LIKE IT OR NOT

Will Whitman '92

Swarthmore College
Linguistics Program
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Abstract.

In this paper, I study several uses of the word like, and their distributions in American English. In particular, I focus first on its use as a comparison operator, and then on its use as a speech/state introducer. I argue that the latter is related to (and was able to come into existence as such by) the former, and, through a semantic analysis following that of Johnson-Laird's Mental Models interpretation, that it is a particularized instance of comparison.
There are at least four ways that *like* can be used in Colloquial American English – exemplified in the following:

1. Ken looks like his father. (comparison like)
2. Jeff likes finished exams. (preferential like)
3. This, like totally huge guy, like walked, like right up to me. (pause/ "Valley" like)
4. Marcus was like, really upset. (speech/introducing like)

These all represent different *likes*. The category of *like* as a comparison operator, as in (1), is debatable– Maling (1982) and others (such as Quirk et al. (1972)) have described it as a Preposition (P), while Bresnan (1978) and Lightfoot (1980) have argued for it as an Adjective (A). I will add some new reasons why it can be described as an A. In Section I below, I argue that *like* can act both as a P and also as an A, even simultaneously. And we shall see the problems that this presents for Case Theory, a module of Chomsky's (1981, 1982, 1986) Government and Binding theory which is dependant on category distinctions. *Like* in (2) is a normal V, as we shall see later (Section II). The *like* of (3), which Bolinger (1972) has described as an identifier, can be used as a pause or stutter in speech, and occurs very freely, but is subject to some restrictions, which will be discussed below (Section III). As in (4), *like* can be used to
introduce a state. Along with go (more often used with physical actions) and all (used as an emphatic), like can also be used to introduce speech, both direct and indirect:

(5a) Fran went in and was all, 'WHAT are you doing?'
   b She asks me 'what are you doing?', so I go, 'what's it to you?'
   c Sarah came in and was like, "I can't believe it!"

The speech/state introducer like has received little, if any, attention in the linguistic literature. (The comparison like has also been much ignored, with the major exception being Maling (1981)). However, it warrants attention, as its frequency of use among Americans aged 7-21 is high, possibly higher than say as a speech introducer. This might be because it can also introduce indirect speech and gestures. Later, I will appeal to a Mental Model-based explanation of speaker memory to account for the ability to use like as an introducer to states and also to speech (direct and indirect, as well as gestures). Further, I will claim that this like takes some of its characteristics, i.e., its apparent stativity, from the other uses of like that I study.

Section I- Comparison Like

In this section I study the like of the sentence (1-0) Roses are like pansies.
in terms of its semantic, syntactic, and morphological properties. I will look at some of the claims that have been
made as to the properties of this like, particularly those of Dowty (1979) and Maling (1982). Contra Maling's conclusion that like has undergone reanalysis diachronically from being an Adjective to a Preposition, I claim that there is good reason for a dual synchronic syntactic classification of A and P for like. In doing this I will demonstrate why some of the standard tests used to give evidence for syntactic categorihood are mainly semantic in nature. I will show why some of Maling's tests, which lead her to a singular P assignment for like, are not valid. Following Bauer (1983) and Williams (1981a and 1981b), I will show various morphological evidence for like as both P and A.

1.1 Semantics.

First I would look at what kind of semantic relationship like has to the other words in a sentence. In (1-0), like is predicated of the NP role-player roses. But is pansies part of the predicate, or another role player of the predicate? I will consider pansies as part of the event/predicate, because in an event-based notion of predicate, we consider the event to be being like pansies. Pansies is both an argument of and the object of (be) like; but it is semantically part of the event and therefore, part of the predicate that assigns a property to roses.

While this like serves as a predicate in (1-0), there is a usage of like for modification, too.
Problems like this are hard to solve.

In (1-1), like this helps to pick out which problems we are talking about; thus, it is inside the NP headed by problems, the NP which the string hard to solve is predicated of.

(Below, we will see the syntactic difference in the phrases headed by like in (1-0) and (1-1), i.e., that in (1-0) is a sister to V; that in (1-1) is a sister to N.) Modifiers like that in (1-1) are post-nominal. While I analyze the NP Problems like this of (1-1) as having the same semantic and syntactic head, that being problems, there is an interesting semantic entailment here.

(1-2) np1[ Sisters like np2[my sister] ] say wretched things.

-----> My sister says wretched things.

(1-3) np1[ Sisters of np2[ tall people] ] are often very short.

-----> Tall people are often very very short.

Normally, when XP is predicated of NP, XP is not necessarily predicated of any subpart of NP. However, with np1 [N'like NP2], if XP is predicated of NP1, as an entailment XP is also predicated of NP2.¹ This follows because the two arguments of like must share all properties relevant to the comparison.

¹Comma intonation around the like-phrase, however, relieves this entailment.
We find NP right sisters (cf. 1-0 and 1-1) to both the predicative and the modifying *like*. If *like* is at least part of the time *A*, evidence for which we shall see below, then this may be a counterexample to one part of Case Theory (as in Chomsky 1981, 1982, 1986, and others) – which claims that *A* in English is not a Case Assigner. Alternatively, *like* may be a *P* in those instances in which *like* takes an NP complement. (We shall determine below whether there exists a systematic distribution of *like* between when it is behaving as a *P* and when it is behaving as an *A*.) With respect to this, *like* presents no problem for Maling because she claims that over time it has undergone reanalysis from an *A* to a *P*. We shall return to this point later.

Returning to the predicative *like*, we can look at some of its properties. Based on an example like (1-0), we can see why the notion of symmetric predicate has been bandied about when discussing the use of this word. For, in (1-0), in order for the statement *Roses are like pansies* to make sense, *Pansies* must also *(be) like roses*.

(1-4) An expression *R* is a symmetric predicate where *a* and *b* are arguments of *R*, iff

\[ aRb \text{ implies } bRa. \]

A typically given example of a symmetric predicate is *shake hands* as in:

(1-5) Bill shook hands with Ted.

(cf. Bill and Ted shook hands.)
In (1-5) *shake hands* is a symmetric predicate because both arguments of the predicate act in the same manner with respect to the action. But *shake hands* needn't always be a symmetric predicate as in (1-5).

(1-5b) Bill shook Ted's hand.

(1-5c) The governor shook hands with the prisoners.²

Here, it is possible to find a context wherein *Ted* in (1-5b) was a nonagentive recipient of Bill's handshake. Hence, it is not impossible, given a context, to say:

(1-5d) Bill shook Ted's hand, but Ted didn't shake Bill's hand; he just stood there.

Further, it is possible to find a context in which the prisoners in (1-5c) were not in control of what was happening either. That is, while the prisoners engaged in the action too, it was not by their own choice, as was the case on the part of the Governor. And while choice has nothing to do with Theta Role (cf. if you are ordered to shake hands and you do it, you've still shaken hands), there is more to meaning here than just Theta role. Thus, the question arises as to whether these are really symmetric; i.e., do these arguments act in the same manner with respect to the action? Since symmetric predicates are semantically defined notions, the disposition of the role players has bearing on the meaning. Therefore, symmetric predicates such as *shake hands* in (1-5) demonstrate some complications in control, agency,

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²Virginia Brennan's example, personal communication.
and focus priority that occur in the interpretation of some symmetric predicates.

While in (1-0) *like* acts symmetrically, that is, both role players of the predicate act in the same manner towards each other, that is due to both the meaning of the predicate *like* and our real world knowledge of *Roses* and *pansies*. As (1-6) demonstrates, *like* need not be a symmetric predicate.

(1-6a) Philadelphia smells like shit.

(1-6b) *Shit* smells like Philadelphia.

(These sentences are not equivalences in the same way that (1-0) and Pansies are like roses. Are.)

In (1-6), *Philadelphia* and *shit*, the two arguments of *like* are so different with respect to their referents that the standard for comparison is not the whole, but some underspecified part, where we interpret the appropriate part based on our experience and knowledge of the world situation denoted in the sentences. There is also the added complication that *like* NP where the whole is interpreted as a pejorative (as in (1-6a)) can have a non-literal reading which would, of course, not be present in the permuted counterpart (cf. 1-6b).³

³In the same manner as *You run like my grandmother* is pejorative, whereas *My grandmother runs like you* is not.
symmetric interpretations of these predicates. For example, in (1-7),

(1-7) John resembles his father.

Does it necessarily follow from this, or is it even possible to infer from this, that

(1-8) John’s father resembles him.

in the same manner that John “resembles” in (1-7)? Does the predicate act in the same way on both arguments? (1-8) represents the entailment of (1-7), if resemble were truly a symmetric predicate. Based on examples such as these, I posit a time hierarchy wherein our real world knowledge (in this case, John’s father preceding John,) interferes with the normal entailment. Instead of merely seeing (1-8) following from (1-7), we tend to merely see the one-way relationship, that of John being compared to his father, not vice-versa.

Also, note the contrast between the mathematical use of equal versus its nonsymmetric colloquial use:

(1-9a) This fraction equals .875.

-----> .875 equals this fraction.

(1-9b) This letter equals a rejection

-----> A rejection equals this letter.\(^4\)

Therefore, even predicates traditionally viewed as being symmetric present problems for interpretation, based on time and focus constraints. I conclude in saying that predicates are not necessarily symmetric or non symmetric; the division

\(^4\)Donna Jo Napoli’s example, personal communication.
is less clean than simply that. There is a hierarchy of more
or less symmetric, including predicates, such as the
mathematical equals and to be a sibling with entailment
features we would expect since they truly are symmetric, and
others such as eat or drive, which are on the other end of
the spectrum, clearly nonsymmetric. But there also exist
many predicates which are debatable as to their symmetry, and
usually context-determined. Predicates beginning with the
comparison like belong to this last group. It is thus not a
ture symmetric predicate, by the definition in (1-4),
although it often has possibilities of symmetric entailments,
as demonstrated in (1-6) and (1-0) above.

Also, some underdetermination in the interpretation of
many like-sentences occurs, based on the effects of ellipsis.

(1-10)a. Ken looks like the rock star.
   b. Ken looks like hell.
   c. Nina eats like a pig.
While the examples in (1-10) may be analyzed as missing
elements important for the correct interpretation, these are
all unquestionably acceptable. Sentences (1-11) are
examples, not meant to correspond exactly to the readings in
(1-10), but as possibilities for deep structures, wherein the
missing elements are overt.

(1-11)a. Ken looks like the rock star looks. / *Ken
    looks like he is the rock star.
b. @ Ken looks like hell looks.  

c. Nina eats like she is a pig.  

Nina eats like a pig eats.  

There are other semantic features of this use of like that I will not go into here. Still, I will mention one notion briefly and return to it in Section II below: the notion known as stativity. Stativity concerns the distinction made between, for example, the two predicates (in boldface) in (1-12) and (1-13):

(1-12) John understands math.  
(1-13) John studies math.  

While understands of (1-12) is a stative predicate, studies of (1-13) is not. The semantic notion has to do with a state versus an action, that is, with John's active participation in studying as opposed to his passivity in understanding, which is something that happens to him. Predicates beginning with the string "Verb + like" may or may not be stative predicates, but whether or not any particular "V + like" is a stative predicate will depend upon the verb only.

(1-14) John understands math like me.  
(1-15) John studies math like a fiend.  

In these examples, the predicate of (111b) is stative, while the predicate in (112b) is not. But this is due to the matrix verb; thus, comparison like as a predicate has no particular stative quality to it. Later, we shall look at

\[5\&\] represents that it is possibly grammatical, just not representative of the same meaning (as (1-10b)).
some tests for determining the stativity of a predicate, and then apply these tests to the verb like (as in John likes peas. See Section II, below.)

Thus, we can see that with respect to semantics, like, when used as a comparison operator as above, can function either as a predicate or as a modifier. While like is often a symmetric predicate, there are instances in which our real world knowledge precludes the symmetric interpretation, as seen above. Some of the constraints on this include time, topic, and focus effects. A hierarchy of the uses of like, ranging from totally symmetric (1-9a and b) to being not symmetric (1-7 and 1-8) was demonstrated based on these effects. Further, the stativity of the predicate is determined solely on the basis of the matrix V, demonstrated in (1-14) and (1-15).

1.2 Syntax.

Now we will see which category (i.e., an A(djective), a P(reposition), a N(oun), or a V(erb)) this comparison like is a member of. In order to do this, we will need to look at various tests that have been used to determine syntactic category. As in Maling (1981), we shall see that many tests (such as the use of subcategorization frames to test for A'hood) which were previously believed to be syntactic diagnostics are actually tests for semantic properties. We will look at some tests which try to distinguish between Ps and As, and at their results with respect to the comparison like, which exhibits properties of both. We will also look
at some properties of Ps and PPs, as discussed in Jackendoff (1973) and Emonds (1985). This will help us to see which syntactic properties like has in common with Ps, i.e., if it can occur in the same types of places that Ps normally can, if it can demonstrate the same types of behavior that Ps can.

Maling (1981) investigates the criteria for establishing syntactic categories, focussing on what she calls transitive adjectives, like, worth, and near. She claims, based on semantic, morphological, and "strictly categorial" tests that like was historically an A in English that has been reanalyzed over time as a P. I will now examine her tests and then her data to show why this analysis, although neater than a dual category assignment analysis, is inadequate. I claim that, while some of her tests are valid, she makes light of critical data showing like as an A. Further, we shall see below that, via various morphological properties of like, including derivational affixes which like can take, as well as compounds it can form, like is still an A today.

1.21 Adjectives. When testing like for A'hood, Maling concentrates on the three types of tests typically used in identifying As, "strict subcategorization, coordination, and co-occurrence with various degree modifiers " (Maling, 3). As Maling points out, "this kind of distributional criteria is actually semantic in nature [sic] " (Maling, 3).
The first test for As that Maling looks at is "the ability to occur as predicate complements to linking Vs such as seem, become, ... which do not allow for PPs". But she shows that this is not a test for A'hood, since these linking verbs can take PPs as predicate complements, as in (1-16):

(1-16)6 a. with an A as predicate complement: Lee sure seems clever.
b. with a nonliteral PP: Lee sure seems out of it/ out of his mind/ onto something/ under the weather.
c. with a directional PP: *Lee sure seems out of town.
d. with a locative PP: *Lee sure seems under the old apple tree.

With these, she demonstrates that this test merely distinguishes between different types of PPs, only allowing those she describes as nonliteral (i.e., metaphorical PPs as opposed to directional and locative PPs). Thus, she concludes that "subcategorization frames should not be stated solely in terms of syntactic category" (Maling, 6), since they often contain restrictions based on semantics, as exemplified in this case.

The next test Maling proposes is Coordination, "often used to test syntactic category... based on the assumption that only phrases of the same syntactic category can be

6example from Maling. (1982)
conjoined." (Maling, 8) However, as (1-17) demonstrates, category identity is not sufficient for conjunction:

(1-17) ?Mary is under the weather and in my car.
   ?Pat is in the next room and over the hill.

So, Maling rejects this as a syntactic category test, since what is needed here is actually a semantic identity. This alone is sufficient; Syntactic identity is not necessary if semantic identity exists, as in:

(1-18) The surgeon operated slowly and with great care.
       Doctors warn us about the dangers of being fat and out of shape.

Therefore, coordination also tests for semantics, not truly syntax.

Next, Maling looks at the Specifiers that APs versus PPs can take. These are truly syntactic tests, because what were classically called "specifiers" are the functional nodes - and functional nodes strictly select their complements by category type. It has been claimed (Wasow, 1977, 1980) that "the ability to take very as a premodifier [is] a test for adjectival status." (Maling, 10) Maling makes the further claim that "As take very but not (very) much as a modifier".

(1-19) The birds were very noisy/*in the tree.

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7 example from Maling (1982)
8 example from Maling (1982)
9 Even the fact that coordinated phrases must have parallel gaps (as in the data typically offered to support the Coordinate Structure Constraint) could be looked at as a semantic fact. That is, coordinated phrases must be open to parallel interpretations - so a gap in one but not the other would be barred. (pointed out to me by DJ Napoli).
10 example from Maling (1982)
The kids were very (*much) noisy.

(1-19) demonstrates that A's but not locative PPs can take very as a specifier. It also shows that As generally cannot take much as part of the Spec. Compare (1-19), though, with (1-20).

(1-20) John looks very much like his father.

àJohn looks very like his father.

(1-20) shows that very or very much can be a specifier to like. (1-21) shows the acceptability of very with related words, unlike and alike. Unlike, we shall see below, is adjectival. Since very and much can both be specifiers of the clearly adjectival unlike, we can see that, if very tests for A-status, then much can modify A's, too.

(1-21a) Japanese is very (much) unlike English in this respect.

(1-21b) Japanese and English are very (much) alike in this respect.

Maling says that the ability of like to take much as part of its specifier can be explained if like NP is a metaphorical PP which, as opposed to locative and directional PPs and all As, can take much as a Specifier. (Maling, 11 and 19)\textsuperscript{11} But,

\textsuperscript{11}Note, however, that comparatives (cf. (very) much happier/taller than..., (very) much more N than), which are clearly not metaphorical PPs but rather As, can take much as a specifier. But the much of a comparative A may be licensed by the comparative morpheme, and not the A. Other As, however, can take much as a specifier; amazed, alert, ajar, aware, afraid, aghast. This may be due to the history of the a-prefix as a P in English. Other possible As which can take very much are bewildered, hurt, embarrassed, ignored, etc. These are all homophonous with the passive participle of a V form, and as such, walk the line between V and A.
calling *like* a P based on these specifier conditions is unfounded because the claim that A takes *much* but not *very much* does not actually obtain.\(^{12}\) As with the other tests, these cut across syntactic categories as well as semantic classes. Therefore the evidence from the specifier *much* cannot be considered a valid test.\(^{13}\) The *very*-test for Adjectivehood is valid, though; thus, from all our evidence thus far, *like* is an A.

Another test Maling uses to distinguish As from Ps is the position *enough* can take relative to a word. Her claim is that "*enough* follows As, but precedes Ps". However, even she questions her crucial data in support of this point, namely her (22d).

\[
(1-22)^{14} \quad *\text{Robin seems in love enough.} \\
\hspace{1cm} \text{at home enough.} \\
\hspace{1cm} \text{over the hill enough.} \\
\hspace{1cm} \text{out of shape enough.}
\]

In fn. 14, she states: "The judgments indicated here are mine; for at least some speakers, the examples in 22d [my 1-22] are acceptable (Maling, 12)". Since these data are controversial, they can not be used as sole support for her most important (what she calls "a criterion that seems to be purely syntactic" (Maling, 12)) test yet. If the sentences

\(^{12}\)Incidentally, this also argues against the claim (Jackendoff 1977) that "APs take only simple degree words, whereas PPs take QPs as specifiers, which in turn can optionally contain a degree word" (Maling, 10).

\(^{13}\)But if it was a valid test, it would yield results supportive of my conclusion, i.e., an assignment of A and P to *like*, since *like* can take both *very* and *much*.

\(^{14}\)Example from Maling (1982), (22d), p. 12.
of (1-22) are acceptable (as many people I have asked say), then the claim that enough (obligatorily) precedes P is clearly wrong. Because the data used to demonstrate this test are questionable (even Maling notes and then ignores this), this test is not valid.

Therefore, the tests based on Subcategorization, coordination, degree modifiers, and enough were all flawed. Either because they were based on semantics or because they relied upon questionable data, all of these tests, save the very-test, are invalid. The very-test showed like to be an A.

1.22 Prepositions. Jackendoff and Emonds go to great length to discuss what positions PPs can occur in. Unfortunately, discussing the range of structures PPs can occur in does not help in identifying Ps, since these structures are ones that some Ps can occur in while others cannot.

Jackendoff establishes five criteria for PPs. They are (with examples where appropriate):

(a) they begin with words that are obviously of the category Preposition;

(b) they occur in the complements of verbs such as put, which strictly subcategorize PPs;

(1-23) Irving put the books / *0 / on the shelf / away / there.
(c) they condition Subject-Verb Inversion (SVI) under appropriate circumstances (namely, a locative or directional PP preposes and no auxiliary can result in inversion of an intransitive Verb and the Subject);

(1-24) Into the opera house raced Harpo.
Up the stairs wafted the fragrant smell of airplane glue.
On the corner stood a frightened Venusian cookie monster.

(d) they occur in the with- construction;

(1-25) Up to yor bedroom with you, young man!
Away with the evidence!

and (e) they occur with right. 15

(1-26) She went right out the door.

First, we can exclude (a) due to its self-definitional nature. While (b) - (e) do describe syntactic properties of some PPs, certainly not all PPs (particularly metaphoric PPs) can occur in these structures:

(b) Irving put the books *out of town / *out of it
   / *like his father.
(c) *Out of town called Mary.16
   *Like her mother looked Mary.
(d) *After lunch with you! / *For a dollar with you!
   *Like a tenor with you!
(e) *I counted right on Mary.17

---

15 right can occur as a modifier to P, and no other category in standard American English. (*She went right quickly.) Examples such as She went right home. and Walk right this way. might be counterexamples to this test, since home and this way can be used also as NPs. But these expressions have been analyzed as null head PPs, where the direct object NP is reanalyzed as a PP.

16(c) works only with locative or directional Ps (as Jackendoff points out); still not with all of them, as the example demonstrates.

17As in Jackendoff (1973), right only works with directional, spatial, or temporal Ps, not with any others.

(fn1) I gave it right to Mary. (directional)
   ??I wrote the letter right to Mary. (less directional)
   * I baked the cake right for Mary.
*right like

So, like's inability to occur in these structures does not show that it is not a P; rather, it may still be a P that (for some other reason) cannot occur in such structures. Therefore, ability to occur in these structures (a-e, as described by Jackendoff and elsewhere) are sufficient, but not necessary tests for Phood.

So, we have seen five tests, one for Ahood (very) and four for Phood (complements of strictly subcategorizing Vs like put, ability to condition SVI, ability to occur in with-construction, and right), that are purely syntactic. Still, only one (the very-test) can be valid in showing us anything, since the P-tests are sufficient but not necessary as tests for Phood. And like appears to be able to occur as an A according to the very-test.

One final test for categorihood can be devised based on Case theory. Only P, not A, can assign Case. Therefore, the fact that like takes a right NP sister (regardless of whether like heads a predicate or a modifier – as noted in Section I above) is evidence that like is a P.

In conclusion, the syntactic evidence supports my claim that like is both an A and a P.

1.3 Morphology.

* I left right with Mary.
* I did it [right because of Mary.]
* I did it [right in Mary's place.]
Thus, MOST uses of P don't allow right. (Examples from DJ Napoli, personal communication.)
Our clearest evidence about what category like belongs to comes from its morphological properties. What derivational affixes it can take can demonstrate the category of its root morpheme, by comparison to what category it becomes as a result of the affixation. For example, the suffix -ee attaches to English Vs to form patient Ns:

(1-27) flirt > flirtee 
    kick > kickee  
    consult > consultee  
    kidnap > kidnappee 
    employ > employee 
    appoint > appointee 
    persecute > persecuteur 
    franchise > franchisee 

(from Bauer, 243-7)

There is much evidence in the linguistic literature supporting the notion that certain morphological processes, i.e. the attachment of derivational affixes, can occur only with words of particular categories (cf. Bauer (1983), Aronoff (1976), among others). Like can take various derivational affixes, forming the words in (1-28):

(1-28a) unlike 
    b) likeness 
    c) liken 
    d) likely 
    e) likewise 
    f) alike

I will now investigate the relationship between each of the words in (1-28a-f) and like. First, we see that like can take the prefix un-, to form the word unlike.

(1-29a) Like Fran, Lenny is at work today. 
(1-29b) Unlike Fran, Lenny is at work today. 

Clearly, these words, like and unlike, are lexically related (See Williams (1981) for more on lexical relatedness). Their
phonological form and function are similar in these sentences. Their meaning is where they are distinct. In (1-29b), we see the un- prefix as assigning an opposite characterization, or having an negating effect. This prefix -un has been studied previously, and analyzed as being a class-maintaining prefix which is productive and "used exclusively with an A base" (Bauer, 218).18

(1-30) unhappY unintelligent uninterested uncompromising
*unin *unon

(1-30) demonstrates how un- can attach productively to As but not to Ps in English. Therefore, this negative un- attaches to As, and the output of this formation is an A.20

Maling writes that "despite the fact that the negative prefix un- attaches only to Adjectives, and that unlike clearly means 'not like', this would...be very weak justification" for synchronic assignment to A. Contrary to Maling, I would say that derivational morphological processes

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18 Historically, -ward added to a P to make an A - so toward was an A at the time we could form untoward. Thus, untoward is not a counterexample.

19 un- can attach to to, but the result of this formation is not what would normally be expected (negation); therefore, I conclude that the un- of unto is not the same -un of unlike. Probably, unto < upto (suggestion of DJ Napoli, personal communication).

20 there is also an un- that varies with dis- (undo/*unhappen versus distrust/*distake). This is used as a reversal marker too and attaches to V's, i.e., untie, unzip. Others have claimed it attaches to Ns such as unbeliever, but this can either be viewed as being formed from un-believer (un- prefix), or unbelieve-r (-er suffix), and depending upon which view one takes, this un- can possibly also attach to Ns as well as As (still not Ps) (cf. Bauer, 219).
are among our most reliable tests for categories (Scalise 1984) among many others).

This affix is extremely productive, and is even replacing the (now archaic) prefix a- in some words (as in apolitical > unpolitical and atypical > untypical), which bears the same semantic relationship upon the words it prefixes, i.e., negation (Bauer, 218). Thus, like's ability to take the un- prefix is evidence for its Ahood.

Another suffix which can form a word with like is -ness. The -ness morpheme, in general, attaches to As to form Ns:

\[(1-31) \text{sincere} > \text{sincereness} \]
\[\text{certain} > \text{certainness} \]
\[\text{like} > \text{likeness} \]

(from Bauer, 222)

As noted in Bauer, "This is one of the most productive suffixes in the English language today. It is added predominantly...to As...producing Ns from As" (222). Therefore, likeness, which is a N, is further evidence that like is an A.

Further evidence for like as an A comes from the suffix -en. Typically, -en derives Verb forms from As, as in:

\[(1-32) \text{white} > \text{whiten} \quad \text{sad} > \text{sadden} \]
\[\text{wide} > \text{widén} \quad \text{thick} > \text{thicken} \]
\[\text{like} > \text{liken} \quad \text{short} > \text{shorten} \]

(Bauer, 223-4)

\[(1-33) \text{I liken his actions to those of a thief.} \]
\[(1-34) \text{I reddened the barn by painting it.} \]

21 Some people find distinctions such as atheoretical vs. untheoretical, where atheoretical denotes absence due to antagonism toward theory whereas untheoretical denotes absence of theory only, as pointed out to me by DJ Napoli, personal communication.

22 See Aronoff (1976), Williams (1965), and others, for more on -ness as a productive affix.
There is another -en, the -en which forms As from Ns (wood > wooden). Liken (as in (1-33)) is a V though; therefore, the -en of (1-32) is the one of interest here. And despite the idiosyncracy of its interpretation, the -en of liken is the same -en of redden, and the rest of (1-32). Therefore, since -en attaches to As to form Vs, and liken is a V, this formation represents further evidence that this like is an A.

We have seen arguments for like as an A, based on the morphological features which enable unlike, likeness, and liken to be derived from like. (1-35) demonstrates the three affixes we have seen so far, gives their semantic characterization, as well as what syntactic change they effect.

(1-35a) un-R: having the opposite quality of R, A > A
   b) R-ness : property of being R, A > N

23Compared with the other words in (1-32), liken has at least two possible readings, one of which is not continuous with the 'standard' understood interpretation of -en.
   (fn2a) I liken his actions to those of a thief.
   (fn2b) I likened my picture to hers.
In (1-32), we understand redden to mean make red. However, in (fn2a), liken does not entail any change in the object of liken; this refers only to our perceptions of the object. Therefore,
   (fn3) If NP1 likens NP2 to NP3 (as in (fn2a)), then, NP1 does not change NP2 to be more like NP3, but rather NP1 believes that NP2 is in some way(s) similar to [or like] NP3.
   This contrasts with the (fn2b) reading, along with the 'normal' readings, such as in (1-32), which are interpreted as:
   (fn4) if NP1 A-en NP2, then NP1 makes NP2 (more) A.
Therefore, although liken has the same -en suffix as the other words in (1-32), there are two interpretations for liken (cf. (fn2a) and (fn2b), and the more general (i.e., easier to obtain) interpretation, as seen in (fn2a), of liken is unlike the normal interpretation of A-en. The difference, I believe, can be reduced to the fact that like takes two arguments, obligatorily, and a third argument (the agent) is needed when it becomes a V (i.e., by adding -en). Most As, which, unlike like, are intransitive, have only one argument to begin with, and when V formation occurs, they need one more argument (subject), making a total of two arguments.
Other affixes which form words with like are -ly and -wise, as in likely and likewise. The -ly suffix forms As (both Adjectives and Adverbs), as in (1-36):

(1-36) friend > friendly
good > goodly
nice > nicely
happy > happily

(1-36) has examples of -ly attaching to Ns and As to form As (adjectives and adverbs). Likely is a case of forming an Adjective (cf. a likely story, it is likely that...) from either a N or an A.25

Likewise, likewise supports the notion of like as possibly being a N. The -wise suffix is "now added productively to Ns, e.g. cornerwise, lengthwise" (Bauer, 225). Examples are easy to come by. However, there are exceptional instances in which -wise attaches to an Adjective, such as otherwise. Productively, however, -wise adds to Ns to form Adverbs. (For more on -wise, see Houghton (1968)). So, likely is evidence for like as an A or possibly a N, and likewise is evidence for like as a N. (I will return to the issue of like being an N below, when I discuss the likes.)

Alike is a final example of a word derived from like, by adding an a- prefix (which appears to detransitivize like):

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24 see footnote 23 for alternative meaning for -en.
25 only those -ly examples which form adverbs support the idea that Ps can be bases for this suffix, i.e., thusly; all of the adjective examples came from either Ns or As. Therefore, only the adverb-forming -ly can attach to P, on the assumption that the archaic thus is a P.
Maldow and his father look alike.

This prefix is no longer in use today. But in Middle English, it was a P. Some other examples of this prefix being used are:

(1-38) ajar, aware, amazed, alert, afraid, aghast

Maling would argue that, like alike, these words were formed at a time when like was still an Adjective. However, this a- can still be used today, and it attaches to Vs (afloat) and Ns (afoot) as well as As. So, this a- prefix tells us that like can be of any category but P (*a-in, *a-out, *a-with).

Another property of like is its ability to form compounds. What category the resulting compounds belong to can give us information about the categorial status of like. An example of a compound that like participates in forming is birdlike, as in

(1-39) Mary ate in a birdlike fashion.

Other compounds of this form N-like are found in (1-40):

(1-40) lady like
      child like
      cocaine like

Since the category of most compounds in English is determined by the category of the right element, and these compounds are As, this is further evidence for like being an A.

26 There is however the negation a- prefix, which, as mentioned above, is being replaced by un-.
27 Like participates in another compound, like-minded. This compound is an A, but since the right element of the compound determines the category of the whole compound, this tells us nothing about the category of like. However, if we look at other words that participate in this
Ability to occur in prenominal position has long been considered a test for Ahood.\textsuperscript{28} As Maling points out, lexicalized PPs can occur prenominally, as in:

\begin{enumerate}
\item The out-of-shape people probably won't finish the marathon, but the in-shape ones will.\textsuperscript{29}
\end{enumerate}

Maling considers examples such as these to be adjectives and hence calls this test "a good criteria [sic] for distinguishing categories (Maling, 16)". Maling then shows us a few uses of like in prenominal position:

\begin{enumerate}
\item a You'll need boots, raincoats and the like.
\item b Did you ever see the likes of him?
\end{enumerate}

I disagree with Maling's analysis of the like in (1-42a) as a null headed NP which like (as an A) modifies. However, I believe that this construction is further evidence for like as a N (I shall return to this and explain why below). Further, Maling calls this use "not productive" and concludes "Since prenominal use of like is nonproductive, the existence of the phrase and the like would be very weak justification for a synchronic assignment to the category A" (Maling, 18). I disagree here that this use is

\textbf{formation, such as right-minded, wrong-minded, science-minded, we find that the left hand element is an A, or possibly a N (if science in this case is a N). So this does give us information about like's category, if we assume that -minded only takes As or Ns as left elements; notice that Ps can not be used to form this compound: *in-minded, *out-minded, *away-minded.}

\textbf{a counterexample to this test is inside of the inside label, which is both an A and a P.}

\textbf{example of Maling (1982)}

\textsuperscript{28} example of Maling (1982), her 32b and fn.24iii
nonproductive. In terms of prenominal modifiers, I see sentences such as

(1-43a) All men came from a like beginning.

b) Lee bought a new car and I bought a like model.
as examples of like as a prenominal modifier, thus an A.31

Returning to example (1-42), we see that it suggests a possibility of like being a N, since it takes inflection as a plural N with the -s morpheme, because the -s of (1-42b) says that the like has been analyzed as a N by the speaker.

However, this analysis does represent more evidence for like being an A, since it is reanalyzed syntactically from A > N; and this process of reanalysis as Ns of As that modify the null head N of null headed NPs is a regular syntactic process. Another example of this reanalysis is:

(1-44) The books should be arranged on the shelves by color. So, put the blues here and the reds below them.

In this example, blue and red, which were As modifying their respective null heads (presumably interpreted as books or ones) were reanalyzed by the speaker as Ns, witness the plural N morphology. Thus, this is further evidence for like being an A and a N.

Maling further claims that since like and unlike do not have synthetic comparatives, they are not As. But there is

31 Maling marks (1-43b) as ungrammatical, although I find it acceptable. Even if this is questionable, we find another reason for like's inability to normally occur prenominally in the fact that it branches rightward; thus the right branching alone would be sufficient to rule out any prenominal cases which weren't acceptable even if like were an A.
nothing that says that all As have synthetic comparatives.\textsuperscript{32} An option most As have as an alternative to taking an \textit{-er} suffix is taking \textit{more} before it. And \textit{more like} is well-formed in English.

Thus, we have several reasons to call this \textit{like} an A; namely, the \textit{un-}, \textit{-en}, \textit{a-}, \textit{-ness}, \textit{-ly}, and \textit{-wise} affixes, and the ability of \textit{like} to compound, as in \textit{child-like}.

Further, we see morphological evidence for it as a N, in expressions such as \textit{the like} and \textit{the likes}. These NPs may be (and have been, as in Maling) seen as being null headed NPs, and these \textit{likes} may be As modifying the null heads. However, the plural morpheme attaches to a head and not to the end of a phrase in English; therefore, \textit{the likes} is strong evidence that \textit{like} is analyzed as a N by the speaker.\textsuperscript{33} We even see the possibility of \textit{like} being a V, with the evidence from \textit{a-}.

But none of this morphological information shows that \textit{like} is a P, as Maling argues. From her arguments, however, we can see that it is not simply an A either. It functions today, in productive ways, as both an A and a P (and possibly a N).

We can see that \textit{like} can function simultaneously as A.

\textsuperscript{32}And there are many As that do not, with many different explanations for why they do not. Beautiful / *Beautifuler may be ruled out by a WFR which doesn't allow -er to attach onto words that have already been suffixed. It is widely argued that the requirement for -er synthetic comparatives is monosyllabic As or disyllabic As with a light second syllable (prettier); yet we find polysyllabic As which do it (pleasanter) and also monosyllabic As that don't (fair (in the relevant sense), just). Thus like may not have a synthetic comparative and still be an A.

\textsuperscript{33}But the process by which the speaker can do this is productive to many As. So As in headless NPs can be reanalyzed by the speaker as Ns - and then get the plural morpheme.
and P in (1-45):

(1-45) Unlike John, Mary wants to go to the play.

Here, like is an A (since it can take the un- prefix), but is also a P, (since it assigns Case to John). So, like can be both an A and a P simultaneously; this demonstrates the need for a dual synchronic assignment for like. Therefore, calling those properties which demonstrate Ahood irrelevant, or merely throwbacks to a time when like was an A (i.e., before its supposed reanalysis), as Maling does, neglects important facts about the way the word acts and functions. Doing this sacrifices reality for the sake of neatness.

Section II - Preferential Like

In this section I study the like of sentences like:

(2-0) John likes peas.

In terms of its semantic, syntactic and morphological properties. I will demonstrate some of the tests classically used for determining if a predicate is stative or nonstative. I will apply these tests to the like of (2-0). I will then show morphological evidence to demonstrate that the syntactic category of this like is V(erb). I conclude that this like (hereafter "preferential like", or Pref. like) is a different like from those discussed in Sections I, III, and IV; though they are homophones, they bear no meaningful relationship one to another whatsoever.

2.1 Semantics.
The \textit{like} of (2-0) is not a symmetric predicate (as defined earlier, Section 1.12), since (2-1) is unacceptable:

(2-1) *John likes peas and peas like John.

This, however, may be ungrammatical because of our real-world knowledge of the inanimacy of peas. We find further evidence that \textit{like} is not symmetric in (2-2), which is not a contradiction, but should be if \textit{like} were a symmetric predicate here.

(2-2) Jodi likes Steve but Steve doesn't like Jodi.

(For a more detailed discussion of symmetric predicates herein, see Section I above. And for more information, see L+P (1966) as well as Dowty (1979)). Therefore, Pref. \textit{like} is not a symmetric predicate.

Now we will look at whether Pref. \textit{like} is a stative predicate, as some have claimed. First, we can look at some tests that have been used to distinguish statives from nonstatives. Some (Dowty, 55) include:

(2-3) \textit{only non-statatives occur in progressives with the present time frame}\textsuperscript{34}
John is studying math. (non stative)
*John is understanding math. (stative)

(2-4) \textit{only non-statatives occur as complements of force/persuade}
Dave forced/ persuaded Megg to study (math).
*Dave forced/ persuaded Ben to understand (math).

(2-5) \textit{only non-statatives can occur as imperatives}
Study!

\textsuperscript{34} as pointed out to me by Nell Duke '93, personal communication
Understand (math)!

(2-6) only non-statives can occur with deliberately/carefully.

Megg carefully/deliberately studied her notes.

*Ben carefully/deliberately understood the answer.

(2-7) only non-statives can appear in pseudo-cleft constructions.

What Megg did was study.

*What Kurt did was understand the answer.

So, Dowty's tests tell us that study is a non-stative predicate, while understand is a stative predicate.

Other tests for stativity are given in Lakoff and Peters (1966) "Phrasal Conjunction and Symmetric Predicates". These tests are given below:

(2-8) only non-statives can occur in do-so pro forms:

John studied math, and Mary did so, too.

*John understood math, and Mary did so, too.

(2-9) only non-statives may take an underlingely conjoined subject.

John and Mary study math. ===> Both John and Mary study math.

John studies math and Mary studies math.

or

John and Mary study math together.

John studies math with Mary.

but:

John and Mary understand math. ===> Both John and Mary understand math.

John understands math and Mary understands math.

but not:

*John and Mary understand math together.
*John understands math with Mary.35

If we look at how Pref. like behaves with respect to these tests, we see that it appears to be stative.

(2-10) * John is liking peas.
* Dave forced/ persuaded John to like peas.
* Like peas!
* John deliberately / carefully liked peas.
* What John did was like peas.
* John liked peas, and Alex did so, too.
John and Mary like peas. ==> Both John and Mary like peas.
John likes peas and Mary likes peas.
but not
* John and Mary like peas together.
* John likes peas with Mary.

Therefore, based on the stativity tests Dowty (1979) and Lakoff and Peters (1966) propose, Pref. like is a stative predicate.36

2.2 Syntax and Morphology.

Now we will determine which category Pref. like belongs to. We will also briefly see what types of complements this like can take.

First, looking at inflectional morphology, we can see that like is a Verb.

35 For more on why these constructions, i.e., together and ...with NP are tests for underlying conjunction, and why both and "S and S" are tests for surface conjunction, see Lakoff and Peters (1966).
36 While I believe that what is at issue with these tests has more to do with a control/ no control distinction than with a stative/ nonstative distinction, I will consider these valid for the purpose of demonstrating the syntactic differences between statives and non statives. For more on stative predicates, the reader is referred to Dowty (1979), Lakoff and Peters (1966), and Lakoff (1966), "Stative Adjectives and Verbs in English".
(2-11) John likes peas.

John and Mary like each other.

Taking tense and agreement inflection as a V is sufficient to demonstrate its category. Further, Pref. *like* can take an auxiliary.

(2-12) John had liked Mary, but no longer does. Pref. *like* can also take *not* negation, another V feature.

(2-13) John does not like to do his homework. Pref. *like* can take the *-ing* suffix to form the accusative + *-ing* construction, as in:

(2-14) John's liking *(of)* loud music made him a bad neighbor.

Therefore, Pref. *like* is a V.

Looking at derivational morphology, we see that Pref. *like* can take the prefix *dis-*, which productively attaches to V only, as in:

(2-15) We disliked John for playing his music so loudly. The backformation *dislike* may also be used as a N (just as other Vs can have Ns backformed from them), as in:

(2-16) John's dislike for Mettalica was his saving grace.

These morphological features all demonstrate that Pref. *like* is a V.

In conclusion, we can see that Pref. *like* is a V, based on its syntactic and morphological features.

**Section III - Valley Like**

In this section, I will discuss the *like* of sentences.
Like:

(3-0a) Like, the other day I walked into this like store.

In terms of its semantic, syntactic and morphological properties. This use of the word like, hereafter "Valley" like, is particularly prevalent in the speech of the young (namely 20-year-olds and younger). We will see that this like is semantically empty (i.e., meaningless), syntactically variable in where it occurs (though I will speculate on some possible restrictions), and morphologically frozen.

3.1 Semantics.

Sentence (3-0a) demonstrates Valley like. In sentence (3-0b), we can remove the like, without affecting the meaning of the sentence (either in a truth-functional semantics sense or a pragmatic, real-world sense).

(3-0b) The other day I walked into this store. = (3-0a)

This demonstrates that the Valley like has no meaning. Further, the Valley like can occur in other places in the sentence without affecting the meaning of the sentence as a whole, or even parts of the sentence.

(3-0c) The other day, I like walked into this store.
(3-0d) The other day, I walked into like this store.

So Valley like is semantically empty.

I must now make clear the distinction between Valley like and the identifier like of Bolinger (1972a):

(3-1a) identifier like:
He, like, stumbled - you know what I mean? 
He swam over, like, and took hold of the side. 
I helped him up, like, but he stood on his own.37

Bolinger defines the identifier like as "a companion to sort of as a colloquial term, but...more limited in the dialects it affects" (Bolinger, 239). So for Bolinger, this like is defined approximately as "sort of"; in other words, it bears semantic similarities to the comparison like, but it is used differently from how we have seen Comparison like used before (as in section I). We shall see other particularized uses of this comparison like in the next section. This like cannot be removed, still leaving the same meaning behind.

(3-2a) He stumbled, you know what I mean? (=(3-1a))

There is a difference in the interpretation of (3-2a) and (3-1a), if we interpret like in (3-1a) to mean "sort of", as Bolinger does. Nor can it be moved, with the same meaning remaining.

(3-2b) Like, he stumbled - you know what I mean? 
(=(3-1a))

(3-2c) He stumbled, like, - you know what I mean? 
(=(3-1a))

(These would be fine as instances of Valley like, but not as instances of the identifier like.)

This points to the fact that meaningful operators have scope over their domain; and therefore, if moved, their domain changes, and their scope changes with it. So moving meaningful scope operators will result in differences in interpretation (at least in Truth-Functional Semantics). And,

37 (3-1)b and c are examples of Bolinger (1972a)
since identifier like has meaning (it cannot be moved or removed without creating a meaning difference), we must distinguish between it and Valley like, which does not have meaning.

Further, Valley like not only has no lexical meaning, it also has no functional meaning. This can be contrasted with, for example, adverbial particles in Japanese (i.e., zo, namu), which can show speaker attitude toward the utterance. Valley like is thus totally vacuous, since it expresses nothing lexically or functionally.

Therefore, we can see that Valley like is semantically empty; effectively, it functions in the same way that a pause or stutter in speech does. It is similar in this respect to the word umm, which also has no meaning and can be moved or removed without affecting meaning.

3.2 Syntax.

As we saw in the previous section, Valley like, because it is semantically empty can occur at different places within a sentence without affecting meaning. If semantics were the only requirement on placement in English, then perhaps Valley like could occur freely. However, phonetics and syntax may place other restrictions on where like can occur.

The identifier like of Bolinger, which he says means "sort of", functions adverbially (see (3-1)), and is probably actually an A; this may make it a relative of Comparison
like. The Valley like, on the other hand, can do interesting things such as

(3-3a) Is it like mostly profanity? 38

which would normally (i.e., if like had meaning), have to be

(3-3b) Is it mostly like profanity?.

This again shows the variety of places that Valley like can fill.

Furthermore, examples such as

(3-4a) This like tall guy comes in and...

demonstrate how Valley like can occur where most other types of phrases cannot. The position it is in in (3-4a), i.e., between a Determiner and the rest of the nominal, is highly restrictive. Typically only parentheticals can occur here:

(3-4b) This, and you're not gonna believe it, tall guy comes in and...

Typically adverbials, regardless of scope cannot occur here. So the fact that Valley like can occur here adds support to the idea that it is functionally outside the sentence. Since it adds no meaning, it doesn't matter where it goes.

In terms of a category, Valley like belongs to a special class of words in English that can go anywhere. Thus, it has no category of its own, because it is lexically empty and functionally depleted (like umm). 39

38 example of Bonnie S. McElhinny, "The Language of Women doing 'Men's' Work"

39 my speculation on restrictions for where Valley like can occur is that there are some, but they are phonological in nature.
3.3 Morphology.

We can see that the morphology of Valley like is frozen, since it can only occur in one form.

(3-5a) *Unlike, the other day, I walked into this store.
   b *Dislike, the other day, I walked into this store.

Since we have seen these affixes attach to like in its other forms, we know of no reason that it should not be able to. We can therefore conclude that Valley like is morphologically frozen.

So, we have seen that Valley like is semantically empty, syntactically unrestricted (except for some speculations about possible phonological restrictions), and morphologically frozen in one form, like.

Section IV - Speech Introducing Like

In this section, I would like to study the be like phrase of American English, where it is used as a direct speech introducer, hereafter "SI like", as in (4-1):

(4-1) Lenny was like, "What are you doing?"

In terms of its semantic, syntactic and morphological properties. The use of be like as a speech introducer is a particularized instance of comparison; thus it borrows most of its properties (esp. semantic) from Comparison like (Section I above). In arguing this, I describe a mental model process of speaker memory similar to that of Johnson-Laird (1988). While Johnson-Laird makes the currently
standard claim that NP's are added to the model, and then well-formed propositions regarding that NP are added successively, I posit additionally that individuals representing the NPs are identified with the properties that those well-formed propositions represent. We shall return to a Mental Models discussion below.

In addition to the common usage of be like as in (4-1), there is the interesting ability of the phrase to take complements such as state descriptions (4-2), and nonverbal communications (4-3).

(4-2) Marcus was like, really upset when he bowled a 34.
(4-3) Sarah was like [speaker throws up hands ].

Thus, what makes this construction particularly interesting is the variety and variability of types (both syntactically and semantically) of complements that be like can take, as opposed to the more limited and narrow set of complements for which most other speech-introducing matrix verbs select.

4.1 Semantics.

It will help to describe our Mental Model analysis, and how it explains like as a direct speech introducer. The standard Mental Model analysis of memory depicts a listener forming an image based on the propositions he has been given. For example, If I hear the assertion Marcus was like upset because he bowled a 34., then I first form an image of Marcus. If I know Marcus, then other attributes of his personality, as well as physical features, will be colored in
in the Mental Model that otherwise would remain undefined, or guessed at if I did not know Marcus. Thus the standard Mental Model begins with subject = x; this is an assignment of the subject to a variable. Next, if Marcus is tall, for example, I would assign x the property of tallness, through the logical proposition, tall (x) (Figure 1).

Figure 1 How Standard Mental Model Formation Begins

Given the above assertion, Marcus was like, really upset when he bowled a 34, the next propositions to be put in the MM would be:

a) Bowling (x)
b) Bowling poorly (x)
c) upset (x)

Propositions a, b, and c contain within them all other things associated (by lexical definitions, both connotatively and denotatively) for the listener. Hence, if I know that Marcus always drinks Budweiser while bowling, an implication of Proposition A would be that

aa) Drinking Budweiser (x).

So within the Mental Model schema, the more you know about the NP's, the more clearly defined will be the Mental Model.
What is important here, in determining that the meaning of *be like* as a speech / state introducer comes from *like*'s use as a comparison operator, is that in the Mental Model, Proposition c will be represented by images marking Marcus' ways of expressing his upsetness, be they sitting and moping (x) or crying and shouting (x) (Figure 2).

![Figure 2: One Mental Model Formulation for Marcus was like upset.](image)

So, Marcus is equated in the Mental Model with all of Marcus' characteristics and actions. These constitute a logical construction of Marcus' state; therefore, Marcus can be said to be *like upset*. This is where my analysis differs from Johnson-Laird's; in his model, propositions regarding NPs compose the model, while in mine, individuals representing the NPs are identified with the properties that those propositions represent.

Thus, from (4-2), Marcus becomes equivalent with Marcus' identity in the MM that the speaker has for the event, information which include his upsetness, and his bowling a 34 in this case. In describing this situation to another, the speaker doesn't (and the listener doesn't presuppose that the speaker does) give a verbatim report of the event, only an
approximation that is similar to or "like", what happened. 40
41 42

Therefore, that we compare someone to what they said (or their attitude / state of mind) when we use be like as a speech / state introducer demonstrates that SI like is a particularized use of like as a comparison. 43

Comparing be like to other speech introducers such as say, we see an intuitive difference in like's ability to attribute states (as in (4-2), compared with (4-4)).

(4-4a) *Marcus said really upset.
(4-4b) *?Marcus said [gesture]. (this is (at least)
more limited than nonverbal complements of be like.)
(4-4c) Marcus was (like) really upset.

The ability of SI like to attribute states of mind is suggestive of it being a stative predicate. From Section II, we have seven tests for stativity, which are:

1. only non-statives occur in progressives with the present time frame;

40 This seems to make the semantics of SI Like very much like the identifier of Bolinger, as mentioned earlier (Section III).
41 another outcome of the MM analysis is that the Garnhamian theory that 'people remember the gist of what you tell them, not the exact syntax or lexical items' is naturally corroborated
42 it has been suggested to me (Ashley Ehmer, personal communication) that this is an example of implicit qualification for speech self-censorship. The idea is that if someone attacks what you said, and you've used like, you can always fall back by saying, "That was not exactly what I meant, only like what I meant to say".
43 Further, the use of the Mental Model analysis here helps us apply our results from like to other nontraditional speech introduers, such as be, all, and go.
2. only non-statives occur as complements of \textit{force} / \textit{persuade};

3. only non-statives can occur as imperatives;

4. only non-statives can occur with \textit{deliberately} / \textit{carefully};

5. only non-statives can appear in pseudo-cleft constructions;

6. only non-statives can occur in \textit{do}-\textit{so pro forms};

and

7. only non-statives may take an underlyingly conjoined subject.

\textbf{Si} \textit{like} cannot occur in these:

(4-5) *John is being like really happy at having bowled his best game ever.

*Dave forced Ben to be like happy.\(^{44}\)

*Be like, upset!

*Marcus deliberately was like upset.\(^{45}\)

*What John did was be happy.

*Marcus was like upset, and John did so, too.

\begin{align*}
\text{Marcus and John were like upset} & \Rightarrow \\
\text{Both Marcus and John were like upset.} & \\
\text{Marcus was like upset and John was like upset.} & \\
\text{but:} & \\
*Marcus and John were like upset together. & \\
*Marcus was like upset with John. &
\end{align*}

From the fact that \textit{be like} cannot occur in any of these constructions, \textbf{SI} \textit{like} appears to be a stative predicate.\(^{46}\)

So, \textbf{SI} \textit{like} semantically functions as a comparison operator, just as \textit{Comp. like} does. Like the identifier \textit{like} of Bolinger (1972), it is a particular type of comparison. Furthermore, it is a stative predicate, as is \textit{Pref. like}.

\subsection*{4.2 Syntax.}

\(^{44}\) but ?Dave persuaded Ben to be like happier.

\(^{45}\) also *Marcus was being like upset and John did so too.

\(^{46}\) but not a symmetric predicate, since

\begin{itemize}
\item (fn5a) Marcus was like upset.
\item doesn't imply
\item (fn5b) *Upset was like Marcus.
\end{itemize}

In fact, \textbf{SI} \textit{like} appears to take only one argument; here, it is Marcus.
We can now look at which category SI like might be a member of. Unlike adverbials, like does not get fronted in pseudo-cleft sentences:

(4-6) a John was like upset.
   b *Like upset is what John was.
   but c Upset is what John was like.

(4-7) a John was really upset.
   b Really upset is what John was.
   c *Upset is what John was really.

Based on the complementary distributions found regarding fronting in pseudo-cleft constructions, we can consider that like forms a constituent with be, when used as SI like.

Further, we can believe that it is part of the Verb, if we compare it syntactically to other speech introducers, which are known verbs, such as say, shout, exclaim.

(4-8) John said "Hey, how are you?"
    John shouted "Hey, how are you?"
    John exclaimed "Hey how are you?"
    John was like "Hey how are you?"

Be like here forms a constituent which semantically is a predicate, and syntactically is a V (be) plus like (whatever category it may be). 47

47 It has been suggested that like is a COMP, like that, since it is often found as a clause or complement introducer. Further evidence for like's status as a COMP comes from the fact that we don't get sentences with that following SI like. This could be ruled out by the Doubly Filled Comp Filter; otherwise it should be well-formed.

(fn6a) John said that he was starting to feel sick again.
   b *John was like that he was starting to feel sick.

But this could be reduced to other peculiarities of the SI like, such as lexical choice of complements. And it could follow from the fact that if a quote follows be like, it must be a direct quote not an indirect quote - witness obligatory subject-aux inversion on questions:

(fn7a) She was like "What are you doing?"
   b *She was like what you are doing."
4.3 Morphology.

We can see that SI like is morphologically frozen, since it cannot take derivational affixes, as in

(4-9) *Lenny walked in and was unlike, "What's going on here?"

Section V - Conclusion

In conclusion, there are two questions that are naturally raised from this analysis:

1) Do the similarities between the properties of the different forms of like (Comp. like, Pref. like, and Valley like) and the SI like force us to speculate on a relationship between the previous forms and the latest development? and 2) Is a historical reanalysis as an account of like (such as that of Maling) empirically adequate and explanatory?

We can question whether, or rather to what extent, new formations rely upon their origins in getting their semantic and syntactic properties. First, we can see that SI like takes many properties from the other uses of like we have studied herein. SI like is semantically similar to Comp. like, in terms of how it is a two-place comparison operator.

Another piece of evidence suggesting the possibility of like as a COMP is the homophony found in many languages between COMPs and Speech introducing words, such as in Kwa (see Carol Lord "Evidence for syntactic reanalysis: from V to COMP in Kwa", CLS, 1970?).
Furthermore, SI *like* is a stative predicate, as is Pref. *like*. SI *like* is morphologically frozen, as is Valley *like*. Also, it exists predominantly in the speech of the young, as does Valley *like*. So we can see that SI *like* is related to the other previous uses of *like*.49

In answering the second question, we can see, based on much syntactic and morphological evidence that a historical reanalysis is not empirically adequate or explanatory. The dual categorial assignment of A and P to *like* sheds some disturbing light on the earlier claim about which categories can and cannot be Case assigners. There is more to this matter, namely, a distinction has been made among the major lexical categories of N, V, A, and P as to their + or - N and V status. Thus, V (+V, -N), and P (-V, -N) have been called Case assigners, and have been grouped together for other purposes (i.e., morphological processes, as in Scalise (1984) on the basis of their -N similarity. Also, N (-V, +N) and A (+V, +N) have been similarly grouped together based on their +N status. So, we would hope that if a lexical item belongs to two distinct categories, those categories would be able to be related via the features of +/- N and +/- V. But Comp. *like* has properties of an A and a P (and a N). Thus it

48 the stativity probably follows from similarities in meaning, as it is doubtful that homophony alone could push such an effect.

49 My speculation on the origins of *like* as a Speech introducer is that the identifier *like* of Bolinger, which is an instance of the Comp. *like* (Section I), became increasingly popular and was thus used more. With this increased use came a depletion of its meaning, leading to the Valley *like*. Once its morphology was frozen it began to regain its meaning - this time as the SI *like*, another specific instance of comparison.
has properties of the two most disparate of the major lexical
categories in terms of the features of +/- N and +/- V.


Fillmore, Charles J. "The Case for Case", The Ohio State University.
Givon, T. Syntax: A Functional-Typological Introduction

Greenbaum, Sidney. Studies in English Adverbial Usage.

Jackendoff, Ray S. Semantic Interpretation in

Jackendoff, Ray. "The Status of Thematic Relations in
Linguistic Theory", Linguistic Inquiry, Vol 18 #3, Summer,
1987, 369-411.

Jackendoff, Ray S. "The Base Rules for Prepositional
Phrases", in A Festschrift For Morris Halle, eds. Anderson
and Kiparsky. Holt, Rinehart, and Winston, Inc., New York,

Johnson-Laird, Philip N. Mental Models: Towards a

Lakoff, George and Stanley Peters. "Phrasal Conjunction
and Symmetric Predicates", reprinted in Conjunction from
Mathematical Linguistics and Automatic Translation, Harvard
Computational Laboratory, Report No. NSF – 17, 1966, ppVI-1
to VI - 49, by permission of G. Lakoff and S. Peters and the
President and Fellows of Harvard College.

Lord, Carol. "Evidence for Syntactic Reanalysis: From

Maling, Joan. "Transitive Adjectives: a case of
Categorial Reanalysis", to appear in Frank Heuy (ed.)


