Available online at www.sciencedirect.com
ScienceDirect
Journal of Pragmatics xxx (2008) xxx–xxx
journal of PRAGMATICS
www.elsevier.com/locate/pragma

The problem of negative existentials does not exist: A case for dynamic semantics

Lenny Clapp *

Instituto de Investigaciones Filosoficas, UNAM, Circuito Mario de la Cueva S/N, C.P. 04510 Col. Coyoacan Del. Coyoacan, México City, El D.F., Mexico

Received 17 March 2008; received in revised form 21 June 2008; accepted 24 September 2008

Abstract

The problem of negative existentials arises because utterances of such sentences have the paradoxical feature of denying what they presuppose, thus undermining their own truth. There are only two general strategies for solving the problem within the constraints traditional static semantics, and both strategies attempt to explain away this paradoxical feature. I argue that both strategies are fundamentally flawed, and that an adequate account of negative existentials must countenance, and not explain away, this paradoxical feature. Moreover, I argue that a framework of dynamic semantics can achieve this result. Thus negative existentials provide a case in support of dynamic semantics.

Keywords: Negative existentials; Dynamic semantics; Russell; Meinong

1. Introduction: static semantics and the problem of negative existentials

Let a negative existential be a sentence whose subject is a singular definite NP – proper names and definite descriptions being the paradigmatic cases – and whose VP is 'does not exist'.[1] Consider two typical negative existential sentences:

(1) The loch Ness monster does not exist.
(2) Nessie does not exist.

The problem of negative existentials is that in the theoretical framework of traditional *static semantics* it is assumed that the proposition, or truth conditions, expressed by a sentence, relative to a context, are compositionally determined by the referents (semantic values) of the words in the utterance, relative to the context, and the relevant syntactic structure (logical form, LF) of the utterance. Consequently, if one of the words in an utterance – a word that is

* Tel.: +52 55 5622 7242.
E-mail address: lclapp@filosoficas.unam.mx.

[1] Negative existentials whose subjects are indexicals or demonstratives are extremely odd: '*I* do not exist'; '*This* does not exist'. They are odd because utterances of them are such that their felicity typically requires salient evidence of their falsity. (Utterances of such sentences *can* be interpreted as expressing truths, but only in special contexts.) The corresponding positive existentials are also odd in a complementary manner: utterances of 'I exist' and 'This exists' are such that their felicity typically requires salient evidence of their truth. This latter oddity partially explains the special role-played by 'I' in Descartes' *cogito*, and, at one time, by 'this' in Russell's logical atomism.

0378-2166/$ – see front matter © 2008 Published by Elsevier B.V.
doi:10.1016/j.pragma.2008.09.031

purported to refer – lacks a referent, then the utterance cannot express a proposition; if one of the relevant parts does not provide a reference, then a proposition cannot be determined as a function of the referents of the relevant parts, together with the relevant syntactic structure. Or to describe the problem in terms of the judgments of interpreters, if an interpreter judges that one of the words lacks a referent, that the alleged referent does not exist, she ought to judge that the utterance is *infelicitous*, as she will be unable to compositionally determine the truth conditions of the utterance based upon the referents of the words in it. Thus static semantics explains most instances of the phenomenon of presupposition failure: e.g. the reason you would judge my utterance of 'Nessie is an omnivore' to be *infelicitous* is that you believe 'Nessie' has no referent and thus you are unable to compute compositionally a truth-evaluable proposition. Negative existentials, however, are apparent counterexamples against this general prediction of static semantics: negative existentials are often judged by interpreters to be both felicitous and true despite the interpreter's belief that the subject term lacks a referent. Indeed, if an interpreter judges an utterance of a negative existential to be true then it seems she does so *because* she believes that the subject term lacks a referent. The problem posed to static semantics by negative existentials thus arises because utterances of them are in a way paradoxical: they deny what they presuppose. Assuming the traditional framework of static semantics, it follows from this paradoxical feature that utterances of negative existentials deny what is required for their being truth-evaluable, and consequently they undermine the possibility of their being true.[2]

I will argue that an adequate account of negative existentials must countenance, and not attempt to explain away, this paradoxical feature: Utterances of negative existentials *do* deny their own presuppositions. But I will also argue that if one rejects the traditional framework of static semantics in favor of *dynamic semantics*, this paradoxical feature can be rendered compatible with the empirical fact that utterances of negative existentials are interpreted as being both informative and true. Thus, negative existentials constitute a case in favor of dynamic semantics.

2. Why static semantics cannot solve the problem of negative existentials

If one accepts the theoretical framework of static semantics, then there are only two general strategies of response. Both strategies attempt to explain away the paradoxical feature of negative existentials. The first, which I will call ''Meinong's strategy,'' is to *accept* that the felicity of an utterance of a negative existential requires that its definite NP have a referent, but to *deny* that this requirement is not satisfied. So, for example, under this strategy one accepts that an utterance of (1) is felicitous only if 'the loch Ness monster' has a referent, yet one denies that it lacks a referent. Thus the advocate of Meinong's strategy claims that, despite strong intuitions to the contrary, the definite NP does refer to something, and this referent, which is in some sense *real*, somehow satisfies the predicate 'does not exist'. The second strategy, which I will call ''Russell's strategy,'' is to *accept* that the definite NP in an utterance of true negative existential lacks a referent, but to *deny* that the felicity of an utterance of a negative existential requires that this definite NP have a referent. Under this strategy one analyzes away the troublesome referential requirement of definite NPs. Ordinary definite NPs, including ''ordinary names,'' are analyzed away and replaced by logical quantifiers, predicates, and ''logically proper names''—all terms which either require no referent, or whose referential requirements are guaranteed to be satisfied since one is *acquainted* with their referents.[3] Since, under Russell's strategy, the subject-term of a negative existential is not *really* a referent-requiring definite NP (not a ''logically proper name''), the subject terms of negative existentials do not require referents, and thus utterances of negative existentials do not deny their own felicity requirements, and in this other way the paradoxical feature is explained away.[4]

I cannot here consider every way in which these strategies have been utilized, much less every way in which they might be utilized. Instead I will consider two proposals that utilize these general strategies in order to illustrate the *fundamental* problems that *any* utilization of the strategies will encounter. Appreciation of the fact that these specific

[2] There is a complementary problem of explaining how positive existentials can be felicitous and *false*.

[3] As I interpret Russell's analysis, he grants that all *genuine* definite NPs – what Russell would call ''logically proper names'' – require referents. But Russell maintains that in most cases what *appear to be* definite NPs are really disguised ''denoting phrases'' which are not referent-requiring. A slightly different version of the analysis would be to accept that what appear to be definite NPs – e.g. 'the loch Ness monster' and 'Nessie' – really are definite NPs, yet deny that all such NPs require referents. There is no significant difference between these proposals; the fundamental idea in both is to deny that what appear to be definite NPs require referents.

[4] Russell also needs to move the NEG constituent so that it takes scope over the quantifiers that are to replace the NPdef. If he does not move NEG out in this way, then the resulting sentence will not merely undermine its own felicity requirements, but will be an outright contradiction. These issues concerning the scope of NEG are independent of my central concerns, so I will ignore them.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

proposals fail for fundamental reasons will thus motivate the search for an account of negative existentials that does not utilize either Meinong's or Russell's strategy.

In his book *Logical Properties* (2000) Colin McGinn advances a version of Meinong's strategy. One burden for anyone utilizing Meinong's strategy is to explain how something can be *real* enough to be a referent, yet still fail to *exist*. That is, if one is to countenance real, yet non-existent, entities, one must explain what distinction among real entities is marked by existence and non-existence. McGinn attempts to make room for such non-existing referents, and explain what distinction is marked by existence vs. non-existence, by invoking the distinction between *mind-dependent* and *mind-independent* entities:

> . . . it is essential . . . to acknowledge a crucial asymmetry between existence and non-existence, namely that non-existence is representation-dependent, while existence is not. That is, the complement class of 'exists' is purely intentional – its *esse* is *concipi*. . . . [T]here are no mind-independent non-existent entities – though there are plenty of mind-independent existent entities. (McGinn, 2000, p. 37)

According to McGinn then 'The loch Ness monster' has a referent, though this referent is a ''purely intentional object'' (McGinn, 2000, p. 38). Such ''representation dependent'' objects lack the property of existence, and thus can be truly ascribed the property of non-existence.

There are a number of obvious problems that arise specifically with McGinn's utilization of Meinong's strategy: the claim that a non-existent entity's being ''purely intentional'' and ''mind-dependent'' is ''precisely what its non-existence consists in'' (McGinn, 2000, p. 38) seems to have counterintuitive consequences. The claim implies that abstract created entities, such as poems and symphonies and perhaps even cities and baseball games, do not exist, but this is counterintuitive. And McGinn is also compelled to assert the existence of entities that seem not to exist. McGinn finds himself defending the thesis that not only *merely possible* objects, such as the state that seceded from the United States in 2000, but also *impossible* objects, such as round squares, *exist* (McGinn, 2000, p. 40).

The above are the *sort* of problems that arise for any utilization of Meinong's strategy, but in articulating them I assumed McGinn's analysis of *existence* as *mind-independence*. But the following problem, which I will call the fundamental problem, arises for *any* version of Meinong's strategy. The fundamental problem is that Meinongian analyses of negative existentials are incorrect; e.g. utterances of (1) are not about, and make no *reference* to esoteric entities. Utterances of (1) *say* that the loch Ness monster does not exist; they do not say, e.g. that such-and-such esoteric entity is purely mind-dependent. One way in which this fundamental problem manifests itself is that Meinongian analyses assign the wrong modal profile to utterances of negative existentials—they simply get the truth conditions wrong.[5] Let 'R' be a rigid designator referring to the posited referent of 'Nessie', as the name appears in (2), whatever exactly this referent is.[6] According to McGinn, to attribute ''non-existence'' to R is to assert that R is mind-dependent. So, McGinn's utilization of Meinong's strategy is adequate only if (2) and

(2**) R is mind-dependent.

have the same modal profile, are true relative to the same possible worlds. But, whatever the exact nature of R, clearly utterances of (2) and (2**) do not have the same modal profile.[7] There are worlds in which there is no beast swimming in the depths of loch Ness, yet R is mind-independent. Relative to these worlds (2) is true, and (2**) is false. (Note that

[5] Another way in which the fundamental problem manifests itself concerns subsequent pronoun anaphora: if 'the loch Ness monster' as it appears in utterances of (1) has some esoteric entity as its referent, then this referent ought to be available for subsequent pronoun anaphora. Thus, utterances of sentences such as 'The loch Ness monster does not exist, and many think *it* is a mental action'' ought to be appropriate; indeed, utterances of this sentence would be plausibly true. But such sentences are not appropriate, and utterances of this particular sentence are not plausibly true.

[6] Note it would probably not be correct to say that 'R' and 'Nessie' are coreferential. Presumably an advocate of Meinong's strategy would maintain that 'Nessie' refers to R only when it appears in a negative existential; in other linguistic contexts 'Nessie' simply lacks a referent. This shifting in referent would account for the infelicity of (most) utterances of, e.g., 'Nessie prefers to sleep at the North end of the lake.').

[7] In places McGinn suggests that the posited referents are *mental acts*: ''Assertions of non-existence really are statements about mental acts, just as the representation-dependence thesis suggests'' (2000, p. 43). But he immediately qualifies this remark in a footnote: ''When I say this I do not mean to be asserting that statements of non-existence *mean* the same as statements about failed intentionality; I am speaking rather of the basic truth-maker for negative existentials.'' It is relatively clear that what motivates McGinn to make this qualifications is the modal profile problem. It is far less clear, however, what the qualification amounts to: If in the linguistic contexts of (2) and (2**) 'R' and 'Nessie' are co-referential rigid designators, and if attributing non-existence to an entity just is attributing mind-dependence to it, then (2) and (2**) ought to have the same modal profile, but they do not.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

McGinn cannot claim that there are *no* worlds in which R is mind-independent. If he says this, then (2**) is true relative to every world in which R is to be found; i.e. (2**) expresses what we might call a *weakly necessary* proposition. But (2), it seems, does not express a proposition that is true relative to all worlds in which R is to be found; i.e. (2) does not express a weakly necessary proposition. This is just the modal profile problem in another guise.[8]) And, if one assumes that there are worlds in which Nessie *is* to be found, then in some of those worlds R is mind-dependent; in such worlds the proposition expressed by (2) is false, and the proposition expressed by (2**) is true.[9]

In his book *Descriptions* Stephen Neale advocates a version of Russell's strategy. Neale's basic idea is that many unattractive features of Russell's theory of descriptions can be jettisoned, while the main claim and the main purpose of the theory, which are sufficient for explaining the truth of utterances of (1), can be maintained.[10] The unattractive and ''inessential'' features that Neale rejects include Russell's ''sense-datum epistemology, his consequent desire to treat ordinary proper names as disguised descriptions, his talk of objects as *constituents* of singular propositions, and his use of the formalism of *Principia Mathematica*'' (Neale, 1990, p. 14). The ''main claim'' and ''the main purpose'' are described by Neale in the following passage:

> The main claim is that ... the proposition expressed by an utterance u of 'the F is G' is object-*independent*. The purpose of the theory is to make available a class of propositions to serve as the meanings of (utterances of) sentences of the form 'the F is G', whether or not anything answers to 'the F'. (Neale, 1990, p. 20)

Neale assumes, of course, that the *proposition* expressed by an utterance constitutes the truth conditions it is interpreted as having, and that this proposition is compositionally determined from the referents of the words in the utterance together with its logical form (Neale, 1990, p. 22). And in claiming that the proposition expressed by 'the F is G' is ''object-independent,'' Neale is claiming that it ''can be perfectly well understood by a person who does not know who or what is denoted by 'the F', (indeed, even if nothing satisfies 'the F', and even if that person knows that nothing satisfies 'the F')'' (Neale, 1990, p. 21). Hence, according to Neale, an utterance of (1) expresses an ''object-independent'' proposition; i.e. the definite NP 'the loch Ness monster' does not require a referent, and in this way the paradoxical feature of negative existential utterances is explained away.

Neale is correct in maintaining that for some purposes the unattractive features of Russell's theory of descriptions are not ''essential.'' But, some of the unattractive features are essential to the theory if it is to provide a plausible analysis of, and solution to, the problem of negative existentials. In particular, since Neale – correctly in my view – rejects Russell's descriptive analysis of ''ordinary proper names,'' his theory does not apply to negative existentials such as (2) whose subject terms are proper names. But negative existentials involving proper names are no less problematic than negative existentials involving definite descriptions. My objection here is not merely that Neale's proposal does not apply to all utterances of negative existentials and thus is limited in scope. Rather my objection is that *the very same problem* arises beyond the scope of Neale's proposed solution, and this strongly suggests that his proposal does not provide an adequate analysis of, nor solution to, the problem.

That Neale's utilization of Russell's theory fails as an analysis of, and solution to, the problem is underscored by the fundamental problem, which arises for *any* version of Russell's strategy. The fundamental problem is that definite descriptions, like all definite NPs, carry presuppositions, and thus any theory that denies this is simply wrong.

Consider the following sentence, which contains an ''incomplete'' definite description:

(3) The dog barked all night.

[8] Inspired by Kripke's defense of a posteriori necessities, one might attempt to maintain that R is *essentially* mind-dependent and thus that, despite appearances, both (2) and (2**) express weakly necessary propositions. This only postpones the difficulty, however. For R, being essentially mind-dependent, exists only contingently. Let W be a world in which neither Nessie nor R is to be found. Relative to W (2) is true, but (2**) is *not true* – which is not to say that relative to W (2**) is false.

[9] Another version of Meinong's strategy is what Braun (1993) calls the ''Metalinguistic View,'' according to which the entity to which 'the loch Ness monster' refers just is that very NP and non-existence is assimilated to non-referring. This version of Meinong's strategy also runs afoul of the modal-profile problem: The set of possible worlds in which there is no beast in the depths of loch Ness is obviously distinct from the set of worlds in which 'Nessie' lacks a referent. Donnellan (1974) endorses a Metalinguistic version of Meinong's strategy in terms of ''blocks'' of causal-historical chains for proper names. It is noteworthy that Donnellan, like McGinn, qualifies his proposal: after developing the notion of a ''block,'' Donnellan admits that his proposal fails to ''tell us what such statements mean, or what propositions they express'' (1974, p. 25).

[10] Neale's central thesis that definite descriptions are quantifier phrases and not ''genuine referring expressions'' (1990, p. 18), and nothing I say here undermines this thesis. But what I say here does undermine Neale's implicit assumption that definite descriptions would carry presuppositions only if they were non-quantificational referring terms.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

The definite description is ''incomplete'' because there is more than one dog in the universe. Neale suggests that some utterances of (3) might nonetheless be interpreted as being true because the definite description is somehow ''contextually completed''; somehow context supplies the information needed to make the definite description uniquely satisfied. But suppose (3) is uttered in a context that is not rich enough to provide such contextual completion; suppose (3) is uttered ''out of the blue.'' According to Neale's Russellian theory an interpreter who believes that there is more than one dog in the universe ought to judge that such an utterance of (3) is *false*. But this prediction is simply wrong. If I were to come up to you and utter (3) ''out of the blue,'' you would not judge the utterance to be false; you would not respond by saying, ''No, that's wrong; I saw two dogs just this morning.'' *Really*, you would not interpret the utterance as saying something that you could evaluate for truth or falsity at all. The utterance would be infelicitous for you because you believe that the presupposition carried by the definite NP 'the dog' is not satisfied.

How would you *really* respond to an ''out of the blue'' utterance of (3)? You would not respond by agreeing, nor by disagreeing; rather if you chose to respond you would probably say something like ''*What* dog?'' This phenomenon of requesting background information when utterances suffer from presupposition failure is familiar to everyone, and conversational linguists have discovered that such requests constitute common and rule governed general procedures.[11] When a conversation breaks down as a result of this sort of presupposition failure an interpreter will typically respond by initiating a *repair procedure*. A common way of initiating such a procedure is to ask a wh-question where a wh-word-fronted phrase replaces the offending phrase in the infelicitous utterance. For example, our discourse involving an utterance of (3) might proceed as follows:

Me: (a) The dog barked all night.
You: #(b) *What* dog?
Me: #(c) My mom gave me a dog for my birthday.
You: (d) Ah. (e) Maybe *it*'s lonesome.

This simple discourse displays some interesting and common features of conversations. First, pairs <(a), (d)> and <(b), (c)> are *adjacency pairs*; conversations are typically organized around the initiation, and completion, of such pairs. The pair <(a), (d)> is of the type <assertion, acceptance>, while the pair <(b), (c)> is of the type <question, answer>. Moreover, the sequence <(b), (c)> constitutes a repair procedure, the point of which is to bring about an appropriate response, *acceptance* or *rejection*, to my utterance of (a). It is as if in the discourse repair sequence <(b), (c)> we go ''off-line'' and repair the presupposition failure problem, and then go back ''on-line'' with your utterance of (d), thus forming the complete adjacency pair <(a), (d)>.

The relevance of such repair procedures to Neale's Russellian proposal is this: If Neale's proposal were correct, then utterances containing (non-contextually completed) incomplete definite descriptions would not trigger such repair procedures—instead, such utterances would be interpreted as being (obviously) false, as they would express ''object independent'' propositions. But, it is an incontrovertible empirical fact that such utterances *do* trigger such repair procedures. So Neale's Russellian proposal must be rejected; definite descriptions, and all definite NPs, carry presuppositions.[12]

One might attempt to defend Neale's proposal from this objection by appealing to a sort of Gricean pragmatic procedure that engages when one utters something that is obviously false. One could claim that an ''out of the blue''

[11] See for example Chapter 6 of Levinson (1983), Parts I and II of Clark (1992), and Schegloff et al. (1977). ~~In their~~ Asher and Lascarides (2003) develop a version of dynamic semantics called ''Segmented Discourse Representation Theory'' in which such adjacency pairs are related by various *rhetorical relations*. These rhetorical relations are in turn assimilated into speech act theory. For example, the speech act of *answering* serves to relate utterances in an adjacency pair. In subsequent work I hope to provide a formal analysis of negative existentials within the dynamic framework of Segmented Discourse Representation Theory.

[12] It has been suggested to me that this objection can be undermined if Neale allows the domain of quantification for an utterance to be a contextually determined proper subset of the set of everything. For example, perhaps ''context determines'' that the domain of quantification for an utterance of (3) is restricted to the set of things within sight of the location of utterance during a certain span of time surrounding the time of utterance. But the suggestion does not help; it does nothing to support the claim that definite descriptions do not carry presuppositions. Suppose the domain of quantification for an utterance of (3) is restricted as suggested above. And suppose that there is no dog in that restricted domain. According to this ''hidden indexical'' version of Russell's theory, the utterance of (3) ought to be false. But it is not false; it is infelicitous. If you believe that there is no dog in the contextually determined restricted domain of quantification, you will be unable to evaluate the utterance for truth or falsity. Again, if you chose to respond, you would probably initiate a repair procedure by asking, ''What dog?'' It is irrelevant what the domain of quantification is taken to be. The issue concerns what happens when there is no referential candidate in the domain, *whatever it is*.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

utterance of (3) really is false, but people do not respond to such utterances by disagreeing, or saying, ''that's false,'' because they assume that the speaker is trying to obey the Cooperative Principle—the speaker is attempting to say something *true* and *relevant*. According to this defense, when interpreters judge that utterances containing obviously incomplete definite descriptions are infelicitous, they overlook the semantic fact that the utterance expresses an object independent (and false) proposition, and they attempt to figure out what true and relevant information the cooperative speaker must be trying to communicate. This attempt at figuring out what the speaker might be trying to communicate being unsuccessful, they judge that the utterance is infelicitous. But, the defense continues, this judgment confuses semantics and pragmatics—the utterance is actually, semantically, false. So, concludes the defense, definite descriptions do not carry presuppositions, and the empirical evidence to the contrary can be explained away by invoking the tendency of ordinary interpreters to confuse mere *pragmatic* considerations with what is *semantically expressed*.[13]

This Grice-inspired defense, however, cannot rescue Neale's proposal because it applies only to utterances containing definite descriptions that are *obviously* incomplete. But, the empirical evidence strongly suggests that even utterances containing definite descriptions that are not obviously incomplete suffer from presupposition failure. Consider an ''out of the blue'' utterance of

(4) The purple dog-cart is broken.

According to Neale's Russellian proposal, this ''out of the blue'' utterance ought to be *felicitous*; it expresses an ''object independent proposition.'' The proposition expressed is either true or false—depending only upon whether or not there is somewhere in existence a unique purple dog-cart that is broken. If there is just one purple dog-cart somewhere in the universe, and it is broken, the utterance is true; otherwise, the utterance is false. Thus Neale's Russellian view predicts that if you believe it likely that there is somewhere in the universe a unique purple dog-cart that is broken, you will judge the utterance to be true. But if you believe this is unlikely – perhaps because you believe there is bound to be more than one purple dog-cart out there somewhere – then you will judge this utterance to be false. I assume that most people's beliefs with regard to these questions are similar to mine: I think it is plausible that there is just one purple dog-cart in the universe, but I have no strong beliefs one way or the other. Thus, I do not think the definite description is *obviously* incomplete, and thus, assuming Neale's Russellian analysis, I would not judge that an ''out of the blue'' utterance of (4) would be obviously false. But, such an utterance *would* nonetheless be infelicitous for me, and my inability to understand the utterance, to assign it truth conditions, would be a consequence of the definite description's presupposition failure. If I were to respond to such an utterance, I would not agree or disagree, rather I would again initiate a repair procedure. I would utter something like, ''*What* purple dog-cart?'' Since the definite description 'the purple dog-cart' is not obviously incomplete, the Grice-inspired defense just introduced cannot apply in this sort of case. And consequently this Grice-inspired defense is not an adequate response to the objection presented above.[14]

Consideration of an ''out of the blue'' utterance of (4) also reveals that definite NPs carry *two* sorts of presupposition. You judge an ''out of the blue'' utterance of (4) to suffer from presupposition failure despite the fact that you do not judge the definite description to lack a referent. You are willing to grant that there is just one purple

[13] It is not clear that this appeal to confusion between semantics and ''mere'' pragmatics is really compatible with the Russellian strategy. If it is allowed that speakers' judgments of truth conditions and felicity conditions can be wrong in the way proposed by the defense, then there is no need to ''analyze away'' the troublesome referent requiring definite NPs. Instead, once could simply maintain that negative existentials are *semantically* infelicitous and thus neither true nor false, yet they can be used to *convey* – albeit only pragmatically – informative and true information. I do not think this response is at all plausible, but I think it less convoluted than the Russellian response combined with the Gricean defense.

[14] The empirical fact that definite descriptions carry presuppositions in this way is obscured by the examples typically considered by philosophers. Most of the definite descriptions discussed by philosophers can be felicitously interpreted by readers as a result of what Clark and Marshall (1992, p. 36) call ''mutual knowledge based on community membership.'' (Indeed, this is true of my example, 'the loch Ness monster'.) For example, everybody in the philosophical community believes that the solar system has a unique number of planets, and as a consequence can felicitously interpret utterances containing the definite NP 'the number of planets'. Nobody is tempted to ask, ''*What* number of planets?'' That philosophers habitually use in their examples definite descriptions whose presuppositions are satisfied in virtue of this ''mutual knowledge based on community membership'' obscures the fact that definite descriptions carry such presuppositions. Note that even if you agree with Russell that an utterance of 'The king France is bald' is false, and not infelicitous, this judgment of felicity depends upon your knowledge of France, and your knowledge that European countries, if they have kings, have unique kings. Compare your judgments concerning 'The king of France is bald' with your judgments concerning, e.g., 'The plumber is bald'.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

dog-cart in the universe, but despite this open-mindedness, you judge the utterance to be infelicitous due to presupposition failure. Thus, not all judgments of infelicity due to presupposition failure are due to judgments of reference failure. To further bring out the distinction between the two sorts of presuppositions carried by definite NPs, consider sincere utterances of the following:

(5) The loch Ness monster is vicious.
(6) Eddie Luccetti is vicious.

I assume you judge the utterance of (5) to be infelicitous, and this because you believe that there is no loch Ness monster. As result of this judgement of infelicity, you would probably respond by initiating a sort of repair procedure, but note the utterance of (5) does not prompt you to utter, "*What* loch Ness monster?"[15] Rather, in response to an utterance of (5) you are much more likely to utter something like, "Well . . ., hold on, there is no loch Ness monster' or perhaps even, "Well . . ., hold on, the loch Ness monster does not exist." I assume that you also judge the utterance of (6) to be infelicitous, but for very different reasons. Here you are tempted to initiate repair by asking, "*Who* is Eddie Luccetti?" and you have no beliefs concerning his existence at all. So, utterances of definite NPs can carry two sorts of presuppositions. The first sort, which following Heim (1982) I will call the *familiarity presupposition*, requires – in a sense I will clarify later – only that the utterance of the definite NP be *familiar in the context*. Utterances of definite NPs *always* carry the familiarity presupposition. The second sort of presupposition I will call *the referential presupposition*, and it requires that the definite NP be believed to have a referent. Utterances of definite NPs sometimes, but not always, carry a referential presupposition. For example, in a discourse about whether or not there are any dangerous aquatic creatures, the definite NP in (5) would carry a referential presupposition. And thus an utterance of (5) in such a discourse would be judged infelicitous by an interpreter who did not believe in the loch Ness monster. But in a discourse about the dispositions of Santa, Zeus, and other mythical beings openly acknowledged as such, the definite NP in an utterance of (5) would *not* carry a referential presupposition, and thus in this sort of discourse an utterance of (5) would be judged to be felicitous even by an interpreter who did not believe in the loch Ness monster.[16]

So, there are actually *two* sorts of presupposition carried by definite NPs, *familiarity*, and *referential*. If an interpreter judges an utterance containing a definite NP to suffer from either sort of presupposition failure, she will judge the utterance to be infelicitous. Neale's version of the Russellian strategy, however, claims that utterances containing definite descriptions express object independent propositions, and thus such utterances should never be judged to be infelicitous as a result of presupposition failure. Neale's proposal must therefore be rejected.[17]

I conclude that neither McGinn's utilization of Meinong's strategy nor Neale's utilization of Russell's strategy is adequate. Moreover, the failures do not result from specific details of McGinn's and Neale's proposals that might be amended; rather the general strategies are fundamentally flawed. The essence of the argument for this negative general conclusion can be summarized as a dilemma: Either (i) utterances containing (what at least seem to be) definite NPs require referents for felicity, or (ii) they do not. If one assumes the theoretical framework of traditional static

[15] Indeed, this question would make little sense coming from you, as you think there is no loch Ness monster.

[16] Since *every* utterance of a definite NP carries a familiarity presupposition, we could say that the familiarity presupposition is carried by *definite NPs* (types), while the referential presupposition is carried by *utterances* of definite NPs (tokens).

[17] Another version of Russell's general strategy, which does not rely on Russell's analysis of definite descriptions, is developed by Braun (1993). According to Braun, utterances express structured Russellian propositions, and utterances of negative existentials such as (2) express the "gappy proposition" <<∅, existence>NEG> (where '∅' indicates nothing, a "gap," not the empty set). And Braun proposes that the following semantic principle provides the real semantics for "filled" and "gappy" atomic propositions:

> If P is a proposition having a single subject position and a one-place property position, then P is true iff the subject position is filled by one, and only one, object, and it exemplifies the property filling the property position. If P is not true, then it is false. (Braun, 1993: 463)

Braun further assumes that NEG is the negation operator of classical logic, so this principle yields the result that utterances of (2) are really true: the atomic, gappy, proposition <∅, existence> is false, and thus the molecular gappy proposition <<∅, existence> NEG> is true. Braun's gappy proposition view is thus a version of Russell's strategy since on this view utterances whose subjects are "empty" definite NPs express "gappy" propositions, and (atomic) gappy propositions are simply false. So, for example, on Braun's view an utterance of 'Nessie eats fish' is predicted to be *false* rather than infelicitous, and – even more oddly – an utterance of 'Nessie does *not* eat fish' is predicted to be *true* rather than infelicitous. In other words, Braun, like Russell, attempts to solve the problem by denying that definite NPs carry presuppositions (another problem with Braun's view is that it entails that utterances of, e.g., 'Santa is fat' and 'Nessie is fat' express the very same proposition, viz. <∅, being fat>).

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

semantics, then opting for disjunct (i) leads one to a version of Meinong's strategy, while opting for disjunct (ii) leads one to Russell's strategy. If (i), then negative existentials can be true only if these referential requirements are satisfied. But if entities are posited to satisfy these referential requirements, then negative existentials will be analyzed as being about the wrong entities; i.e. one founders on the modal profile problem. But if (ii), then one founders on the empirical fact that typically utterances containing definite NPs *do* require referents for felicity—indeed, they carry two sorts of presuppositions. Therefore *no* proposal utilizing Meinong's or Russell's strategy for explaining away the seemingly paradoxical nature of negative existentials can succeed.[18]

We can draw two important conclusions from the failure of the two strategies. First, an adequate explanation of how utterances of negative existentials can be true and informative must countenance, and not attempt to explain away, their paradoxical nature; utterances of negative existentials *both* carry presuppositions *and* deny that these presuppositions are satisfied. But now we recognize the distinction between *familiarity* and *referential* presupposition, and we understand that definite NPs always carry a familiarity presupposition, but only sometimes carry a referential presupposition. This raises a question: ''Which sort of presupposition is incompatible with what is asserted by a negative existential?'' Clearly only the referential presupposition, if there be one, is incompatible with what is asserted. So we can state this first conclusion more precisely: to solve the problem of negative existentials we must countenance the fact that negative existentials deny the referential presupposition carried by their definite NP, if such a presupposition is carried.

One might at this point anticipate that my positive proposal will involve denying that the definite NPs in true and informative negative existentials carry referential presuppositions. After all, if the sort of presupposition denied by the utterance of a negative existential (viz. referential) was different from the sort of presupposition carried by the definite NP (viz. familiarity), then the paradoxical result that negative existentials deny their own presuppositions would be avoided. But this is not the general form of my positive proposal. I maintain that many, though not all, utterances of negative existentials *do* have the paradoxical feature of denying their own *referential* presupposition. For consider, many utterances of negative existentials are *informative*; they express *new* information. But an utterance of (1) could hardly be informative to someone who *already* believed that 'the loch Ness monster' lacked a referent. It seems that an utterance of (1) can be informative only if the definite NP carries a referential presupposition. (That is a bit too strong; I will explain why below.) So, although the definite NPs in *some* utterances of negative existentials do not carry a referential presupposition, the distinction between familiarity and referential presupposition alone will not solve the problem. The challenge is, still, to explain why utterances that deny their own *referential* presupposition are interpreted as being both informative and true.

Fortunately, the second important conclusion we can draw from the failure of the strategies of Meinong and Russell is that in providing this explanation, we need not respect the constraints of static semantics.

3. Negative existentials in dynamic semantics

A number of semantic theories have been developed within the general framework of dynamic semantics, but all of them share a core idea. Dynamic semantics recognizes the obvious fact that language use is a *cooperative* activity, especially if one takes communication, the exchange and development of information, to be the central function of language use.[19] In the following passage Stalnaker presents the core idea for incorporating this recognition into semantic theory:

> Communication, whether linguistic or not, normally takes place against a background of beliefs or assumptions which are shared by the speaker and his audience, and which are recognized by them to be so shared. When I

[18] This disjunctive syllogism also refutes theorists such as Salmon (1998), who utilize Meinong's strategy for some negative existentials, and Russell's strategy for others. For example, concerning negative existentials involving fictional characters, Salmon utilizes Meinong's strategy. He claims, for example, that through the practices of writing and discussing fiction, real abstract entities, fictional characters, are created. An utterance of 'Holmes does not exist' is then analyzed as denying the property of existence to a particular abstract creation, though Salmon never explains what it is for such an abstract entity to lack, or have, this property. Indeed, when it comes time to provide such an explanation, Salmon seems to give up on the idea that 'Holmes' is a referring and presupposing term, and instead proposes that 'Holmes' is a ''disguised improper definite description'' (1998, p. 304). Concerning other negative existentials, e.g. 'The king of France does not exist', Salmon utilizes Russell's strategy in a way very similar to Braun (1993): Salmon claims that, because the definite NP has no referent/denotation, utterances of this sentence express a ''structurally challenged proposition,'' (307–308) and, like Braun, Salmon argues that such gappy propositions can be true. In effect then, Salmon, like Russell and Braun, denies that definite NPs in (some) negative existentials carry presuppositions.

[19] Many aspects of the dynamic framework are anticipated in Strawson (1950).

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

> discuss politics with my barber, we each take the elementary facts of the current political situation for granted, and we each assume that the other does. ...The more common ground we can take for granted, the more efficient our communication will be. And unless we could reasonably treat *some* facts in this way, we probably could not communicate at all.
>
> Which facts or opinions we can reasonably take for granted in this way, as much as what further information either of us wants to convey, will guide the direction of our conversation—will determine what is said. I will not say things that are already taken for granted, since that would be redundant. Nor will I assert things incompatible with the common background, since that would be self-defeating. My aim in making assertions is to distinguish among the possible situations which are compatible with all the beliefs or assumptions that I assume we share. (Stalnaker, 1974, pp. 48–49 in Stalnaker, 1999)

The core idea is then that utterances take place against a *common ground* of information, which is identified as the context of utterance, and the semantic content of an utterance – *what is said* – is a matter of *how the utterance affects the common ground*.[20] The semantic content of an utterance, what is said, is thus the *difference* between the common ground *before* the utterance and the common ground *after* the utterance. The *linguistic meaning* of a sentence, the element of meaning that remains constant across different contexts of utterance, constitutes general instructions for changing contexts—general rules for updating and/or amending the common ground. Following Heim (1982, 1983) we can call this *linguistic meaning* the ''context change potential'' (CCP) of a sentence. The semantic content of an utterance of a sentence in a context, or relative to a common ground, is the result of applying its CCP to this particular common ground. A *felicitous* utterance at time t changes the common ground so that it will be different after the utterance, at $t + 1$. Yet the semantic content of a subsequent utterance at $t + 2$ depends upon the common ground brought about at $t + 1$. Consequently, what semantic content *can* be expressed *changes* throughout a discourse.

On this dynamic conception of semantics, what is it for an interpreter to judge that an utterance is true, or false? When an interpreter judges whether or not an assertive utterance is true or false, she is judging whether or not applying the CCP of the utterance to the common ground results in an accurate representation. That is, she is judging whether or not the resulting common ground squares with her broader belief set, which of course includes beliefs that are outside of the common ground. It is because our beliefs do not completely overlap that, through conversation, we can learn from each other, and develop new information together. If our beliefs completely overlapped, there would no point in conversing. But if our beliefs did not somewhat overlap – if there was no common ground – conversation would be impossible.

The phenomena of presupposition and presupposition failure, of both sorts, find a natural place in this dynamic framework. The instructions that constitute the CCP of a sentence require that the common ground to which they are applied satisfy certain conditions. Presupposition failure, and thus infelicity, results when the instructions require the common ground to have some feature that it lacks; if the instructions cannot be carried out, then the common ground cannot be changed in accordance with the instructions. Typically in such situations an interpreter can understand the instructions—she knows *in general* how to change common grounds in accordance with the utterance, but she cannot do it in *this* case because this common ground is in some way deficient. For example, the definite NP in an utterance of (3) will typically carry both a familiarity presupposition, and a referential presupposition. Again following Heim (1982, 1983), the *familiarity presupposition* can be understood as requiring that there be in the common ground a unique ''file'' of information to which the definite NP 'the dog' can be linked, so that the effect of the utterance will be to add information to this file.[21] The CCP instructions state the common ground is to be amended by adding to this file the information that *this* dog barked all night. The *referential presupposition* carried by a definite NP can then be understood as requiring that the common ground include information concerning the file to which the definite NP is linked. An utterance of a definite NP carries a *referential presupposition* just in case it requires that the common ground include the information that the file to which the definite NP is linked pertains to an existing entity.

Infelicity, or presupposition failure, typically occurs when the speaker and interpreter are not in agreement as to what the common ground is. *Familiarity presupposition failure* occurs if there is not a unique file in the common ground to which the definite NP can be linked. If an utterance containing a definite NP suffers from familiarity

[20] An anonymous referee suggested that this core idea of dynamic semantics is supported by the broader interactivist model of representation, as outlined in Bickhard (2007) and Bickhard and Campbell (1992). According to this model interaction is essential not only to linguistic meaning, but to representation in general. I do not have space to consider this enticing suggesting here, but I hope to address these wider concerns in a subsequent work.

[21] Actually, Heim employs a more complex metaphor involving ''cards'' in ''files,'' but the simpler metaphor is adequate for my purposes here.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

presupposition failure, then, even though the interpreter grasps the CCP instructions encoded in the utterance, she cannot follow them, and as a result the utterance is infelicitous for her. The discourse has thus broken down, because the speaker and interpreter do not agree about the common ground—or rather there is not as much common ground as the speaker assumed. The interpreter can respond to the infelicitous utterance in a number of ways. First, she can initiate a discourse repair procedure; e.g. she could ask, "*What* dog?" The function of this utterance is to get an appropriate file for the definite NP introduced into the common ground. But, second, the interpreter could also choose to *accommodate* the infelicitous utterance, and thereby avoid the tedium of a repair procedure. That is, she could *accommodate* the infelicitous utterance by adding an appropriate file for the definite NP 'the dog' to the common ground, and then proceeding as if my utterance were felicitous. Given the inefficiency of repair procedures, speakers typically prefer to *accommodate* infelicitous utterances when possible.

Referential presupposition failure occurs when the interpreter comes to believe that the speaker assumes that the file to which the definite NP in his utterance is linked pertains to an existing entity, but the interpreter assumes that this file does not pertain to an existing entity. This sort of breakdown occurs when the CCP of the speaker's utterance requires adding information to the relevant file that is inappropriate given the interpreter's assumption that the file does not pertain to an existing entity. For example, if I utter

(7) The loch Ness monster prefers to sleep at the north end of the lake.

this would be infelicitous for you, as you do not believe in the loch Ness monster. Following the CCP of my utterance requires you to add the information "prefers to sleep at the north end of the lake" to the loch Ness monster file, which you assume does not pertain to an existing entity. But, for reasons that need not concern us here, it is inappropriate to add this information to a file that does not pertain to an existing entity.[22] As a result, you realize that we are not in agreement about the common ground; you come to believe that I, unlike you, assume that the file linked to 'the loch Ness monster' pertains to an existing entity. Failure of *referential presupposition* occurs when this sort of disagreement about the common ground is discovered, or believed to be discovered, by an interpreter.

How might an interpreter respond when she comes to believe that this sort of referential presupposition failure has occurred? At last the time has come for me to present my positive proposal concerning negative existentials. For if the interpreter is to repair the common ground, she must correct the speaker's false assumption that the file linked to 'the loch Ness monster' pertains to an existing entity. And the most expedient way to do this is to deny the referential presupposition of my infelicitous utterance by uttering the relevant negative existential, viz. (1). But, and this is the key point, *the definite NP in this negative existential will carry the referential presupposition being denied by the utterance. This utterance will deny its own referential presupposition.*

Let us see how this works. I utter (7), which is infelicitous for you because it suffers from *referential* presupposition failure. My utterance thus tips you off that the conversation is defective because we do not agree about the common ground: I think the file linked to 'the loch Ness monster' pertains to an existing entity, whereas you do not. How are you going to solve the problem? What can you *felicitously* utter that will repair the rift in the common ground? Here's what you can do: First, you *accommodate* my utterance. That is, you amend what you take the common ground to be so that it satisfies the referential presuppositions of my utterance – you add the information that the file linked to 'the loch Ness monster' pertains to an existing entity.[23] Accommodating my utterance in this way repairs the discourse – the ground is now common. But this repair has come at a cost: the common ground now contains information that is incompatible with your broader belief set. What can you now felicitously utter that, if I accept it, will further amend the common ground so that is in alignment with your broader belief set? You can utter something like:

(8) No, it doesn't. In fact, the loch Ness monster does not exist.

[22] The issue here is how interpreters come to realize that a definite NP in a speaker's utterance carries not only a familiarity presupposition, but also a referential presupposition, and as a result judge that the utterance suffers from referential presupposition failure. For example, why would you probably *not* judge that my utterance of 'the loch Ness monster is quite a tourist attraction' is infelicitous as a result of referential presupposition failure, though you probably would judge that my utterance of 'I fed the loch Ness monster last night' suffers from referential presupposition failure? This issue, however, is largely independent of my analysis of negative existentials. All I need is the empirical premise that people do in fact sometimes judge that definite NPs occurring in the utterances of others suffer from referential presupposition failure.

[23] Note that initiating a repair procedure by asking, "What loch Ness monster?" is not appropriate. In the relevant sense, you know what I am talking about – my utterance does not suffer from a failure of familiarity presupposition.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

The definite NP 'the loch Ness monster' as it appears in this utterance of yours carries a referential presupposition, and as a result of your accommodation this referential presupposition is satisfied by the common ground relative to which the utterance is made. Thus the utterance is felicitous. Following the CCP instructions for the utterance, however, requires changing the common ground so that the referential presupposition is no longer satisfied. The utterance thus denies its referential presupposition; indeed, to deny this referential presupposition is the purpose of the utterance. Moreover, you judge your utterance to be *true* because, if it is accepted, the common ground is brought into closer alignment with your broader belief set. And your utterance is *informative* because it changes the common ground. Indeed, your utterance is very informative for me, because the information it adds to the common ground is incompatible with my broader belief set.[24] So this briefly sketched analysis of negative existentials satisfies our desideratum: It explains why utterances of negative existentials are interpreted as being true and informative, yet countenances the paradoxical feature that (some) utterances of negative existentials deny their own referential presuppositions.[25]

Earlier I suggested, and I just now allowed room for, true and informative utterances of negative existentials that do not deny their own referential presuppositions, because their definite NPs carry only a familiarity presupposition. How are these utterances accounted for within the just sketched dynamic framework? Consider a conversation about whether or not the loch Ness monster exists. The common ground for such a conversation will contain neither the information that the file linked to 'the loch Ness monster' pertains to an existing entity, nor the information that it does not. This is left as an open question, and the goal of the conversation is to answer it. If (1) is uttered relative to such a non-committal common ground, the definite NP does not carry a *referential* presupposition, though it of course carries a *familiarity* presupposition. Such an utterance will be *informative* even though the definite NP does *not* carry a referential presupposition because it adds new information to the common ground by answering what was previously an open question concerning the existential status of the loch Ness monster. In this way the dynamic framework can also explain how utterances of negative existentials can be informative and true when their definite NPs carry only *familiarity* presuppositions.

The above presents in broad outline how negative existentials can be accounted for within a framework of dynamic semantics, though of course many important issues remain unresolved. Perhaps the most pressing such issue concerns *truth*. The above provides at least an outline of an explanation of why interpreters *judge* utterances of negative existentials to be true and informative. But one might argue that this provides only a *pragmatic* account and that a *semantic* account must explain what *true propositions* are expressed by utterances of negative existentials, regardless of the judgments of interpreters.

I am skeptical, however, of how cogent such an argument would be. It seems to me that if a theory explains the judgments of interpreters concerning the meaning and truth of utterances, then it does all one should ask of a *semantic* theory. If the task of semantics is not to explain such judgments, then what empirical facts would constrain semantic theories? Moreover, the demand that the dynamic proposal specify the *propositions* expressed by negative existentials is question-begging. This demand assumes the perspective of static semantics according to which every grammatical declarative utterance determines, as a function of the referents of the words it contains and its logical form, a self-standing proposition (or equivalently, a set of truth conditions). According to the dynamic analysis, however,

[24] A similar explanation accounts for other sorts of sentences that seem paradoxically to deny their own presuppositions. Consider the following discourse in which you correct my naïve observations of a drag-queen's performance:

Wow. The woman in the slinky dress sure can sing.

The woman in the slinky dress is not a woman!

Tipped off by my utterance, you first *accommodate* by amending the common ground so that it includes the false information that the singer in the slinky dress is a woman. And then you utter a sentence that presupposes this false information in order to rid the common ground of this false information.

[25] This analysis essentially applies something similar to the pragmatic view of presupposition introduced in Stalnaker (1974) to the case of negative existentials. In that prescient paper Stalnaker utilizes the dynamic perspective to explain, e.g., why in, 'If a man is loved by a woman, then *the man* will live a long and happy life' the definite NP does not (in some sense) presuppose the existence of a unique man, while if the antecedent and consequent are reversed, viz. 'If *the man* will live a long and happy life, then a man is loved by a woman', the definite NP does (in some sense) presuppose the existence of a unique man. Stalnaker proposes that this sort of phenomenon can be explained if one allows that the common ground be changed in increments over the course of the entire conditional: The consequent is interpreted relative to the common ground that is brought about by the antecedent. Thus the common ground relative to which an utterance of a conditional is interpreted changes mid-utterance. The dynamic analysis of negative existentials presented here is a further development of this general idea. Moreover, if my application of Stalnaker's idea to negative existentials is correct, then Stalnaker's (1978) analysis of negative existentials in terms of ''diagonal propositions'' is otiose.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

utterances do not express self-standing propositions. Rather the linguistic meaning of an utterance is a CCP – a set of instructions for updating a standing common ground – and the semantic content of a felicitous utterance is the difference between the common ground before the utterance, and the common ground after the utterance. According to the dynamic analysis what competent speakers and interpreters tacitly know is how to determine the CCP of an utterance from the syntactic structure of the utterance and the linguistic meaning of the words in the utterance, how to apply this CCP to standing common grounds, and how to compare the resulting common ground to their broader belief set. Thus the dynamic analysis does not assign a proposition to utterances of negative existentials. (And it certainly does not maintain that an utterance of (2) expresses the proposition that the file linked to 'Nessie' does not pertain to an existing entity. To endorse this latter claim would be to endorse a version of Meinong's strategy.)

Nevertheless, even though the dynamic analysis does not assign self-standing propositions to utterances, it is a relatively trivial matter to define a notion of utterance truth within the dynamic framework outlined above. According the outline presented above, an interpreter *judges* that an utterance is true just in case, roughly, she judges that the common ground brought about by the utterance is compatible with her broader belief set. Thus the judgment of truth is a matter of somehow comparing information in the common ground with believed information outside the common ground. This ''information'' is in some way representational, and thus such judgments are a matter of comparing and evaluating *representations*; it is not a matter of comparing a representation with the world. What is needed to define a notion of *utterance truth* is of course a way of relating such representations to the world.

Let us assume a crude version of the language of thought hypothesis. Under this assumption, common grounds are structures of mental representations – symbols in mentalese – and an interpreter's broader beliefs are also (or are also encoded by) structures of mentalese. *Judgments* of utterance truth are thus a matter of comparing and evaluating such structures of representations. But what is it for an utterance to really be true? An utterance can be said to be true on the dynamic analysis just in case the common ground that it brings about is accurate, just in case this common ground is *satisfied* by the actual world. Here I cannot even attempt to present a general definition of satisfaction for common grounds, but the following general semantic principles are all that is needed to yield the result that utterances of negative existentials such as (2) can be not only *judged* to be true and informative, but moreover can really be true: Let U be an utterance that felicitously brings about a common ground C, containing files $F_1,\ldots,F_n$, and let F_i be a file of C containing file-predicates $P_1,\ldots,P_n$. The following general semantic principles then yield the desired result:

(P1) U is *true* iff C is *accurate*.
(P2) C is *accurate* iff every file F_i of C is *satisfied*.
(P3) A file F_i of C is *satisfied* iff all of file-predicates $P_1\ldots P_n$ of F_i are *satisfied*.
(P4) File-predicate P_j of F_i is *satisfied* iff (i) P_j *is not* 'does not exist' and F_i pertains to an existing entity that exemplifies the property designated by P_j; or (ii) P_j *is* 'does not exist' and F_i does *not* pertain to an existing entity.

To illustrate how the above general semantics for common grounds applies in the case of an utterance of a negative existential, let us suppose that a common ground C* results from a (felicitous) utterance U* of (2). Thus C* contains a file F* which is linked to the definite NP 'Nessie'. As a result of U*, this Nessie-file F* contains the information, or contains the *file-predicate*, 'does not exist.' Semantic principles (P1–P4) entail that utterance U* is true, if the simplifying assumptions that F* is the only file in C*, and 'does not exist' is the only file-predicate in F* are granted. For, granted these simplifying assumptions, by principles (P1), (P2) and (P3), utterance U* of (2) is true iff file-predicate 'does not exist' of F* is satisfied. And by clause (ii) of (P4), file-predicate 'does not exist' of F* is satisfied iff F* does not pertain to an existing entity. Assuming that there is no monster in the depths of loch Ness, this condition is met, and thus utterance U* of (2) is true.[26]

4. Conclusion

I conclude then, by boldly asserting that the problem of negative existentials does not exist. The theoretical framework of dynamic semantics sketched here explains, in more ways than one, how this assertion can be both informative and true. Moreover, because of the paradoxical feature of negative existentials, the problem cannot be solved within the framework of traditional static semantics. Negative existentials therefore constitute a case for endorsing dynamic semantics over traditional static semantics. My assertion is bold, however, because dynamic

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031

framework sketched here is in need of much fleshing out. In particular, much more needs to be said concerning the process whereby an interpreter compares a recently updated common ground with her wider belief set in order to arrive at a judgment of truth value.

Q3 5. Uncited references

Bach (2005), Clark and Marshall (1981), Russell (1918), Russell (1919) and Stanley and Gendler-Szabo (2000).

References

Asher, Nicholas, Lascarides, Alex, 2003. Logics of Conversation. Cambridge University Press, Cambridge.
Bach, Kent, 2005. Context ex machina. In: Szabo, Z. (Ed.), Semantics vs. Pragmatics. Oxford University Press, Oxford.
Bickhard, Mark, 2007. Language as an interaction system. New Ideas in Psychology 25 (2), 171–187.
Bickhard, Mark, Campbell, Robert, 1992. Some foundational questions concerning language studies: with a focus on categorical grammars and model theoretic possible worlds semantics. Journal of Pragmatics 17 (5/6), 401–433.
Braun, David, 1993. Empty names. Nous 27, 449–469.
Clark, Herbert, 1992. Arenas of Language Use. University of Chicago Press, Chicago.
Clark, Herbert, Marshall, Catherine, 1981. Definite reference and mutual knowledge. In: Joshi, A.K., Weber, B., Sag, I. (Eds.), Linguistics, Structure and Discourse Setting. Cambridge University Press, Cambridge (reprinted as Chapter 1 in Clark 1992.).
Donnellan, Keith, 1974. Speaking of nothing. The Philosophical Review 83, 3–31.
Heim, Irena, 1982. The semantics of definite and indefinite noun phrases. Ph.D. Thesis, University of Massachusetts, Amherst.
Heim, Irena, 1983. File change semantics and the familiarity theory of definiteness. In: Baurle, R., Schwarze, C., von Stechow, A. (Eds.), Meaning Use and Interpretation of Language. W. de Gruyter, Berlin, pp. 294–338.
Levinson, Stephen, 1983. Pragmatics. Cambridge University Press, Cambridge.
McGinn, Colin, 2000. Logical Properties: Identity, Existence, Predication Truth. Clarendon Press, Oxford.
Neale, Stephen, 1990. Descriptions. MIT Press, Cambridge.
Russell, Bertrand, 1918. The philosophy of logical atomism. In: Marsh, R.C. (Ed.), Logic and Knowledge. George, Allen and Unwin, London, p. 1956.
Russell, Bertrand, 1919. Introduction to Mathematical Philosophy. George, Allen and Unwin, London.
Salmon, Nathan, 1998. Nonexistence. Nous 32, 277–319.
Schegloff, Emanuel, Jefferson, Gail, Sacks, Harvey, 1977. The preference for self-correction in the organization of repair in conversation. Language 53, 361–382.
Stalnaker, Robert, 1974. Pragmatic presuppositions. In: Munitz, M., Unger, P. (Eds.), Semantics and Philosophy. New York University Press, New York (reprinted in Stalnaker 1999.).
Stalnaker, Robert, 1978. Assertion. In: Cole, P. (Ed.), Syntax and Semantics, vol. 9. Academic Press, New York, (reprinted in Stalnaker 1999.), pp. 315–322.
Stalnaker, Robert, 1999. Context and Content. Oxford University Press, Oxford.
Stanley, Jason, Gendler-Szabo, Zoltan, 2000. Quantifier domain restriction. Mind and Language 15, 219–261.
Strawson, Peter, 1950. On referring. Mind 15, 320–344.

Lenny Clapp received his Ph.D. in philosophy from MIT in 1994. He works in the philosophy of language and philosophy of mind. Much of his current work concerns semantic compositionality and the semantics–pragmatics interface. He is currently an Investigador at the Instituto de Investigaciónes Filosoficas, in Mexico City.

Please cite this article in press as: Clapp, L., The problem of negative existentials does not exist: A case for dynamic semantics. Journal of Pragmatics (2008), doi:10.1016/j.pragma.2008.09.031