

# Intension in Literature

SETH EBNER  
*Johns Hopkins University*  
May 18, 2018

## A Puzzle

The 1955 Allen Ginsberg poem “A Supermarket in California” follows the poet and his musings as he wanders through the aisles of a store. Two lines in particular are of interest:

- (1) “...and you, Garcia Lorca, what were you doing down by the watermelons?”
- (2) “Where are we going, Walt Whitman? The doors close in an hour. Which way does your beard point tonight?”

Walt Whitman and Federico Garcia Lorca were two poets who lived in the 19th and early 20th centuries, respectively—well before “A Supermarket in California” was written. Additionally, Whitman died before either Garcia Lorca or Ginsberg were born. Garcia Lorca died when Ginsberg was 10 and (almost assuredly) did not travel to California in his lifetime.

With this biographical context, we can see that the scene described in the poem cannot have occurred in the real world. The three men did not co-exist in the way suggested. However, the reader has little difficulty envisioning the scene and interpreting the lines. **How are we able to interpret these lines from the poem?**

## The Data

In this section, we present some judgments on statements one could make about the poem.

Since the poem is a work of fiction, perhaps some of the characters in it are fictional representations of real-world people. We begin with some statements about the people represented in the poem:

- (3) In the poem, (the narrator) Allen Ginsberg saw (a fictional version of) Garcia Lorca by the watermelons.

- (4) \* In the poem, (the narrator) Allen Ginsberg saw (the actual) Garcia Lorca by the watermelons.
- (5) \* In the poem, (the actual) Allen Ginsberg saw (a fictional version of) Garcia Lorca by the watermelons.
- (6) \* In the poem, (the actual) Allen Ginsberg saw (the actual) Garcia Lorca by the watermelons.

We can also make judgments on statements that describe the events of the poem as if they had happened in the real world:

- (7) \* In the real world, (the narrator) Allen Ginsberg saw (a fictional version of) Garcia Lorca by the watermelons.
- (8) \* In the real world, (the narrator) Allen Ginsberg saw (the actual) Garcia Lorca by the watermelons.
- (9) \* In the real world, (the actual) Allen Ginsberg saw (a fictional version of) Garcia Lorca by the watermelons.
- (10) In the real world, (the actual) Allen Ginsberg saw (the actual) Garcia Lorca by the watermelons. (acceptable but patently false)
- (11) \* In the real world, (the narrator) Allen Ginsberg wrote about seeing (a fictional version of) Garcia Lorca by the watermelons.
- (12) \* In the real world, (the narrator) Allen Ginsberg wrote about seeing (the actual) Garcia Lorca by the watermelons.
- (13) In the real world, (the actual) Allen Ginsberg wrote about seeing (a fictional version of) Garcia Lorca by the watermelons.
- (14) In the real world, (the actual) Allen Ginsberg wrote about seeing (the actual) Garcia Lorca by the watermelons. (acceptable [e.g., he wrote about it in a diary] but false)

## A First Pass Analysis

We must explain the distribution of judgments on the sentences in the previous section.

From the data, it appears that clauses may not mix “real-world” entities with “literary” entities. Additionally, in literary contexts/clauses (“in the poem”), all entities must be literary, and in real-world contexts/clauses, all entities must be interpreted relative to the real world.

(13) may appear to be an exception to these observations, but it is consistent because it is actually an elided form of: “In the real world, (the actual) Allen Ginsberg wrote (a poem) about (a fictional version of himself) seeing (a fictional version of) Garcia Lorca by the watermelons.”

## The literary intension

A possible explanation for this observation is that instead of *Garcia Lorca* referring to the unique real-world entity, it refers to any entity that satisfies the *intension* of the entity commonly referred to as “Garcia Lorca”, minus any spatiotemporal components of that intension. That is, *Garcia Lorca* could refer to any entity that satisfies  $spanish'(x) \wedge poet'(x) \wedge \dots$  but not necessarily satisfying  $has - traveled - to'(x, California) \wedge lifespan'(x, 1898, 1936) \wedge \dots$ . In other words, in a literary setting, “Garcia Lorca” is something of a weak or perhaps non-rigid designator.

A lexical entry for *Garcia Lorca* might be:

$$[[Garcia Lorca]]^w = \iota x. spanish'(x, w) \wedge poet'(x, w) \wedge \dots$$

Abstracting over worlds, we get the intension:

$$[[Garcia Lorca]]_d = \lambda w. \iota x. spanish'(x, w) \wedge poet'(x, w) \wedge \dots$$

of type  $\langle s, e \rangle$ .

We’ll call such an intension that ignores spatiotemporal aspects of the entity the *literary intension* and any entity picked out by the literary intension a *literary entity*. The relaxation on the spatiotemporal components of the intension allows for displacement and the so-called “willing suspension of disbelief” that is ubiquitous in literature.

## Worlds of literary evaluation

What entity in the real world would satisfy that intension? Does one exist? The only entity to satisfy it would be real-world Garcia Lorca, but we know this interpretation won’t work because Ginsberg and Garcia Lorca didn’t co-exist!

Some other interpretation is needed, which means we must evaluate with respect to a world that is not the real world. Evaluating in a different world offers an explanation for why clauses don’t seem to allow mixing of real-world and literary entities: the evaluation world for a “real-world” entity is the real world, whereas the evaluation world for a literary entity is some other (im)possible world. The world of literary evaluation is not the real world. The structure of the intension bears the constraint that only one entity can be, for example, Garcia Lorca in a given world; there cannot be both a real-world and literary Garcia Lorca in the same world. In cases where both kinds of entity are present, there is a clash regarding which world to evaluate the statement in, yielding an unacceptable/uninterpretable utterance.

To avoid having two worlds of evaluation in a single utterance, we choose to interpret all entities in the world of literary evaluation, regardless of whether they are seemingly real-world or literary. To this end, entities that exist in the real world are transformed

into literary intensions that are evaluated in the world of literary evaluation. One realization of this is that the narrator Allen Ginsberg is not the real-world Allen Ginsberg, but rather an entity in the world of literary evaluation that satisfies Allen Ginsberg's literary intension.

## Interpretations under the proposal

An interpretation of "Garcia Lorca is near the watermelons" would be:

$$[[\text{Garcia Lorca}]]^{w_{lit}} = \iota x. \text{spanish}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots$$

$$[[\text{near}]]^{w_{lit}} = \lambda y. \lambda x. \text{near}'(x, y, w_{lit})$$

$$[[\text{the watermelons}]]^w = \iota x. \text{watermelon}'(x, w)$$

$$[[\text{near the watermelons}]]^{w_{lit}}$$

$$= [[\text{near}]]^{w_{lit}} ([[ \text{the watermelons} ]])^{w_{lit}}$$

$$= \lambda x. \text{near}'(x, \iota y. \text{watermelon}'(y, w_{lit}), w_{lit})$$

$$[[\text{Garcia Lorca near the watermelons}]]^{w_{lit}}$$

$$= [[\text{near the watermelons}]]^{w_{lit}} ([[ \text{Garcia Lorca} ]])^{w_{lit}}$$

$$= \text{near}'(\iota x. \text{spanish}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots, \iota y. \text{watermelon}'(y, w_{lit}), w_{lit})$$

And an example demonstrating the "lifting" of Allen Ginsberg from a real-world entity to a literary entity:

$$[[\text{Allen Ginsberg}]]^w = AG'$$

$$[[\text{Allen Ginsberg}]]^{w_{lit}} = \iota x. \text{american}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots$$

$$[[\text{Garcia Lorca}]]^{w_{lit}} = \iota x. \text{spanish}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots$$

$$[[\text{see}]]^w = \lambda y. \lambda x. \text{see}'(x, y, w)$$

$$[[\text{see Garcia Lorca}]]^{w_{lit}}$$

$$= [[\text{see}]]^{w_{lit}} ([[ \text{Garcia Lorca} ]])^{w_{lit}}$$

$$= \lambda x. \text{see}'(x, \iota y. \text{spanish}'(y, w_{lit}) \wedge \text{poet}'(y, w_{lit}) \wedge \dots, w_{lit})$$

$$[[\text{Allen Ginsberg saw Garcia Lorca}]]^{w_{lit}}$$

$$= [[\text{saw Garcia Lorca}]]^{w_{lit}} ([[ \text{Allen Ginsberg} ]])^{w_{lit}}$$

$$(\neq [[\text{saw Garcia Lorca}]]^{w_{lit}} ([[ \text{Allen Ginsberg} ]])^w)$$

$$= \text{see}'(\iota x.\text{american}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots, \iota y.\text{spanish}'(y, w_{lit}) \wedge \text{poet}'(y, w_{lit}) \wedge \dots, w_{lit})$$

If we had used  $[[\text{Allen Ginsberg}]]^w = AG'$  in our interpretation, we would have calculated that the real-world Allen Ginsberg saw a literary version of Garcia Lorca in the world of literary evaluation, which is judged as unacceptable. The real Allen Ginsberg cannot see literary entities, nor does he exist in literary worlds, where he purportedly did the seeing. We must use  $[[\text{Allen Ginsberg}]]^{w_{lit}} = \iota x.\text{american}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots$  instead.

One of the more involved and interesting sentences presented may be (13), which we rephrase as: “Allen Ginsberg wrote that Allen Ginsberg saw Garcia Lorca”:

$$[[\text{Allen Ginsberg}]]^w = AG'$$

$$[[\text{Allen Ginsberg}]]^{w_{lit}} = \iota x.\text{american}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots$$

$$[[\text{Garcia Lorca}]]^{w_{lit}} = \iota x.\text{spanish}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots$$

$$[[\text{see}]]^w = \lambda y.\lambda x.\text{see}'(x, y, w)$$

$$[[\text{write}]]^w = \lambda p.\lambda x.\text{write}'(x, p, w)$$

$$[[\text{see Garcia Lorca}]]^{w_{lit}}$$

$$= [[\text{see}]]^{w_{lit}}([[ \text{Garcia Lorca} ]])^{w_{lit}}$$

$$= \lambda x.\text{see}'(x, \iota y.\text{spanish}'(y, w_{lit}) \wedge \text{poet}'(y, w_{lit}) \wedge \dots, w_{lit})$$

$$[[\text{Allen Ginsberg saw Garcia Lorca}]]^{w_{lit}}$$

$$= [[\text{saw Garcia Lorca}]]^{w_{lit}}([[ \text{Allen Ginsberg} ]])^{w_{lit}}$$

$$(\neq [[\text{saw Garcia Lorca}]]^{w_{lit}}([[ \text{Allen Ginsberg} ]])^w)$$

$$= \text{see}'(\iota x.\text{american}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots, \iota y.\text{spanish}'(y, w_{lit}) \wedge \text{poet}'(y, w_{lit}) \wedge \dots, w_{lit})$$

$$[[\text{wrote that Allen Ginsberg saw Garcia Lorca}]]^w$$

$$= [[\text{wrote}]]^w([[ \text{Allen Ginsberg saw Garcia Lorca} ]])^{w_{lit}}$$

$$= \lambda a.\text{write}'(a, \text{see}'(\iota x.\text{american}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots, \iota y.\text{spanish}'(y, w_{lit}) \wedge \text{poet}'(y, w_{lit}) \wedge \dots, w_{lit}), w)$$

$$[[\text{Allen Ginsberg wrote that Allen Ginsberg saw Garcia Lorca}]]^w$$

$$= [[\text{wrote that Allen Ginsberg saw Garcia Lorca}]]^w([[ \text{Allen Ginsberg} ]])^w$$

$$= \text{write}'(AG', \text{see}'(\iota x.\text{american}'(x, w_{lit}) \wedge \text{poet}'(x, w_{lit}) \wedge \dots, \iota y.\text{spanish}'(y, w_{lit}) \wedge \text{poet}'(y, w_{lit}) \wedge \dots, w_{lit}), w)$$

A paraphrase of the resulting predicate is that the real-world Allen Ginsberg wrote about literary Allen Ginsberg seeing literary Garcia Lorca.

We could have chosen to evaluate all entities with respect to the real-world instead of the world of literary evaluation, in which case we would have derived:

$$\text{write}'(AG', \text{see}'(AG', GL', w), w)$$

paraphrased as the real-world Allen Ginsberg writing about the real-world Allen Ginsberg seeing the real-world Garcia Lorca. This utterance is interpretable but false. Note that in either case, both entity arguments to *see* must be interpreted relative to the same world of evaluation.

## Some Problems

Some problems with the above analysis are apparent: how do we enumerate all the terms in the literary intension? Is enumeration even how we want to define the literary intension? How do we determine which world is the world of literary evaluation?

There are countless (possibly infinite) terms that could appear in an entity's literary intension: where were they born, what was their occupation, what were their experiences, what were their accomplishments? We could imagine the literary intension of Garcia Lorca listing off all his written works. Enumerating all of these items is cumbersome, error-prone, and doesn't satisfyingly get to the essence of the entity, which is what the literary intension is attempting to capture in the first place.

There is another problem with enumeration. If the literary world is one in which the literary entity differs from the real-world entity in a purposeful and meaningful way—say, in an alternate history—then the enumerative approach will fail. Even though Garcia Lorca wrote *Blood Wedding*, we could imagine (real) Ginsberg concocting an alternate timeline where he doesn't write it and in which (literary/narrator) Ginsberg chides (literary) Garcia Lorca for not writing *Blood Wedding*.

If the literary intension of Garcia Lorca were to include *author-of'*( $x, \text{Blood Wedding}, w$ ), then there (potentially) would be no entity satisfying the literary intension in the world of literary evaluation, under the assumption that the world of literary evaluation has already been determined. The interpretation of the utterance would then fail. The selection of the world of literary evaluation is discussed below.

Another problem to address is that of determining which world (or worlds) is the world of literary evaluation. The modal base for "A Supermarket in California" cannot be as restrictive as in the real world because the three poets did not co-exist (and more

generally due to the existence of alternate histories in literature), so we must specify what criteria a world of literary evaluation must satisfy.

## A Second Pass Analysis

### A new definition of the literary intension

We appeal to a cleaner definition of the literary intension, such as the following:

$[[\text{Garcia Lorca}]]_d = \lambda w. \lambda x. x$  is similar to the real-world Garcia Lorca

(with the presupposition that  $x$  exists in  $w$ )

where the ordering source is one based on the similarity of the truth values of salient “deeds” (experiences, accomplishments, etc.) between the literary and real-world entities.

Since an alternate history seems to have the ability to falsify any property of a real-world entity in the world of literary evaluation (imagining that Garcia Lorca didn’t write *Blood Wedding*), we may be inclined to be conservative and say that the modal base is empty.

Where, then, did the information contained in the enumerative definition of the literary intension go? Surely the definition above is too vague to be of use.

### The epistemic modal base

Instead of mandating that the modal base be empty, we propose that the modal base consists of predicates so fundamental to the real-world entity that to falsify one of them would be nearly infelicitous, unenvisionable, or uninterpretable. For example, the modal base concerning Garcia Lorca would include the fact that he was Spanish and that he was a poet, as it would be extremely difficult to imagine him as something else, such as an Italian or a diplomat. Because these facts in the modal base are based on knowledge of the real-world entity, the modal base is epistemic.

In this sense, the modal base contains some terms from the enumerative literary intension. However, many predicates that would appear in the enumerative intension do not appear in the modal base and initially have underdetermined truth values, such as whether Garcia Lorca wrote *Blood Wedding* or whether he was alive in 1955. This allows for such predicates to be refuted in the world of literary evaluation while preserving interpretability.

### Determining the world(s) of literary evaluation

We then have a set of possible worlds of literary evaluation, in each of which the modal base is satisfied and other real-world truths about entities are left unspecified. Each new

assertion or implication presented in the poem refines this set in a manner similar to Stalnaker’s proposal.

The set of possible worlds where the assertion is true is intersected with the set of possible worlds of literary evaluation to yield an updated set of possible worlds of literary evaluation. In some possible worlds of literary evaluation, Garcia Lorca is alive in 1955, and we update our context set to reflect this inference derived from the poem.

## Predictions

We now apply the second pass analysis to a statement regarding Walt Whitman in the poem.

“Allen Ginsberg looked at Walt Whitman’s beard.”

We predict that this statement can only be interpreted when *Allen Ginsberg* and *Walt Whitman* are evaluated as literary entities in the world of literary evaluation.

$$[[\text{Allen Ginsberg}]]^w = AG'$$

$$[[\text{Walt Whitman}]]^w = WW'$$

$$[[\text{Allen Ginsberg}]]^{w_{lit}} = \iota x.x \text{ similar to } AG' \text{ (} x \text{ exists in } w_{lit}\text{)}$$

$$[[\text{Walt Whitman}]]^{w_{lit}} = \iota x.x \text{ similar to } WW' \text{ (} x \text{ exists in } w_{lit}\text{)}$$

$$[[\text{look-at}]]^w = \lambda y.\lambda x.\text{look} - at'(x, y, w) \text{ (} x, y \text{ co-exist in } w\text{)}$$

$$[[\text{'s beard}]]^w = \lambda x.\text{beard}'(x) \text{ (type: } \langle e, e \rangle\text{)}$$

$$[[\text{Walt Whitman's beard}]]^{w_{lit}}$$

$$= [[\text{'s beard}]]^{w_{lit}} ([[ \text{Walt Whitman} ]])^{w_{lit}}$$

$$= \text{beard}'(\iota x.x \text{ similar to } WW') \text{ (} x \text{ exists in } w_{lit}\text{)}$$

$$[[\text{looked at Walt Whitman's beard}]]^{w_{lit}}$$

$$= [[\text{look-at}]]^{w_{lit}} ([[ \text{Walt Whitman's beard} ]])^{w_{lit}}$$

$$= \lambda z.\text{look} - at'(z, \text{beard}'(\iota x.x \text{ similar to } WW'), w_{lit})$$

$$\text{(} x \text{ exists in } w_{lit}; z \text{ and } \text{beard}'(\iota x.x \text{ similar to } WW') \text{ co-exist in } w_{lit}\text{)}$$

$$[[\text{Allen Ginsberg looked at Walt Whitman's beard}]]^{w_{lit}}$$

$$= [[\text{looked at Walt Whitman's beard}]]^{w_{lit}} ([[ \text{Allen Ginsberg} ]])^{w_{lit}}$$

$$= \text{look} - at'(\iota y.y \text{ similar to } AG', \text{beard}'(\iota x.x \text{ similar to } WW'), w_{lit}) \text{ (} x, y \text{ exist in } w_{lit} \text{ and co-exist in } w_{lit}\text{)}$$



If we had interpreted exactly one of *Allen Ginsberg* and *Walt Whitman* as a real-world entity, then the utterance would have been infelicitous because a real-world entity cannot look at (or be looked at by) a literary entity and because the real-world entity does not exist in  $w_{lit}$ . Interpreting both entities as real-world entities is infelicitous as well because the presupposition that the two entities co-exist in the evaluation world is violated. The only option is to interpret both entities as literary entities, which matches the prediction.

Another line in the poem is: “I saw you, Walt Whitman, childless, lonely old grubber, poking among the meats in the refrigerator...”

In a similar derivation to the one regarding Garcia Lorca, we’d calculate the following for “Allen Ginsberg saw Walt Whitman”:

$$[[\text{Allen Ginsberg}]]^w = AG'$$

$$[[\text{Walt Whitman}]]^w = WW'$$

$$[[\text{Allen Ginsberg}]]^{w_{lit}} = \iota x.x \text{ similar to } AG' \text{ (} x \text{ exists in } w_{lit} \text{)}$$

$$[[\text{Walt Whitman}]]^{w_{lit}} = \iota x.x \text{ similar to } WW' \text{ (} x \text{ exists in } w_{lit} \text{)}$$

$$[[\text{see}]]^w = \lambda y.\lambda x.see'(x, y, w) \text{ (} x, y \text{ co-exist in } w \text{)}$$

$$[[\text{see Walt Whitman}]]^{w_{lit}}$$

$$= [[\text{see}]]^{w_{lit}} ([[ \text{Walt Whitman} ]])^{w_{lit}}$$

$$= \lambda z.see'(z, \iota x.x \text{ similar to } WW', w_{lit}) \text{ (} x \text{ exists in } w_{lit} \text{)}$$

$$[[\text{Allen Ginsberg saw Walt Whitman}]]^{w_{lit}}$$

$$= [[\text{saw Walt Whitman}]]^{w_{lit}} ([[ \text{Allen Ginsberg} ]])^{w_{lit}}$$

$$(\neq [[\text{saw Walt Whitman}]]^{w_{lit}} ([[ \text{Allen Ginsberg} ]])^w)$$

$$= see'(\iota y.y \text{ similar to } AG', \iota x.x \text{ similar to } WW', w_{lit}) \text{ (} x, y \text{ exist in } w_{lit} \text{ and co-exist in } w_{lit} \text{)}$$

Interpreting the entities as real-world entities again violates the presupposition that they co-exist in the evaluation world.

In both predictions,  $w_{lit}$  is one in which the literary entities *Allen Ginsberg* and *Walt Whitman* co-exist, which is allowable in some possible worlds because the real-world requirement that they do not co-exist is not in the modal base and therefore doesn’t have to be satisfied. The truth value of their co-existence is not specified in the modal base, so there exists a non-empty set of possible worlds where the two entities do co-exist, and we can restrict the set of worlds of literary evaluation to be a subset of that set.

## Conclusion

We proposed an analysis of intension in literary settings. The literary intension of an entity captures the most salient aspects of that entity but allows for willing suspension of disbelief by leaving unspecified the truth values of many features of the entity that are true in the real world but do not necessarily have to be true in a literary setting. Such an intension might be:

$[[\text{Garcia Lorca}]]_d = \lambda w. \lambda x. x$  is similar to the real-world Garcia Lorca

accompanied by the presupposition that  $x$  exists in  $w$ . These literary intensions are evaluated with respect to a world of literary evaluation. Entities mentioned in literature are always interpreted according to their literary intension—even if they exist in the real world—to avoid having multiple worlds of evaluation in a single predicate.

Worlds of literary evaluation are those that satisfy an epistemic modal base consisting of assertions of the most essential aspects of the mentioned entities. Most aspects are left underdetermined for truth value, and the possible worlds of literary evaluation are ordered according to an ordering source that prefers the fewest number of refutations to the truth values (relative to their truth values in the real world) of these underdetermined predicates concerning the world's entities. Some examples were presented to demonstrate how this analysis plays out in the context of the Allen Ginsberg poem "A Supermarket in California".

## References

1. Saul A Kripke. Naming and necessity. In *Semantics of natural language*, pages 253–355. Springer, 1972.
2. Robert Stalnaker. On the representation of context. *Journal of Logic, Language and Information*, 7(1):3–19, 1998.
3. Kai von Fintel and Irene Heim. Intensional semantics. ms., massachusetts institute of technology, 2011.