The Referring Roses

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Stat rosa pristina nomine, nomina nuda tenemus. The original rose remains only in its name; we hold only naked names.

Umberto Eco, The Name of the Rose (1980)

Reference as Operation, Not as Mapping

1. Introduction: More Than a Tautology

Gertrude Stein's line *"a rose is a rose is a rose"*¹ is often read through literary lenses—as poetic essence, estrangement, or feminist expression. But it also raises a philosophical problem about how language refers and means.

Repetition in language need not be redundant; it can shape and ground meaning. With syntactic bracketing, we can show that Stein's phrase encodes complex referential dynamics, not mere repetition.

2. The Surface Repetition

Take the simpler form: *"a rose is a rose."* It appears tautological but is experienced by many as meaningful. One reason is that the two instances of *"rose"* seem to serve different roles.

The first "*a rose*" may refer to a linguistic or conceptual token; the second may invoke the perceptual experience of a rose. The statement suggests that naming reaches toward something richer than itself—the sensory or lived presence of a rose.

This ambiguity is central. Without context, we cannot fix the referent. But Stein's sentence foregrounds this instability, making it part of its structure.

3. Bracketing the Sentence

Bracketing helps reveal the sentence's structure and semantic possibilities. Two forms stand out:

- (a rose is a rose) is a rose the inner phrase functions as a subject.
- a rose is (a rose is a rose) the inner phrase functions as predicate.

Each reading highlights a different kind of semantic recursion.

¹ **Stein, Gertrude**. 1922. "Sacred Emily." In *Geography and Plays*, 187–193. Boston: Four Seas Company. In the first case, reference becomes object-like: *what we say something is, is what it is.* This suggests a deflationary reading², where reference is taken as a syntactic operation rather than a substantive link to external objects.

In the second case, we get a kind of structural realism: the object is nothing more than the unfolding of its own definition. Reference does not point beyond the sentence, but expands within it.

4. Reference as Operation

The two bracketed readings of Stein's sentence suggest that reference is not a static link between a word and an object but an **operation within language itself**. Language does not connect directly to external things; it relates signs to other signs, and from these internal relations **meaning and apparent reference emerge**.

In formal semantics (e.g., Tarski), reference is defined modeltheoretically: expressions are assigned to objects in a domain via interpretation functions. But in natural language, this mapping is often unclear or circular. Words relate to things only through **convention**, **use**, and **structural placement** within a sentence.

If reference is internal to language, we can define it more precisely as a **binary operation**:

$$\mathcal{R}(x^c, x^o)$$

Here, x^c is a **concept-word** — a linguistic token used as a general term, predicate, or descriptive type. x^o is a **word-object** — a linguistic token that functions, within the context, as a stand-in or label for an object. ³The operation

$$\mathcal{R}(x^c, x^o)$$

expresses the act of anchoring a concept-word in a particular referential use.

This notation allows us to express **recursive structures** of reference. Because the output x^o is still a word - keep in mind that x^o and x^c are the same token x in two different contexts — not two different tokens — and can itself appear in further reference operations. For example, in our case, where $rose^o$ and $rose^c$ replace x, "A rose is a rose" becomes : $\mathcal{R}(rose^c, rose^o)$. Then, our different bracketing will be written as:

• Left-nested reference (resolving toward object):

(a rose is a rose) is a rose : $\mathcal{R}(\mathcal{R}(rose^{c}, rose^{o}), rose^{o})$

Each application of \mathcal{R} draws the conceptual token toward a stabilized referential function, collapsing the recursive chain toward presence.

³ We use "concept-word" to refer to a token in its predicative or descriptive role — a term used to characterize or type objects (e.g., *rose* as "a kind of flower"). We use "word-object" to refer to the same token when it functions as a referential label — a linguistic stand-in for an individuated object. These are not different words, but different semantic roles enacted by the same sign depending on syntactic and pragmatic context. In written and spoken language a concept-word and a word-object are written and uttered the same

² **Horwich, Paul.** 1998. *Meaning*. Oxford: Clarendon Press.

Right-nested reference (deferring object):

a rose is (a rose is a rose) : $\mathcal{R}(rose^{c}, \mathcal{R}(rose^{c}, rose^{o}))$

Here, reference defers its stabilization. Each *x*^{*o*} is produced by an unresolved reference operation, delaying the anchoring of the object in favor of continued conceptual application. This structure mirrors **mediation**: the concept remains active, the referent indeterminate.

5. Two Recursive Forms as Two Poles of Mediation

Now consider the two recursive extremes:

1. Left-nested recursion:

$$\mathcal{R}(\mathcal{R}(\mathcal{R}(\mathcal{R}(\ldots, \textit{rose}^{o}), \textit{rose}^{o}), \textit{rose}^{o}), \textit{rose}^{o})$$

Here, the deepest layer begins with the stabilization of *rose* as a word-object. Each outer operation re-applies the referential structure, but always with a resolved referent. The structure contracts toward a stable term — the object-role of *rose* becomes reinforced. This captures the trajectory toward **immediate presence**.

2. Right-nested recursion:

$\mathcal{R}(rose^{c}, \mathcal{R}(rose^{c}, \mathcal{R}(rose^{c}, \mathcal{R}(rose^{c}, \dots))))$

Each application of \mathcal{R} defers the stabilization of reference. The concept-word *rose* keeps re-entering the referential operation, but the operation never grounds in a final word-object; It resembles Kant's "thing in itself"—always beyond what language can grasp.

These structures reflect the two poles between which language moves:

- One pulls toward sensory immediacy—where language grounds in perceptual contact - the left-nested recursion.
- The other pulls toward conceptual elaboration—where meaning remains open the right-nested recursion.

Language seems to mediate between these poles. It can shape sensation into sayability or stretch thought beyond what appears. Stein's sentence helps us to see this dynamic. Depending on how we bracket it, it either stabilizes or defers. Either way, it reveals that language is not only a conduit between word and object, but can be seen as a patterned field in which experience and expression come to meet This model shifts our understanding of reference. Rather than linking words to objects (as in denotational theories), reference appears **here** as a rule-governed transformation among signs. ⁴ Its output is not a fixed referent but a structured linguistic position — a role that stabilizes meaning through syntax. In this sense, reference operates beyond denotation: not by eliminating it, but by subordinating it to internal operations that generate semantic coherence without pointing beyond language.

5.bis. A note on Saussure' and Peirce's views

Indeed, this thoroughly internalist conception of reference aligns with classic structuralist and semiotic insights. As Saussure observed, language is "a system of only conceptual differences" in which each sign's identity is defined by its relations to other signs.⁵ The present model operationalizes this insight by treating reference itself as an invariant pattern within the sign-system—a rule-governed mapping that yields a stable *semantic role* (the "structured linguistic position" of a term) entirely through intra-linguistic relations. Peirce's triadic theory of signs offers a complementary perspective: a sign signifies only in being interpreted, i.e., through the mediation of an interpretant sign.⁶ In other words, even for Peirce the referential "object" is grasped only via a chain of signs. By reframing reference as such a closed semantic transformation—one that generates meaning by recursion on signs rather than by attaching words to things-the essay extends Saussure's and Peirce's principles. It converts their qualitative insights into a rigorous rule-based account: reference becomes a function of structural invariances within language, achieving the coherence that Saussure and Peirce theorized, but without presupposing any extralinguistic reference point. In this way, the stability of meaning emerges from the syntax and interplay of signs themselves, in harmony with structuralist internalism and Peircean semiosis, yet now articulated as a precise formal mechanism.

6. Classical Models in Contrast

Philosophical theories of reference aim to explain how language connects with the world. Stein's sentence offers a model to resist these classical accounts by sidestepping their assumptions.

Kripke proposed that names refer rigidly via causal chains⁷. Stein's repetition, however, **re-enacts reference**. Each "rose" compacts the causal chain into a single utterance, diverging from Kripke's historical anchoring.

Frege's *Sinn/Bedeutung*⁸ distinction collapses here: recursion **dissolves sense into syntactic operation** (and, again, showing that both sense

⁴ Simply said, this is a strong semantic anti-realist (internalist) view of reference: all we can rely on in language are signs — not mindindependent objects. Reference operates within the system of expressions, not between expressions and external things.; we can't build sentences with actual objects. In this sense, the denoted object is still a word in the sentence so that the reference operation is closed within the structure of the language we use.

⁵ Ferdinand de Saussure, *Course in General Linguistics*, trans. Wade Baskin (New York: McGraw-Hill, 1966 [1916]), 120.

⁶ Charles Sanders Peirce, *Collected Papers of Charles Sanders Peirce*, eds. Charles Hartshorne and Paul Weiss (Cambridge, MA: Harvard University Press, 1931–1958), 2.228–229.

⁷ Kripke, Saul. 1980. Naming and Necessity. Cambridge, MA: Harvard University Press.

⁸ Frege, Gottlob. 1948. "Sense and Reference." Translated by Max Black. *The Philosophical Review* 57 (3): 209–230. (Original work published 1892). and reference are more like asymptotic results rather that definite 'things')

Tarski's model-theoretic reference⁹ falters against **non-representational recursion**, where meaning arises from bracketing, not assignment. This may align with **deflationism** (Horwich, 1998) in minimizing reference's substantive role.

7. Language in Use

Brandom's inferentialism¹⁰ treats meaning not as reference to objects, but as the role a sentence plays in reasoning—its place in a network of inferential commitments and entitlements. In Stein's case, this inferential structure is interrupted: instead of supporting logical progression (e.g., "roses are red, so this flower is red"), the repetition loops back on itself.

Wittgenstein's *language-games*¹¹ apply here: repetition acts as **pragmatic operation**, grounding meaning in use. Just as saying "I promise!" performs an action, Stein's "rose" performs meaning (the classic example of a performative utterance in speech-act theory, Stein's 'rose' performs meaning¹²)—it doesn't describe a flower but enacts one.

8. Counterarguments

A referential realist might argue that even recursion presumes stable objects. If I say "rose" three times, don't I still mean the flower? Stein's repetition complicates rather than withholds ostension.¹³ The first "rose" may establish a conventional reference, but each repetition transforms this reference—not by pointing to different objects, but by shifting how reference itself operates. The word becomes both vehicle and object of reference simultaneously, challenging the assumption that reference must be outward-directed.

A truth-conditional semanticist could claim bracketing requires a meta-language. For Tarski, to say "snow is white" is true, you need a higher language to define truth. But Stein's recursion internalizes hierarchy—there's no "outside" perspective. The sentence folds its meta-structure into itself, rejecting Tarski's stratification. Like a painting that includes its own frame, Stein's sentence, when bracketed, seems to absorb its rules.¹⁴

A Davidsonian might object that even operational accounts require truth conditions. Davidson's program¹⁵ treats meaning through truth in possible scenarios—seemingly incompatible with my account. However, recursive reference doesn't eliminate truth but

⁹ **Tarski, Alfred.** 1956. "The Concept of Truth in Formalized Languages." In *Logic, Semantics, Metamathematics: Papers from 1923 to 1938,* translated by J. H. Woodger, 152–278. Oxford: Clarendon Press.

¹⁰ **Brandom, Robert.** 1994. *Making It Explicit: Reasoning, Representing, and Discursive Commitment*. Cambridge, MA: Harvard University Press.

¹¹ Wittgenstein,

Ludwig. 1953. *Philosophical Investigations*. Translated by G. E. M. Anscombe. Oxford: Blackwell.

¹² **Austin J. L.** 1994. *How to Do Things with Words*. Cambridge, MA: Harvard University Press.

¹³ It is also to note here that whether x^o or x^c are used for x, that depends entirely of the syntactic context, so "i mean the flower", i.e. x^o if its relation in the sentence to other elements asks for it

¹⁴ This 'absorbtion' is possible, again, because only syntactic context determines whether an x is an x^o or x^c

¹⁵ **Davidson, Donald.** 1984. "Truth and Meaning." In *Inquiries into Truth and Interpretation*, 17–36. Oxford: Clarendon Press. relocates it: truth emerges not from word-object correspondence but from the successful execution of reference operations. This resembles truth in performatives ("I promise" is true by being uttered correctly), suggesting that reference can be evaluable without direct mapping to objects.¹⁶

9. Possible Implications for Philosophy of Language

This account does not propose a new theory, but isolates structural features of reference revealed through Stein's verse. Some broader implications may follow.

First, it suggests that meaning can arise from syntactic structure alone, without requiring representational content—potentially connecting to dynamic or use-based semantics ¹⁷

Second, it treats self-referential constructions not as anomalies, but as structurally productive.

Third, it gestures toward a position between direct reference (Kripke) and descriptive theories (Frege), locating meaning in linguistic operations rather than causal chains or conceptual content.

Fourth, and probably not last, this approach hints to a purely syntactic (or proof-theoretic) semantics of reference, which might offer new insights into *self-referential language*, *circular definitions*, or *reference in natural language when context is minimal*. For example, it provides a framework to think about sentences like "I am I" or "This is this" and other apparent tautologies that communicate something emphatic or performative.

These directions require further analysis, but they outline a space for extending the operational view of reference beyond the specific case of Stein's verse. ¹⁶ There is a valid question about what truth-theoretic account — i.e., conditions under which a sentence like $\mathcal{R}(rose^{c}, \mathcal{R}(rose^{c}, rose^{o}))$ is true but this completely exceeds the limits of this paper

¹⁷ In dynamic semantics, the meaning of a sentence is viewed not as its truthcondition but as its potential to change the context or information state.

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