karl Popper (1972, 1977) contains
the rudiments of a conception of language. In terms of this
conception, language is an 'objective' entity autonomous of a
'self-conscious mind'. The Popperian conception of language
differs in important ways, however, from the Platonist one de-
fended by Katz and his associates. In this paragraph, we will
consider the Popperian conception of language, first in the
rudimentary form it has in Popper's own work and then in the
more fleshed-out form in which it has recently been defended
by Carr (1987, 1990). Obviously, two matters of special in-
terest to us will be, firstly, the basic differences between
the Popperian and Platonist conceptions of language and, second-
ly, the relative merits of the Popperian conception.

4.2.1   Working World 3 Wonders

Popper's ontology makes provision for three worlds, which it
portrays as interacting with one another.[46] World 1 is the
world of physical things and of states of physical things:
molecules, clouds, animals, plants, brains, and so on. World 2
is the world of mental states, including not only states of
consciousness and psychological dispositions but also 'uncon-
scious states'. What Popper calls 'the self-conscious mind'
is, accordingly, located in World 2. World 3 is the world of
products of the human mind: stories, explanatory myths, tools,
scientific theories and problems, social institutions, works
of art. World 3, on an equivalent formulation, is the world of

'culture' and of 'objective knowledge'. Many World 3 objects,
however, Popper (1977:38) contends,

> '... exist in the form of material bodies, and
> belong in a sense to both World 1 and World 3.'

As examples, he cites sculptures, paintings and books. Con-
cerning books he (1977:38-39) observes:

> 'A book is a physical object, and it therefore
> belongs to World 1; but what makes it a signifi-
> cant product of the human mind is its *content*:
> that which remains invariant in the various
> copies and editions. And this content belongs
> to World 3.'

In addition, Popper (1977:41-42) provides for 'unembodied
World 3 objects' as well. For example, with the invention of
natural numbers, Popper observes, there came into existence
odd and even numbers 'even before anybody noticed this fact
or drew attention to it'. Until their existence was noticed,
odd and even numbers, then, were instances of 'unembodied
World 3 objects'.

Being products of human thought, World 3 objects are 'man-
made'. But, Popper (1977:40) maintains, they nevertheless have
'a certain degree of autonomy':

> '... they may have, objectively, consequences of
> which nobody so far have thought and which may
> be *discovered*: discovered in the same sense in
> which an existing but so far unknown plant or
> animal may be discovered.'

Once made by man, that is, World 3 objects 'begin to have a
life of their own', to use Popper's (1978:40) words. Popper
emphasises his view that World 3 objects are 'objective' in
that they have this autonomy in relation to the (subjective)
thought --- belonging to World 2 --- of which they are products.

Popper (1972:153) considers the relationship between the three
worlds 'one of the fundamental problems of this pluralistic
philosophy'. He maintains that the three worlds are so re-
lated that, on the one hand, World 1 and World 2 can 'interact'

and, on the other hand, World 2 and World 3 can 'interact'.
This implies that the second world, namely the world of sub-
jective or personal experiences, can interact with each of the
other two worlds. It also implies, however, the first and the
third world cannot interact 'save through the intervention of
the second world'.[47]

That World 3 exists 'in reality', Popper (1972:159) contends,
is clear 'from its tremendous effect on the first world [i.e.,
World 1], mediated through the second world [i.e. World 2]'.
This contention reflects his (1977:10) belief that (unobserv-
able) things are real 'if they can causally act upon, or inter-
act with, ordinary real material things'. The same belief
underlies the sufficient condition/criterion for 'being real'
which Popper (1977:39) expresses as follows: 'interaction with
World 1 --- even indirect interaction --- I regard as a deci-
sive argument for calling a thing real'. To illustrate the
validity of this condition/criterion, Popper (1972:159) cites,
among other things, the impact of atomic theory (a World 3
object) on our inorganic and organic environment (World 1 ob-
jects).

Popper (1977:43) notes that his World 3 corresponds in some
ways to Plato's world of intelligibles, a world to which we
were introduced in par. 4.1 above. But he denies that he is
a Platonist (1972:122-123, 154, 1977:43-44) and points out
various differences between the two 'abstract' worlds.[48]
These include the differences indicated below:

Plato's World of Intelligibles	Popper's World 3
1. Divine in origin, eter-nal	1. Man-made, the products of human thought
2. Immutable	2. Changing
3. Contains essences	3. Essences 'play no signi-cant role'
4. Does not contain prob-lems, conjectures or theories.	4. Contains problems, con-jectures and theories (true and false)
5. 'Grasped' by means of infallible intuition	5. 'Grasped' by making or remaking its objects

As for the fifth difference tabulated above, Popper (1977:44)
admits that there is something like intellectual intuition,
but does not consider it infallible. For 'grasping' a World 3
object, Popper contends, people do not have 'an intellectual
sense organ' or 'eye of the mind'. Rather, the 'grasping' of
a World 3 object is 'an active process' in that it entails
'the making, the recreation, of that object'. This process
Popper (1977:44) illustrates by means of examples such as
those he presents in the following terms:

> 'In order to understand a difficult Latin sentence,
> we have to construe it: to see how it is made,
> and to re-construct it, to re-make it. In order
> to understand a *problem*, we have to try at least
> some of the more obvious solutions, and to dis-
> cover that they fail; thus we rediscover that
> there is a difficulty --- a problem. In order
> to understand a *theory*, we have first to understand
> the problem which the theory was designed to solve,
> and to see whether the theory does better than do
> any of the more obvious solutions.'

Popper's (1977:45) view of the 'grasping' of World 3 objects
assumes, therefore, the 'ability to produce certain World 3
objects, especially linguistic ones'. In turn this ability,
on his view, is 'no doubt the result of practice'. So Pop-
perians, let us note, differ from Platonists as regards the
nature of the epistemological means necessary for acquiring
knowledge of objective/abstract objects: Platonists, we saw
in par. 4.1.3 above, postulate for this purpose a special
faculty of intuition.

Popper's choice of the 're-construction' of a difficult Latin
sentence to illustrate the activity of 'grasping' gives an in-
dication also of where languages fit into his trialist ontology.
He (1977:49) believes that

> '... the various languages are man-made: they are
> cultural World 3 objects, though they are made pos-
> sible by capabilities, needs, and aims which have
> become genetically entrenched.'

Here we have a fundamental difference between the Popperian
and the Platonist conception of language: on the latter con-
ception languages are not man-made objects. Platonists, we

have seen, believe that languages belong to an eternal, un-
changing ontological realm with which people cannot interact
causally.

In line with his 'third world' view of language, Popper (1977:
45) portrays language learning as 'not natural but cultural
and social'. As a 'World 3 learning process', Popper (1977:
48) claims, the learning of a particular language 'is not a
gene-regulated process and therefore not a natural, but a cul-
tural process'. And he (1977:49) believes that 'every normal
child acquires language through much active work'.[49]

In earlier pronouncements, Popper (1972) was less clear about
the 'worldly' status of languages. In certain passages, he
(1972:159-160) expresses the view that 'human language' is part
of the third world:

> 'According to the position which I am adopting here,
> the third world (part of which is human language)
> *is the product of men, just as honey is the pro-*
> duct of bees, or spiders' webs of spiders. *Like*
> *language* [sic] (and like honey) human language,
> and thus larger parts of the third world are *the*
> *unplanned product of human actions*,[9] though they
> may be solutions to biological or other problems.'

In other passages, however, 'human language' is portrayed as
belonging to all three worlds. Thus Popper (1972:157) con-
tends:

> 'This, it seems, was first seen by the Stoics who
> developed a marvellously subtle philosophy of lan-
> guage. Human language, as they realized, belongs
> to all three worlds.[6] In so far as it consists
> of physical actions or physical symbols, it be-
> longs to the first world. In so far as it expres-
> ses a subjective or psychological state or in so
> far as grasping or understanding language involves
> a change in our subjective state,[7] it belongs to
> the second world. And in so far as language con-
> tains information, in so far as it says or states
> or describes anything or conveys any meaning or
> any significant message which may entail another,
> or agree or clash with another, it belongs to the
> third world. *Theories, or propositions, or state-*
> *ments are the most important third-world linguis-*
> *tic entities.'*

Popper's use of expressions such as 'marvellously subtle' and

'realized' seem to indicate that he accepts the view of the
Stoics that 'language' belongs to all three worlds. From
the examples he (1972:157) uses for elucidating this 'trial-
ist' conception of language, it is clear that he takes the
'linguistic entities' belonging to the third world to be units
of 'objective logical content', units of 'information' or
'message' units. These, Popper (1972:20) states, are used in
'descriptive' and 'argumentative' functions. .In his earlier
work, in sum, Popper seems to have an E-language conception
of language: a language is a collection of entities, impor-
tant amongst which are units of (objective) content.

When in his later work Popper (1977) portrays language as
World 3 objects, it is not clear whether he is talking about
units of 'objective logical content' only. He does not expli-
citly invoke the traditional threefold distinction of concrete
utterances as units of (physical) substance, sentences as
units of (linguistic) form or structure and propositions as
units of (logical) content. In fact, it is not clear whether
he sees the need to distinguish between speech/*parole*/perfor-
mance/or the like on the one hand and language/*langue*/compe-
tence/or the like on the other hand. Though Popper talks in
the 'product' mode about language (units), he does not ex-
plicitly draw a distinction between an underlying linguistic
system and the products that result from the use of such a
system. Nor does the distinction between individual languages
and language in general figure in Popper's linguistic ontology
in any principled way. Popper, in fact, appears not to be
well aquainted with fundamental conceptual distinctions stand-
ardly drawn in linguistics. And he has made no attempt to
justify his conception of language vis-à-vis the major con-
ceptions of language that have been entertained by leading
twentieth-century linguists.

It is on account of such limitations in its conceptual well-
foundedness that I have called Popper's conception of language
'rudimentary'. It also has limitations of a more serious kind,
however: limitations which arise from flaws in Popper's trial-

ist ontology. These further limitations, though, are more interesting to consider with reference to a version that makes slightly better contact with present-day linguistic theory and linguistic ontology. So let us move on to Carr's fleshed-out Popperian conception of language.

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Understanding metaphysics as practised in the magical mode is a matter, Conceptions Customer, of seeing through the spectacle and its splendour and discerning the deception and its details. Especially spectacular, of course, is the adroit juggler's act of keeping all of three worlds aloft at one and the same time. And truly impressive, too, in Sir Karl's Conceptual Cabbalism, are the Producing Passes and Remaking Routines by which to 'grasp' those wondrous World Three Things. And yet. And yet: the details of how all this is done suggest that much of Magical Metaphysics boils down to tricks that in themselves are both relatively trivial and quite traditional.

Take, for example, our Nimble-knuckled Knight's illustration of the acitivity of 'grasping'-by-remaking. Specifically, I have in mind here the so-called re-construction of an uniden- tified, 'difficult' sentence from Latin, a language --- please note --- of which in our day the Making and Remaking Rules have to be systematically taught and consciously learned. Instead of Latin, why not take a language such as English, of which many of our contemporaries are native speakers, who acquire the language naturally and use it naturally? Why not select for the purpose of illustration a 'simple' sentence such as Sir Karl is too clever to expect us to catch out? The structures, rules and principles which are 'grasped' through remaking --- why not explicitly represent them as those in- volved in the 'production' and interpretation of this sentence? But, of course, when it comes to getting out of a metaphysical mess, shortchanging an audience on specifics is, needless to say, the oldest of extraction tricks. That every native speaker

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of English can 'make' this sentence is probably true, Dear
Blue. But, and here comes the conceptual Catch, 'making a
sentence' does not equal 'making out how a sentence is made'.

4.2.2 Withdrawing Into the World of Wizardry

In a recent study, Philip Carr (1990) pursues the question
'Can we reasonably speak of linguistic realities?' In answer
to this question, he proposes a Popperian metatheory for
theoretical linguistics or, as he calls it, 'an autonomist
metatheory for the generative enterprise'. The generative
enterprise, on Carr's (1990:33) construal, is built on a par-
ticular 'metaphor', namely 'the notion that "a language" is
a set of sentences'. And on his (1990:33) view, 'the notion
"rule" counts as a central metaphor in the generative lin-
guist's attempt' to 'describe the mechanisms in the underly-
ing linguistic reality'.

Carr's metatheory --- which is meant to be superior to
Chomskyan 'psychologism' --- has two components. The first
is an epistemology in terms of which linguistic theories con-
sist of potentially falsifiable propositions that attempt to
describe the above-mentioned underlying linguistic reality.
The second is a Popperian ontology in terms of which 'lin-
guistic realities' (or objects) are not (a) psychological
entities as argued by Chomsky (e.g., 1986) and Fodor (e.g.,
1975), (b) social norms as Itkonen (e.g., 1978) would like
to believe, (c) dualistic objects with a naturalistic (or
biologistic) side and a social (or socio-political) side as
suggested by Pateman (e.g., 1987), or (d) abstract objects
of a Platonic sort as proposed by Katz (e.g., 1981) and others.
Rather, on Carr's (1990:124-141) Popperian linguistic onto-
logy, Linguistic realities', are 'speaker-external', 'public',
'autonomous', 'objective' objects to be found in Popper's
World 3.

According to Carr (1990:37), the linguistic realities/objects
just referred to include 'rules and sentences and thus lan-
guages'. The status of 'language in general' as a putative
linguistic object inhabiting Popper's World 3 is left unclear
by Carr. He (1990:43-44) does, however, attempt to elucidate
the nature of sentences as 'linguistic realities' by invoking
'the sentence/utterance distinction' as defended by Burton-
Roberts (1985). For this distinction to be upheld, it has to
be assumed that sentences are abstract objects which do not
exist in a context. Sentences, on Burton-Robert's portrayal,
are not events and 'do not occur'. Moreover, in Carr's (1990:
43-44) phrasing;

> 'We cannot attribute spatial location to them [i.e.,
> sentences], and yet it is perfectly reasonable to
> say that they are linguistic realities whose prop-
> erties we may investigate. The ontological status
> here attributed to sentences fits rather naturally
> with the idea of objective knowledge, [that is,]
> with the notion that linguistic objects exist in a
> public space as intersubjective objects of mutual
> knowledge, and not as objects in physical space.'

Recall that, as we saw in par. 4.1.1 above, Platonists such
as Katz and Postal also operate with an explicit distinction
between (abstract) sentences and (concrete) utterances.

Linguistic objects, on Carr's (1990:41-42) ontology, are not
only abstract; they are 'public' as well. Reduced to its
essence, his argument for the latter claim runs as follows:

1.   The lexicon is a public object in the sense that
      'the individual does not know all of the existing
      lexical morphemes of the language, and that this
      set of morphemes is definable only over sets which
      constitute members of communities.' (p. 42)

2.   'If lexical meaning is indeed reasonably described
      as a public, speaker-external state of affairs ...
      then sentence meaning too has this ontological sta-
      tus.' (p. 42)

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3. 'Thus the rules for semantic interpretation are
    public, and so are rules in general.'   (p. 42)

4. 'And, if linguistic rules are public, so are the
    objects which they define: sentences and their sub-
    parts.'   (p. 42)

5. 'Thus the syntactic, phonological and semantic rules
    may be said to enjoy the same intersubjective status.'
    (p. 42)

On this ontological interpretation of the 'generative enter-
prise', Carr (1990:42) considers it proper to say 'that a
language, constituted by its rules, is a public object'.

How credible, then, is Carr's claim that 'linguistic real-
ities' are 'autonomous', 'objective' objects located in Pop-
per's World 3? Let us appraise this claim in terms of two of
the minimal conditions which any theory of 'linguistic real-
ities' --- or, to put it more mundanely, any conception of
language --- must meet:

    (C1)   the 'roots condition': no conception of
           language should be based on general ontologi-
           cal assumptions which are seriously flawed;

    (C2)   the 'fruits' condition: a conception of
           language should be heuristically fruitful
           or, at least, more fruitful than its competi-
           tors.[50]

Let us take up the 'fruits' condition first. According to
Carr (1990:3), Chomsky's mentalist (or 'psychologistic') ontol-
ogy probably continues to be held by the majority of lin-
guists.[51] Consequently, one of the things which Carr has to
show is that, in regard to heuristic fruitfulness, his own
autonomist ontology is superior to Chomsky's mentalist ontol-
ogy. This means in turn that Carr has to show amongst other
things that there are one or more classes of linguistically

significant generalizations or facts which cannot be captured
within Chomskyan mentalism but which can be captured within
his own autonomist ontology. Carr (1990:46, 127) does seem
to recognize the importance of this condition. In this con-
nection, he (1990:46) refers in general terms to 'ambiguities
[of strings] in themselves', 'to generalisations about rules
and sentences' and to 'phonological generalisations which are
not phonetic'. And he (1990:128-138) proceeds to argue ---
contra Donegan and Stampe (1979), Hooper (1976), Vennemann
(1974) and Ohala (1974) --- that 'there are phonological
generalisations which are not phonetic generalisations and
therefore that there are phonological objects which are not
phonetic objects'. Carr (1990:138-141), moreover, argues ---
contra Givon (1984) --- that there are 'linguistic realities'
of a syntactic sort that 'cannot be reduced to facts about
discourse, or communication in general'.

But these arguments of Carr's are beside the point. What he
has to show is that the phonological and syntactic regular-
ities or generalizations in question cannot be expressed in
terms of Chomskyan linguistic theories **because of** the mentalist
(or biologistic) import of recent versions of Chomskyan ontol-
ogy. And he has to show, of course, that these regularities
or generalizations can be captured by 'purely' or 'autonomous-
ly' linguistic accounts **because of** the autonomist import of
Popperian ontology. It is futile to argue against Chomskyan
mentalism by attempting to discredit 'concretist' or 'reduc-
tionist' accounts of linguistic phenomena. Obviously, 'onto-
logical mentalism' does not equal 'concretist phoneticism' or
'reductionist pragmaticism'.[52] The **form** of argument which
Carr should have used is that within whose framework Katz and
Postal (1989) attempt to show that there are facts about
logico-semantic properties of sentences which cannot be ac-
counted for by Chomskyan mentalism.[53]

The 'fruits' condition (C2) may be applied in reverse as well.
When so applied, it requires Carr to show that it is possible
to capture within the framework of his nonpsychologist, auton-

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omist ontology all the kinds of significant generalizations
or facts which can be accounted for within Chomskyan mental-
ism. Carr does not, however, attempt to do this. Such an
attempt would require detailed linguistic analysis, an under-
taking which in its turn would require, amongst other things,
a well-articulated theory of linguistic structure. To esta-
blish a linguistic ontology as heuristically fruitful requires
much more than metascientific argumentation, a point general-
ly poorly understood by proponents of (new) conceptions of
language.[54]

In sum: Carr has failed to show that his autonomist ontology
passes the 'fruits' condition in either of its two directions[55]

Let us take up next the 'roots' condition for linguistic on-
tologies: how sound are the Popperian bases of Carr's auto-
nomist ontology? Obviously, this ontology of Carr's cannot
be sane if its Popperian bases are less than sound. Now,
Popper's 'three-tiered' 'trialist' or 'dualist-interactionist'
ontology has come in for some rather destructive criticisms.
Let us consider a few of these.

First, Dennett (1979:97) has argued that Popper's dualism
'has been composed as an alternative to a materialism no sane
materialist holds'.[56] This means that Popper has not dis-
credited 'the reigning orthodoxy among philosophers of mind'.
A reason for this, Dennett (1979:91) suggests, is that Popper's
work --- and that of Eccles too --- 'fails to make serious
contact with the best theoretical work of recent years'. Den-
nett (1979:92) observes, moreover, that Popper

> '... does not usually manage to extend his appre-
> ciation of depth and intricacy to the works of
> other authors, who almost invariably are drastic-
> ally under underestimated by him.'

But this means that Popper has made the required sort of case
not even for postulating the existence of his World 2.

Second, Cohen (1979:303) has found Popper's claims about the

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'interaction' between the World 1 brain and the World 2 self-
conscious mind to be 'empty'. He (1979:303) argues as fol-
lows:

> 'The self-conscious mind, they say, integrates sen-
> sations, measures time, initiates body-movements,
> corrects recollections, and diagnoses perceptual
> illusions. But how does it do all those things?
> or even any one of them? To that question we are
> given no answer. We are not offered any hypothesis
> whatever about the structure of the self-conscious
> mind. We are not told what it is that enables the
> self-conscious mind to perform certain activities
> and unfits it to perform others. And it is a symp-
> tom of this emptiness of the Popper-Eccles hypo-
> thesis that it is sterile. It generates no new
> testable predictions because, as an explanation,
> it really has almost nothing to say.'

These criticisms are justifiable because Popper and Eccles
adopt Popper's methodology, which excludes any sharp differen-
tiation between science and philosophy. Eccles (1977:375),
moreover, has claimed explicitly that their hypothesis about
the unconscious mind 'belong to science because it is based
on empirical data and is objectively testable'. The further
question, of course, is this: How could one even begin to
make a credible case for the existence of World 3 products of
a World 2 mind if questions such as Cohen's can be raised
about such a mind?

Third, Popper's notion of interaction is obscure in crucial
ways. For instance, Dennett (1979:94) has asked

> 'What kind of causal interaction can this be between
> a [World 2] thinking and a [World 3] theory?'

He observes that 'we are not told' by Popper. And he conti-
nues:

> 'Popper waves his hands about how modern physics
> has vacated all the old-fashioned philosophical
> ideas about causation, but does not give a posi-
> tive account of this new kind of causation ... '

Also Beloff's (1978:270-271) 'main worry' about Popper's trial-
ist ontology concerns the way the key notion of 'interaction'
has been 'deployed' by Popper. Essentially, Beloff --- who

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is generally quite sympathetic to Popper --- is worried
by the fact that

> '... if we take the term "interaction" literal-
> ly, we may define it as a two-way causal process
> between two distinct entities. Now, the enti-
> ties of World 3 are, as Popper clearly states,
> timeless abstractions. How, then, can a timeless
> abstraction actively participate in what, by
> definition, is a temporal process? The answer,
> surely is that it can not ... '

Beloff comes to the conclusion that Popper's notion of 'inter-
action' cannot be taken literally. This means that, from the
point of view of perspicacity, the criterion adopted by Popper
for assigning existence to World 3 objects is in poor shape.

Strangely, in fleshing out the Popperian conception of lan-
guage, Carr has failed to consider 'roots' criticisms such
as those by Dennett, Cohen, Beloff and Mortensen. Carr, in
fact, has even compounded some of the problems concerned.
Thus, he (1990:81) arbitrarily conflates Popper's notion of
'interactionism' with a homonymic but distinct notion which,
on Shaphere's (1969:155) analysis, plays a role in **physical**
reasoning, that is, in the context of a materialist ontology
that does not provide for ontological domains similar to
Popper's World 2 and World 3. Shaphere (1969:156) notes spe-
cifically 'that what counts as an "interaction" is also spe-
cified on scientific [emphasis added] grounds'. Carr fails
to notice that 'interaction' within this context does not
involve the curious kind of causality that he and Popper have
to appeal to.

'Interaction(ism)', within Popper's trialist ontology, is an
obscure notion. As a consequence, Popperians lack the epis-
temological means for obtaining (scientific) evidence about,
amongst other things, World 3 linguistic entities. In this
connection Carr has refrained from attempting to make sense
of Popper's view that linguistic entities such as sentences
can be 'grasped' by 'making' or 'recreating' them. And as
we will see below, Popperians cannot fall back on ordinary

linguistic intuition as a source of direct evidence about
World 3 linguistic entities.

In sum: such criticisms of Popper's ontology as those by
Dennett, Mortensen, Cohen and Beloff clearly indicate that the
roots of Carr's autonomist theory of linguistic realities are
seriously flawed. Having failed both the 'roots' condition
(C1) and the 'fruits' condition (C2), this linguistic ontol-
ogy cannot be considered a serious alternative to Chomskyan
'psychologism'. Carr, in fact, is not in a particularly good
position to criticize Chomskyan ontology in an incisive way:
he appears not to be sufficiently well-informed about the
basic beliefs constituting the more biologised version of
mentalism espoused in Chomsky's more recent writings. Thus,
contrary to what Carr seems to believe, these writings ---
e.g. Chomsky (1987a, 1987b, 1987c, 1988a, 1988b, 1988c, 1988d,
1989) --- make it clear that Chomsky does **not** take (a) lan-
guages to be sets of sentences (1990:33, 36, 42, 54, 103, 123,
126, 139), (b) rules to be real linguistic objects (1990:33),
or (c) I-languages to be systems of rules (1990:49). We
have seen that on Carr's view, 'the notion that "a language"
is a set of sentences' is 'the metaphor on which the "gene-
rative enterprise" is built' (1990:33), and 'the notion "rule"
counts as a central metaphor' of the 'generative enterprise'
(1990:33). These views may be true, by stipulation or defi-
nition. But if so, then Chomsky, strange to say, is no
(longer) practitioner of the 'generative enterprise'.[57]

Moreover, given the way in which considerations focusing on
explanatory adequacy, on the poverty of the stimulus and on
parameter-fixing have recently been invoked in the justifica-
tion of Chomskyan linguistic analyses, Carr is wrong to
believe (a) that 'considerations as to psychological plau-
sibility rarely seem to figure in grammatical descriptions'
(1990:119), and to believe (b) that 'Chomskyan GB theory ...
may effectively be divorced from its psychological interpre-
tation' (1990:127). Because Carr is mistaken about (a) and
(b) he errs, too, in thinking that autonomist lingusitics can

have the same evidential basis as Chomskyan linguistics
(1990:56). He is, moreover, incorrect in assuming that
grammaticality judgements have the same status within the
evidential bases of these two approaches. As we saw in par.
4.1.4 above, because the Chomskyan language faculty is cen-
tral to the etiology of such judgements, they constitute in
a principled way relevant evidence about the nature and
properties of this faculty. Since non-psychological, autono-
mous linguistic objects clearly cannot be involved in this
way in the etiology of grammaticality judgements, Carr, by
contrast, has to stipulate that judgements of the latter sort
constitute evidence about objects of the former kind. As
regards recourse to intuitive linguistic judgements, Popper-
ians face, contrary to what Carr seems to believe, the same
problem as Platonists.[58]

Carr's criticisms of Chomskyan mentalism, in fact, boil down
to a few very general remarks. Taking over a point that
Botha (1979) made about a mid-seventies version of Chomskyan
mentalism, Carr complains that Chomskyan mentalism is 'ontol-
ogically indeterminate': Chomsky, he (1990:89) alleges, has
not actually come up 'with anything in the way of coherent
proposals for dealing with the dualist/physicalist problem'.
But Carr fails to consider the question whether this com-
plaint applies to Chomsky's late-eighties version of mental-
ism, which differs from the earlier one in being much more
biologistic. Carr is disturbed, moreover, by the fact that
Chomsky has not been able to rid his mentalism of all reduc-
tionism, 'reductionism' being a dirty word in the Popperian
vocabulary. But to discredit Chomskyan mentalism, one has to
take apart the real thing --- the more highly biologised,
late-eighties conception of language --- and show that it
has specific flaws of a crippling sort.[59]

Should you itch to try your own hand at a little Popperian
Prestidigitation, Dear buyer, do think again about what it
demands. Requiring philosophical flexibility and epistemo-
logical elasticity, it is a most demanding form of magic;
actively 'grasping' World 3 objects is definitely not an
Arthritic Act. And much more seriously, it may scar your
sanity. Thus you will be able to recall that on Dennett's
diagnosis, Popper's work 'fails to make serious contact with
the best theoretical work of recent years'. And I myself
have been forced to suggest above and elsewhere (Botha to ap-
pear b:13-14) that Carr's contact with work highly relevant
to his concerns is surprisingly slight. What we have here,
Concerned Customer, are symptoms of a withdrawal by Popperian
Wizards into a scholarly world of their own. Conceptually,
of course, it will be curtains for those Popperians who, on
this retreat, cross the boundary by which the weird and won-
derful realm of magic, ranging from white and mild to black
and wild, is marked off from the realm of madness.

4.3   Bowing Out to Bouquets and Boos

Levitational Linguistics, then, delivers lots of good laughs,
Doubled-up Buyer. But at the same time some serious lessons
may be learned at the Apex of the Abstractness Axis of The
Market. Let me list you five of these lessons:

1.   On the essence of language: it cannot be arcanely
      abstract.

2.   On linguistic objects: they cannot be Mathematical
      Maroonees.

3.   On establishing a conception of language: it needs
      extensive epistemological exposure.

4.   On means for learning about language: Extra Eyes,
      Sixth Senses and Grasping Gestures are the means,
      and marks, of magic.

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5.   *On ontology in general: the more Worlds, the more Woes.*

Let me say something more about the core of these lessons, primarily with reference to the Platonist conception of language, the Popperian one not being of matching significance.

Collectively, the first four lessons mean that, in its present form, Platonic realism is not the remedy for the Ontological Angst caused by the question 'What is language in essence?'. True, Dear Blue, Katzian Platonism has the distinct virtue of proceeding from a well-founded conceptual distinction between language and knowledge of language.   For this, the Manhattan Magicians deserve bouquets from all of us.   But the kind of abstractness they attribute to language makes it an arcanum, unfathomable by less problematic epistemological means.   It is pointless to create for this purpose special means, such as Kantian intuition, that are in effect more mysterious than language itself.   The kind of abstractness in question, moreover, turns languages into Conceptual Castaways, cut off causally by an ontological ocean from the mainland of linguistic processes, events and states which they naturally inhabit. Neither our understanding of languages nor our understanding of those linguistic phenomena can benefit from our instituting this sort of insularity.

Lesson number five warrants a special word, Dear Buyer.   Its underlying logic is transparent, or so one would have hoped. Clearly, the more Worlds one postulates, the more vexing becomes the problem of accounting for the 'interactions' among them, especially if some of those Worlds are ontologically rather exotic.   And the more difficult it becomes, too, to shun esoteric epistemological means for exploring those Worlds.   So, as far as the creating of Worlds is concerned, conceptual conservatism would seem to commend itself as a prudent policy.

If you had been taking all of this for granted anyway, Conservative Customer, I have a last little surprise for you: it

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has in fact been proposed that Popper's framework should be 'extended' to include not three Worlds but four! The propo- nent being a linguist, no less. Missing from Popper's 'frame- work', Geoffrey Leech (1983:51) maintains,

> *'... is a world of societal facts ... intervening between his second (subjective) and his third (objective) worlds. Thus Popper's objective "third world" becomes, in this redefinition, a "fourth world" ... '*

No, Dismayed Blue, Leech seems not to have reckoned with the possibility that by multiplying Worlds he may make himself even more dependent on magic as a metaphysical means. So it may well be that I speak for many a Magician Metaphysicist as I cite, in closing, the lament of Marlowe's tormented Doctor Faustus:

> *''Tis magic, magic that hath ravished me'.*

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NOTES

1. In this connection, Katz mentions Partee (1979), Mon-
    tague (1974) and Lewis (1969, 1975). Katz (1981:92,
    n. 1) considers Hjelmslev a possible forerunner of
    Platonism. Hjelmslev (1936:49) believed that extra-
    linguistic criteria, i.e. physical, physiological or
    psychological criteria, cannot be relevant in defining
    linguistic elements such as phonemes. (For this belief
    cf. also Hjelmslev 1947.) Carr (1990:116), however,
    does not consider Hjelmslev to have embraced realism.

2. Many scholars think of present-day Platonism primarily
    as a mathematical metatheory. As such a theory, it con-
    sists of two distinct doctrines, called 'ontological
    platonism' and 'epistemological platonism' by Steiner
    (1973:57). According to ontological platonism, 'the
    truths of mathematics describe infinitely many real
    objects'. And in terms of epistemological platonism
    'we come to know facts about mathematical entities
    through a faculty akin to sense perception [i.e., a
    faculty of mathematical intuition], or at least some
    people do'.

3. For a discussion of three of these ontologies, namely
    physicalism, or materialism, behaviourism and mentalism,
    see Botha 1989b, 1990a, and 1990b, respectively.

4. For a succinct characterization of the make-up of Plato-
    nist linguistic reality cf. Katz 1981:3, 6, 15, 48,
    76-78, 231, 1984:18, 24, 34, Katz and Postal 1989:1,
    Bever 1982:433, 436.

5. Cf. also Katz 1981:55-56, 201, 230-231, Katz and Postal
    1989:5-6, 7-8, 37, 51-52.

6.   Cf. Katz and Postal 1989:5-6.

7.   We will see in par. 4.2.2 below that Popperians who
      advocate an abstractist conception of language invoke
      a 'sentence-utterance' distinction too.

8.   Cf. Katz 1981:55-56, Katz and Postal 1989:51-52.

9.   For a discussion of some of the idealizations used by
      Chomsky, cf. e.g. Botha 1989a:152-153, 1990b:14-18.

10.   Cf. e.g. Katz 1981:76, Katz 1984:24, Katz and Postal
      1989:30ff.

11.   Langendoen and Postal's (1984:vi) central claim is 'that
      the collection of sentences comprising each individual
      natural language (NL) is so vast that its magnitude is
      not given by any number, finite or transfinite'. This
      means to them 'that NLs cannot, as is currently almost
      universally assumed, be considered recursively enumer-
      able, hence countable (denumerable) collections of sen-
      tences.' Rather, they maintain, these collections are
      'mega-collections'.

12.   This correlation is 'effable' in the sense that it is
      complete at both ends: 'there are sufficient sentences
      and senses so that, no matter what the performance capa-
      bilities of a speaker, there will never be a case where
      the non-existence of a sentence or a sense is the reason
      why a speaker is unable to express a thought' (Katz
      1981:225-226). 'Effability' denotes a property that more
      conventionally has been called 'unboundedness in scope'
      (Akmajian et al. 1970:7).

13.   Katz (1981:229-230) refers to this characterization by
      means of '(LU)' and mentions recursiveness and composi-
      tionalitity as features that are linguistic universals in
      terms of (LU). With reference to recursiveness, Katz

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argues that if the rules of syntax were finite in num-
ber and not recursive, the language would be restricted
to finitely many sentences. And since a sentence has
only finitely many senses, the language would be unable
on the expressive side to express all of the infinite-
ly many propositions.

14. In this quotation, 'another conception' means 'a concep-
tion other than/distinct from the Chomskyan conception'.
On the Chomskyan view, 'essential' is equated with 'in-
nately specified or biologically necessary' (Botha 1989a:
130ff., 1990b:10-11). Katz (1981:224-225), however,
contends that this equation cannot rule out all non-essen-
tial properties. Nor can it 'rule in' all essential
properties: 'Some innately specified non-essential prop-
erties will count as part of the nature of language and
some non-innately specified essential properties will not
count as part of the nature of language' (p. 224).

15. For equivalent formulations cf. e.g. Katz 1984:18, 42-43.

16. 'the+ur+gy ('θi:,ɜ:dʒɪ) n., pl. +gies. 1. ... 2. bene-
ficient magic as taught and performed by Egyptian Neo-
platonists and others [C16: from Late Latin theūrgia,
from Late Greek theourgia the practice of magic, from
theo- THEO- + -urgia, from ergon work].' (Collins Dic-
tionary of the English Language)

17. For an historical account of the way in which some of
these beliefs originated cf. Katz 1981:4-6. For a tech-
nical discussion of the logico-semantic facts mentioned
in (B2) cf. Katz 1972:171ff., 1981:94ff., 179ff.
Both Allan (1983:678) and Carr (1990:115) trace Katz's
Platonism back to Katz 1972. Carr (1990:114), however,
considers Katz 1977 to constitute Katz's 'first public
statement of an overtly Platonist line on linguistic
representation'.

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18. Katz and Postal (1989:13) consider any property of relation determined on the basis of the structure of the sentences of an NL to be a feature of that NL.

19. For the earliest version of this theory cf. Katz and Fodor 1963.

20. There are differences of opinion as to what level of grammatical structure it is that provides the semantic information necessary for the application of logical laws to sentences. In the words of Katz and Postal (1989:9): 'Intensionalists take that level to be the sense structure of sentences; extensionalists take the logically relevant grammatical level to be that at which the referential apparatus of NLs is most transparently presented.'

21. Katz and Postal (1989) criticize conceptualism, in particular as it has been developed by Chomsky, for a wide range of other alleged flaws as well. Some of these have been considered in Botha 1990b:69ff.

22. Cf. also Katz 1984:34 for these views.

23. According to Katz (1989:76), this is the 'weaker' claim made by Platonism. The other, 'stronger', one is that sentences and languages are abstract objects (and that linguistics consequently is about abstract objects). Cf. also Katz 1981:9, 1984:25-26, 27-28 for equivalent formulations of the former, 'weaker', claim.

24. Recall that Katz and Postal (1989:4) characterize these facts as 'covering every aspect of sentential structure, *viz.*, syntactic, morphological, phonological and semantic'. They furnish various typical examples of such facts, including those about analyticity and analytical entailment that we considered in par. 4.1.2 above.

25. See in this connection the remarks by Katz and Postal
    (1989:13) quoted above as well as similar comments in
    Katz 1981:46.

26. Cf. Katz 1981:2, 3, 46; 1984:19, Katz and Postal 1989:
    19, 37.

27. Descartes, by contrast, believed in the infallibility of
    intuition. For a discussion of the various accounts of
    the nature of intuition within Platonism and for Katz's
    preference of a particular, Kantian, one cf. Katz 1981:
    200ff. We return to the Kantian account in par. 4.1.4
    below.

28. Other criticisms --- which I do not propose to discuss
    here --- include those indicated in the list below:

    1. The advocates of Platonist linguistics have not
       'demonstrated' that there are Platonic linguistic
       objects (cf. Chomsky 1987a:34-35 and for a reply
       Katz and Postal 1989:26).

    2. Abstract (linguistic) objects are not to be found in
       the real world: they are 'constructed' by people
       (cf. Chomsky 1987a:34-35 and, for a reply, Katz and
       Postal 1989:26-27).

    3. Katz 'is at least as mysterious as Plato on where
       these abstract objects exist ...' (cf. Allan 1983:
       679).

    4. Language is not 'ontologically homogeneous', i.e., it
       is 'one meeting place of the abstract object and the
       non-abstract' (cf. MacQueen 1984:417).

    5. It would be more correct 'to let historical and social
       norms of language rather than "eternal" Platonic enti-
       ties stand for the abstract objects analyzed by gram-
       matical theory' (cf. Itkonen 1983:240-241 and Pateman
       1983:284, 1987:51-52). To this criticism I will re-
       turn in Botha to appear a.

6. There are 'obvious' differences between languages
   and other abstract objects such as mathematical
   entities: the former but not the latter are subject
   to diachronic change and social variation (cf. Itko-
   nen 1983:241).

7. Platonist linguistics 'has no empirical relevance, no
   relevance to the real world' (cf. Chomsky 1987a:35
   and, for a reply, Katz and Postal 1989:27).

8. Using Occam's Razor consistently, Katz has to dis-
   pose of abstract objects since, within his Kantian
   epistemology, they remain in themselves unknowable,
   our knowledge being confined to the phenomenal world
   of Katz's concepts of abstract objects (cf. Pateman
   1983:283, 1987:50).

9. Katz's account of the analogy between formal logic and
   linguistic theory is too 'sketchy' to be convincing
   (cf. Itkonen 1983:242).

10. Necessary truth is as amenable to a conceptualist as
    to a Platonist interpretation (cf. MacQueen 1984:417).

11. Katz does not consider whether abstract theoretical
    constructs exist 'independently of theories of lin-
    guistic analysis', or 'independently of the minds of
    linguistic analysts' (cf. Allan 1983:679).

12. If linguistic Platonism rejects the psychologistic
    competence/performance distinction, then Katz has not
    yet 'disentangled him from the terms' (cf. Allan
    1983:680).

13. It is mistaken to assume, as Katz does, that nominal-
    ism, conceptualism and realism 'encompass the entire
    range of twentieth-century philosophies in linguistics
    (cf. Carr 1990:115-116).

Note, incidentally, that one can argue that sentences and
languages are abstract Platonic objects, without having
to assume that numbers are such objects too. So, if it
turned out that there are strong reasons for denying num-
bers the status of Platonic objects, the former case would

not thereby collapse. But Katz, Postal and others have
of course based their model of linguistics as a 'branch
of mathematics' on the assumption that mathematics should
be assigned a Platonistic ontological interpretation.
And the latter assumption is still quite controversial as
is clear from the ongoing debate conducted in studies
such as Steiner 1975 and Wright 1983 (chapter 2 of the
latter is particularly relevant).

29. For a discussion of the notion of 'E-language' cf. Botha
    1990b:5-9. In terms of the alternative conception of
    I(nternalized)-language, the conception defended by Chom-
    sky, a language is '... some element of the mind of the
    person who knows the language, acquired by the learner,
    and used by the speaker-hearer'. For an explication of
    Chomsky's notion of 'I-language' cf. Botha 1990b:10-13.

30. Cf. Chomsky 1986:26-28.

31. Cf. Chomsky 1986:25.

32. The distinction between the knowledge of a thing and the
    thing known that lies at the basis of Katz and Postal's
    use of the notion of 'relational' was considered in par.
    4.1.2 above.

33. Cf. Katz 1981:202.

34. Following Kant, Katz (1981:204) takes a concept *in con-
    creto* to be 'a particular concept of something, e.g., a
    cube, the number seventeen, or the sentence "They are
    flying planes", in the form of a concrete object of in-
    tuition'.

35. Katz (1981:193) furnishes two general considerations as
    the basis for the claim that intuition exists: '... first
    hand experience with its operations, on the one hand, and
    the elimination of all other faculties as capable of sup-

plying the knowledge in question, on the other'. His
reference, via Hardy (1940), to the case of Ramanujan
--- see the quotation at the end of par. 4.1.3 above
--- involves the first consideration.

36. For a more detailed discussion of this point cf. Botha
1980:77ff., 1989a:182-185, and Chomsky 1981:9, 1986:
34ff.

37. For just how difficult it is to say in Platonist terms
something of substance about language acquisition cf.
Bever 1982.

38. Dillinger (1984a:302) considers this interpretation of
linguistic theories 'a regress for linguistics' since he
takes progress in science 'to be showing new relations
between things rather than assuming a head-in-the-sand
position on old ones'.

39. The 'Right View' as instantiated, for example, by Chom-
skyan conceptualism entails on Fodor's (1985:148-149)
characterization the following: '(a) Linguistic theories
are descriptions of grammars. (b) It is nomologically
necessary that learning one's native language involves
learning its grammar, so a theory of how grammars are
learned is *de facto* a (partial [?]) theory of how lan-
guages are learned. (c) It is nomologically necessary
that the grammar of a language is internally represented
by speaker/hearers of that language; up to dialectical
variants, the grammar of a language is what its speaker/
hearers have in common by virtue of which they are
speaker/hearers of the *same* language. (d) It is nomolog-
ically necessary that the internal representation of the
grammar (or, equivalently for these purposes, the inter-
nally represented grammar) is causally implicated in com-
munication exchange between speakers and hearers in so far
as these exchanges are mediated by their use of the lan-
guage that they share; talking and understanding the lan-

guage normally involve exploiting the internally repre-
sented grammar.'

40. Cf. e.g. Chomsky 1964; Botha 1989b, 1990a.

41. Cf. Katz 1981:2, 12 and Katz and Postal 1989:4.

42. In par. 4.2.2 below we will see that a condition with
    the general tenor of (C1) is pertinent to the appraisal
    of Popperian linguistic ontology as well.

43. Suppose that it turned out to be possible to present a
    well-argued case for including facts about analyticity
    and analytical entailment within the scope of linguistic
    theories. Then, would Katz and Postal's condition (10)
    (b) guarantee that the Platonist conception of language
    was more highly valued than the conceptualist one? Not
    necessarily, since --- as we will see directly below
    --- extensive coverage of data/facts is only one of
    several conditions pertinent to the appraisal of the lin-
    guistic theories constructed on the basis of a linguistic
    ontology.

44. Nor do they consider the well-known difficulties in-
    volved in assigning in a non-arbitrary way a clear con-
    tent to the notion of 'simplicity'. For some of these
    difficulties cf. e.g. Chomsky 1972:125, 129. Cf. Botha
    also 1989a:189ff. for the various notions of simplicity
    that play a role in Chomskyan linguistics.

45. Cf. Botha 1982:6ff. and 1989a:150-151 for the Chomskyan
    notions of 'deductive depth' and '(theoretical) unifica-
    tion'.

46. This account is based on Popper 1972 (chapters 3 and 4)
    and 1977 (chapter P2).

47. In Popper's earlier work 'first world', 'second world'

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and 'third world' denote what in his later work are
called 'World 1', 'World 2' and 'World 3', respectively.

48. Popper (1972:107, 154) maintains that his World 3 is not
Hegelian either. Rather, his World 3 'has more in com-
mon ... with Bolzano's theory of a universe of proposi-
tions in themselves, though it differs from Bolzano's
also. My third world resembles most closely the universe
of Frege's objective contents of thought'.

49. Popper (1977:48) does claim that language learning is 'a
process in which genetically based dispositions, evolved
by natural selection, somewhat overlap and interact with
a conscious process of exploration and learning, based on
cultural evolution'. What this is intended to mean in
empirical terms, however, he does not spell out with refe-
rence to the acquisition of any specific lingusitic
forms, structures, rules etc. of any specific languages.

50. For these two conditions cf. Botha 1989b:38-39. Two sub-
cases of the 'fruits' condition were considered in the
discussion of the Platonist conception of language in par.
4.1.4 above.

51. Similarly, Katz and Postal (1989:5) take Chomskyan con-
ceptualism to represent the 'current orthodoxy' in theoret-
ical linguistics.

52. Interestingly, some of the most serious criticisms of
(Chomskyan) SPE phonology were directed at the excessive
'abstractness' of its level of phonological representa-
tion (for references cf. Goyvaerts and Pullum (eds.)
1975:2-4). And, of course, over the years Chomskyans
have acquired the reputation of being the champions *par
excellence* of an autonomous syntax. For some discussion
and many references cf. Newmeyer 1983:5-27, 96ff.

53. For this form of argument cf. par. 4.1.2 above.

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54. For some discussion of this point cf. Botha 1990b:37-38,
     49-50.

55. Nor has Carr shown that his linguistic ontology would
     lead to a better understanding of 'external' or 'extra-
     grammatical' processes such as those considered above
     under point 5 of par. 4.1.4.

56. Mortensen (1978:264), in similar vein, has argued that
     'discussions [by Popper and Eccles] of recent physicalist
     strategies for dealing with mental phenomena are inade-
     quate'.

57. The '1990' references above and below are to Carr 1990.
     For a detailed discussion of the late-eighties version
     of Chomskyan linguistic ontology cf. Botha 1990b and
     Katz and Postal 1989.

58. See also Fodor 1985:151.

59. I have not discussed above --- or in Botha to appear b
     --- everything that I consider problematic in regard to
     Carr's linguistic ontology. Thus, I have not commented
     on the variety of hidden assumptions necessarily involved
     in Carr's argument for the 'public' nature of linguistic
     objects. Nor have I attempted to give an exhaustive sur-
     vey of (philosophical) criticisms of Popper's ontological
     theory. For example, I have not gone into Platonist
     criticisms of the Popperian view that World 3 objects are
     man-made. Katz (1981:201), for example, has observed
     that if objects of the third world are 'of our making'
     then 'Popper has to claim, inconsistent with realism, that
     numbers are contingent objects that didn't exist until
     humans came into existence. Further, he has to claim that
     numbers can be destroyed just as honey and webs of spiders
     can'. And on Katz's (1981:201) judgement, too, 'Popper
     seems not to appreciate the fact that objective entities

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with neither spatial nor temporal location cannot enter
into causal relations'. For a variety of serious criti-
cisms of Popperian interactionist dualism cf. also Bunge
and Ardila 1987:10.

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THE SPIL LOGO

The logo on the front cover depicts Simon van der Stel,
Dutch governor of the Cape of Good Hope from 1679 to
1699, and the founder of Stellenbosch. We have chosen
to portray Van der Stel in our logo for reasons of
symbolism that relate to his historical significance,
his intellectual qualities, and his creole descent.
Simon van der Stel was the man who, in founding the
town of Stellenbosch, took a deliberate initiative to-
wards establishing the permanency of the young Dutch
settlement at the Cape of Good Hope. He has been por-
trayed as a man endowed with special intellectual
qualities, who set great store by clear, factual think-
ing --- a quality which we value. His creoleness,
to us, is symbolic both of the melting-pot from which
emerged the South Africa of the 18th century and of
the kind of future that we envisage for our country:
a future unmarred by the racist divide that infects
our society today. Our linking of Van der Stel's
image to SPIL is intended to reflect our commitment
to such a future. We are happy to note that this com-
mitment is reflected, too, in the policy of our univer-
sity, quoted below:

> We reject outright all discrimination on the
> grounds of race, colour or creed and see our-
> selves as committed, unequivocally, to the
> dismantling of apartheid and to achieving in-
> clusive democracy and equal opportunity for
> all in this fair country.