Reply to Kac

David Pitt Department of Philosophy California State University, Los Angeles

In our paper "Compositional Idioms," Jerrold Katz and I identified a large and productive class of expressions, typified by <u>plastic flower</u>, <u>stuffed animal</u>, <u>rubber chicken</u>, and <u>kosher bacon</u>, which, we claimed, have a distinctive semantics involving both idiomatic and compositional components. Our account of these expressions was motivated by a puzzle we encountered in attempting to accommodate certain intuitive semantic facts about them. For example, while the analyticity (and truth¹) of <u>plastic flowers are not flowers</u>, the contradictoriness of <u>plastic flowers</u> are flowers, and the antonymy of <u>plastic flower</u> and <u>flower</u> suggest some kind of incompatibility between the meanings of <u>plastic</u> and <u>flower</u>, any such incompatibility would deprive <u>plastic</u> flowers are not flowers, plastic flowers are plastic, <u>plastic flowers are fakes</u>, etc. from being true. We thus seemed to be faced with two conflicting sets of facts.

We resolved the apparent conflict by supposing that <u>plastic flower</u> is ambiguous.² It has a conjunctive reading, on which it means <u>flower made of plastic</u>, and a non-conjunctive reading, on which it means <u>imitation flower made of plastic</u>. Since, in general, imitations <u>F</u>s are by definition not <u>F</u>s, any expressions of the forms <u>imitation F</u> and <u>F</u>, for any predicate <u>F</u>, will be

¹ Not all analytic sentences are true. Consider, for example, <u>the present king of France is</u> <u>male</u>, which is analytic if <u>kings are male</u> is, but which is not true (on either a Fregean or Russellian approach to definite descriptions).

² Just as, for example, the apparent conflict between the intuitions that both <u>dusting</u> <u>removes dust</u> and <u>dusting applies dust</u> are analytic though <u>remove</u> and <u>apply</u> are antonymous is resolved on the supposition that <u>dust</u> is ambiguous between <u>remove dust from</u> and <u>apply dust to</u>.

antonymous. <u>Plastic flower</u> on its non-conjunctive reading is antonymous with <u>flower</u> because <u>imitation flower</u> is antonymous with <u>flower</u>. For the same reason, <u>plastic flowers are flowers</u> is contradictory and <u>plastic flowers are not flowers</u> is analytic on their non-conjunctive readings (<u>imitation flowers made of plastic are flowers</u> is contradictory, and <u>imitation flowers made of plastic are flowers</u> is contradictory, and <u>imitation flowers made of plastic are not flowers</u> is contradictory, and <u>flower</u> are not themselves semantically incompatible, <u>plastic flower</u> can have an extension, and <u>plastic flowers are not</u> flowers are plastic flowers are flowers are fakes, etc. can be true.

Our account is further supported by the case of <u>stuffed animal</u>, where the ambiguity is especially obvious.⁴ There are stuffed animals in a straightforwardly conjunctive sense – the things produced by taxidermists – as well as stuffed animals in the non-conjunctive sense – the things produced by toy companies. Stuffed animals in the first sense are animals, and in the second sense are not. Hence, for example, <u>taxidermy is the art of producing stuffed animals</u> is analytic (and true) on the conjunctive reading of <u>stuffed animals</u>, and false on the non-conjunctive reading.

Given that the concept of an imitation is to be found in neither the sense of the head nor the sense of the modifier in these constructions, it follows that the semantics of <u>plastic flower</u>, et al., on their non-conjunctive readings, is both <u>non-compositional</u> and <u>decompositional</u>. It is non-

³ Hence, on our account, <u>plastic flowers are flowers</u> is analytic on one reading of <u>plastic</u> <u>flower (flower made of plastic</u>) and contradictory on the other (<u>imitation flower made of plastic</u>), while <u>plastic flowers are not flowers</u> is contradictory on the former reading and analytic on the latter. (Compare: <u>dusting removes dust</u> is analytic on the <u>remove dust from</u> reading of <u>dust</u> and contradictory on the <u>apply dust to</u> reading, while <u>dusting applies dust</u> is contradictory on the former reading and analytic on the former reading and analytic on the latter.)

⁴ If it is not obvious in the case of <u>plastic flower</u> it is because there are no plastic flowers in the conjunctive sense in the actual world.

compositional because the meanings of these expressions are not determined by the meanings and syntactic relations of their syntactic constituents. It is decompositional because the meanings of these expressions contain elements that cannot be assigned to any of their syntactic constituents. The underived element <u>imitation</u> is assigned to a non-terminal node in the syntactic structure of the phrase, in the manner of an idiomatic interpretation. In order to accommodate the productivity of these constructions (<u>paper flower</u>, <u>stuffed African elephant</u>, <u>kosher Canadian</u> <u>bacon</u>, ...), we proposed that the underived element take the form of an "idiom schema" – e.g., <u>imitation X made of [or by] Y[ing]</u>. Productivity is accounted for by the combination of readings for heads and modifiers with the idiom schema in the derivation of a phrasal reading.

We argued that extensionalist semantic theories cannot accommodate the non-conjunctive readings of these expressions, since there are no distinctions among the extensions of their modifiers and heads, or among the intensional functions determining such extensions across possible worlds, that can capture them in a non-ad hoc way. Michael Kac ("The Semantics and Pragmatics of Appearance") has suggested that, after all, there is a way for a purely extensional semantics to account for the intuitive facts about these constructions (which Kac calls "oxymoroids"). All one need do is introduce a principle by which the extension of a common noun \underline{N} is <u>generalized</u> to include not only \underline{N} s, but also things that merely <u>appear to be \underline{N} s</u>. Once this is done, the semantics of expressions like <u>plastic flower</u>, <u>stuffed animal</u>, etc. becomes straightforwardly conjunctive – indeed, on Kac's pure extensionalist account, straightforwardly <u>intersective</u> (e.g., [plastic flower] = [plastic] \cap [flower]). Neither senses nor decompositionally buried idiom schemas are required. Hence, Kac argues, his account is preferable to ours on grounds of theoretical parsimony.

Kac is surely right that, in general, the simpler of two accounts that explain the same phenomena is to be preferred. The question is whether he has produced such an account. I do not think he has.

At the beginning of his paper, Kac presents the notion of a generalized extension of an expression in model-theoretic terms. Given a domain, D, interpretation functions A_1 and A_2 assign values and generalized values, respectively, to "each basic expression of the language." This strongly suggests that Kac takes the interpretation of oxymoroids to be a matter of the semantics of English expression-<u>types</u>.⁵ An obvious problem with this proposal, on which virtually every common noun would be assigned such a liberalized extension, is that it wreaks havoc with the intuitive semantic facts of natural language. If every common noun <u>N</u> has an extension that includes not only <u>N</u>s, but indefinitely many things that are <u>not</u> Ns but merely look like them, then, for example, there are readings on which (1) and (2) are false, (3) is true, and (4) is valid:

- (1) Plastic flowers are not flowers
- (2) Eating people is morally wrong
- (3) Some dogs are inanimate objects
- (4) (a) All pizzas are edible
 - (b) Some pizzas are made of sheet metal; therefore,
 - (c) Some things made of sheet metal are edible

Kac is sensitive to problems of these kinds, which he solves by allowing that, though a

generalized extension is the "unmarked case" (note 8), the generalization may be cancelled for

⁵ As does Kac's application of the apparatus of generalized extensions to temporal adjectives (p.X) (which, by the way is essentially the same account Katz and I offer in note 4 of our paper).

some occurrences of a term, which would then have their ungeneralized extensions. Hence, Kac claims that in (1) <u>flowers</u> has its generalized extension in its first occurrence but not in its second, and so is true. Likewise, (2) is true and (3) is false if <u>people</u> and <u>dogs</u> are assigned their ungeneralized extensions, and (4) is invalid if <u>pizza</u> has an ungeneralized extension at its first occurrence and a generalized extension at its second occurrence.

The proposal, then, appears to be that common noun- and predicate-types are extensionally ambiguous. As is generally the case, disambiguation may be determined by features of the linguistic context (as linguistic context determines what reading should be assigned to <u>dust</u> in the context <u>the police dusted the table for fingerprints</u>).

Kac claims that his extensional approach can account for the kinds of semantic facts that Katz and I took as our starting point – in particular, the set of examples (Kac's (3a-f)) we gave toward the end of our paper. Kac says, for example, that the existence of a reading on which <u>kosher bacon is not real bacon</u> is analytic is <u>explained by</u> the possibility of assigning <u>bacon</u> a generalized extension at its first occurrence and an ungeneralized extension at its second occurrence. The implication is that the sentence is analytic <u>because</u> the extensions of <u>kosher</u> <u>bacon</u> and <u>real bacon</u> are disjoint. Similarly, the anomaly of <u>valuable antique wooden Indians</u> <u>regret current laws</u> is explained by the fact that the extension of <u>valuable antique wooden Indian</u> (which is the intersection of the generalized extension of <u>Indian</u> and the extension of <u>valuable</u> <u>antique wooden</u>) is disjoint from the extension of <u>regret current laws</u>.⁶ It would also seem to follow that the inclusion of the extension of <u>kosher bacon</u> in the extension of <u>kosher</u> explains the analyticity of kosher bacon is kosher and the analytic entailment of Sydney ate something kosher

⁶ Our other examples are explained in similar ways.

at breakfast by Sydney ate kosher bacon at breakfast.

But it is well known that semantic properties and relations such as anomaly, analyticity and analytic entailment cannot be explained by or reduced to such purely extensional properties. Sameness, inclusion or disjointness of extension (even across possible worlds) implies nothing about synonymy or antonymy of terms, or analyticity or analytic entailment of clauses. For example, the extension of <u>people</u> and the extension of <u>clone</u> are disjoint, but (5) is not analytic, and (6) is not semantically anomalous:

- (5) People are not clones
- (6) People are clones

and the extension of <u>salmon</u> is included in the extension of <u>edible</u>, but (7) is not analytic, and (8) does not analytically imply (9)

- (7) Salmon are edible
- (8) Sydney likes salmon
- (9) Sydney likes something edible

Hence, Kac's formal account does not provide a workable alternative to our account of the semantics of <u>plastic flower</u>, <u>stuffed animal</u>, et al.

But this is not the end of the matter; for there seems to another, pragmatic account of these expressions in Kac's paper. Whereas his initial presentation is in terms of expression-types, Kac <u>also</u> claims (p. X) that "how an expression is to be construed extensionally is subject to a degree of contextual variation," and (note 12) that "extensions are <u>always</u> determined by pragmatic considerations." Moreover, in his discussion of "PE" – the principle that licenses assigning generalized extensions – he mentions Gricean maxims as plausibly governing the

assignment of a generalized extension given a context of utterance. On <u>this</u> account, terms like <u>flower</u> and <u>animal</u> are not extensionally ambiguous as types, but may have generalized extensions (or ungeneralized extensions, if types have only generalized extensions) assigned to their <u>tokens</u>.⁷

On the face of it, such an approach seems ill-equipped to handle the sorts of facts – e.g., the analyticity (on a reading) of <u>plastic flowers are not flowers</u> – that Katz and I sought to explain, and that Kac himself endorses. If <u>flower</u> has only <u>one</u> extension in the language, then the sentence-type <u>plastic flowers are not flowers</u> is contradictory.⁸ Moreover, it seems simply incoherent to suppose that sentence-types receive their interpretation in the language on the basis of nonce interpretations of their tokens.

Perhaps, then, Kac's formal presentation at the beginning of his paper should be ignored, and he should be understood as proposing that, on the basis of the principle PE, in certain circumstances, utterances of the term <u>flower</u> may refer to things that are not flowers, but merely look like them⁹ (or, alternatively, if, as Kac claims in note 8, the generalized extension of an

⁷ Or, perhaps, one might hold that expressions have both ungeneralized and generalized extensions in the language, and it is typically utterance context, rather than linguistic context, that disambiguates. As far as I can tell, Kac does not endorse this position.

⁸ On the ungeneralized interpretation of <u>flower</u>, the sentence asserts that flowers that are made of plastic are not flowers; on the generalized interpretation of <u>flower</u>, the sentence asserts that things that look like flowers and are made of plastic are not things that look like flowers.

⁹ <u>PE</u> stands for <u>Perception is Everything</u>, which Kac glosses as "one is entitled, except in specially defined circumstances, to take appearances at face value" (p.X). He also refers to it as the "Duck Principle" – presumably an allusion to the saying "if it looks like a duck and sounds like a duck and ... then it <u>is</u> a duck." He asserts (in note 7), however, that he does not mean that the principle licenses taking the referents of <u>flower</u> in these circumstances to <u>be</u> flowers. Rather, his claim is "only that [PE] sanctions the occasional use of <u>flower</u> as if it had artificial flowers in its extension." Yet, in note 5, he claims that "PE justifies taking non-flowers that look like

expression is the "unmarked value," that the token-extensions of some utterances of <u>flower</u> exclude things that are not flowers but merely look like them).

I think this is the most coherent view that can be teased out of Kac's paper. So let us assume that his proposal is that <u>flower</u> has a single type-extension (whether generalized or not), and that in certain circumstances the extensions of its tokens may be different. Hence, when one says that plastic flowers are not flowers, one's utterance is true because the first token of <u>flowers</u> has a generalized extension and the second token of <u>flowers</u> has an ungeneralized extension. Moreover, the intuition that <u>plastic flower</u> is ambiguous is to be explained (as Kac does on p.X) in terms of the distinction between type-extension and token-extension.

This does seem to be the view endorsed in section 5 of Kac's paper. Here Kac claims that his Gricean account is immune to the objections Katz and I offer, since he is "<u>not</u> claiming that it is implicated that <u>kosher bacon</u> ... is an oxymoroid. What is implicated is only that it is not to be construed literally, other features of the linguistic and extra-linguistic context being required to determine which of a number of possible nonliteral construals best fits the prevailing conditions." (P.X)

But Katz and I never even considered the claim Kac attributes to us. Our objection was not that Gricean principles cannot determine that <u>plastic flower</u>, et al. are compositional idioms (oxymoroids), but, rather, that Gricean principles cannot determine <u>which</u> non-literal interpretation of such expressions is implicated in a given circumstance. (Grice himself seemed to have serious doubts on such matters.) Kac has not even addressed these worries; he simply asserts (p.X) that in some cases "there will be a bias toward interpreting [a] sentence in such a

flowers to <u>be</u> flowers." Of course he can't have it both ways.

way as to take the utterer to be speaking the truth," and that this will yield the non-conjunctive interpretations Katz and I identified.

Kac has also not addressed our point that, even if linguistic and utterance contexts could supply conclusive evidence for favoring one interpretation of an expression over another, this would not show that the expression is not ambiguous <u>as a type</u>. Assuming the basic truth of Grice's story about implicature, it seems easy enough to construct a story on which, for example, <u>dust</u> has only one meaning in the language – say, <u>remove dust from</u> – and any instance in which it is taken to mean <u>apply dust to</u> is a case of implicated utterance interpretation. Indeed, one could, thus, try to eliminate <u>all</u> ambiguity at the level of expression types (<u>bank</u>, <u>slug</u>, <u>cleave</u>, <u>sanction</u>, <u>enjoin</u>, ...). The question is whether in so doing one is respecting the facts about the semantics of natural language or distorting them to fit a particular program. Perhaps it is difficult to tell which one is doing. <u>Why</u> does it seem wrong to say that <u>dust</u>, <u>bank</u>, <u>slug</u>, etc. are univocal as types? Indeed, one might inquire after the basis of the intuitions speakers have about all of the properties (syntactic, phonological, semantic) of expressions in their language, or challenge their evidential status. If the intuitions go, however, it is hard to see what the data for linguistics would be.

The sort of inquiry Katz and I (and, I would suppose, Kac) were engaged in <u>begins with</u> a set of intuitive facts, and attempts to explain them. The question then becomes whether there is sufficient evidence to support an intuition that an expression has some semantic property or other. And the evidence can only be further facts of the same kind. The intuition that <u>dust</u> is ambiguous is supported intuitions such as that <u>Watson dusted the table</u> is ambiguous, that Watson dusted the table with Pledge and the pilot dusted the cornfield with DDT are not (at least

as far as <u>dust</u> is concerned), that <u>Watson dusted the table in order to remove dust from it</u> and the <u>pilot dusted the cornfield with DDT in order to apply DDT to it</u> are redundant, and so on. Together these intuitions make a strong case for the ambiguity of <u>dust</u>. Katz and I appealed to the same kind of evidence for the ambiguity of <u>plastic flower</u>, <u>stuffed animal</u>, <u>kosher bacon</u>, et al.: <u>plastic flowers are not flowers</u> has a reading on which it is true (and analytic) and a reading on which it is false (and contradictory); <u>Peter disapproves of stuffed animals</u> is ambiguous, <u>Peter disapproves of stuffed animals because he is an animal rights advocate</u> and <u>Peter disapproves of stuffed animals because he hates toy companies</u> are not; <u>kosher bacon</u> and <u>imitation bacon made according to kosher law</u> are synonymous; and so on. Kac has supplied neither intuitive evidence for his claims about these expressions nor a workable account of the facts he alleges.