

Empirical Evidence for FID as an Instance of Mixed Quotation

Peter Hofmann, University of Kassel

This article investigates whether Free Indirect Discourse (FID) can be analyzed as a covert form of mixed quotation. Building on formal accounts that treat FID as the selective integration of quoted and unquoted material (e.g., Maier 2015), we examine whether it satisfies the verbatim requirement typically associated with mixed quotation. In a pilot study, participants rated the acceptability of verbatim repetitions, synonyms, and lexical mismatches following short texts presented in FID, direct quotation, or a neutral control condition. Verbatim repetitions were consistently preferred across conditions, with no significant differences between presentation modes. These findings suggest that FID is compatible with direct quotation in preserving linguistic form despite lacking overt quotation markers. We interpret this as tentative support for the hypothesis that FID instantiates a covert quotation structure governed by semantic principles similar to those of mixed quotation. However, questions regarding the quotation-specific interpretation of this effect arise in the present design. Further research is needed to explore the generalizability and interpretive mechanisms underlying this phenomenon.

Keywords: free indirect discourse, mixed quotation, quotation, sentence processing

1. Introduction

Free Indirect Discourse (FID) has received considerable attention in recent linguistic accounts and has sparked ongoing debates among semanticists and pragmatists. As a narrative mode that occupies an intermediate position between direct and indirect discourse, previous studies have shown that a perspectival ambiguity characterizes FID, that is, stretches of discourse in FID mode reflect features of the narrator's and the character's perspective (Eckardt 2015, Kaiser 2015, a.o.). The seamless integration of different contexts of utterance and the resulting dual anchoring of linguistic material often leads to interpretive indeterminacy in FID processing. This has motivated competing theoretical accounts concerning the pragmatic and semantic status of FID. Currently, two main theoretical approaches to FID can be distinguished. One account treats FID mainly as a semantic phenomenon based on context shift mechanisms, a view that goes back to Schlenker (2004). The other frames FID as a form of (mixed) quotation and derives its semantic-pragmatic properties from a wider theoretical framework of quotation with a focus on mixed quotations (MQs) in particular (Maier 2015, Maier 2014a).

This paper addresses the empirical side of this debate. Recent formal accounts have analyzed MQ as a form of embedding, in which quoted linguistic material is mentioned and used at the same time (e.g., Maier 2015). The present investigation aims to determine whether FID is consistent with an MQ analysis. If so, we would expect that FID, like direct quotation (DQ), satisfies what Maier (2014b) calls the verbatim requirement: the requirement that the quoted words were indeed verbally or mentally uttered by a salient source (e.g., a protagonist) in discourse, and that they are quoted verbatim (i.e., consistent with their original linguistic form). To test this assumption, we conducted a pilot study with questionnaire-based acceptability ratings and reaction times. Our goal was to investigate whether identity relations between previously presented utterances and their lexical repetitions are preserved across different presentation modes. To evaluate the hypothesis that linguistic material anchored to the

protagonist’s context of utterance behaves similarly to direct quotation, we tested FID, DQ, and a neutral control condition without quotation. In particular, we asked whether the acceptability of subsequent verbatim repetitions of critical items differs depending on whether the original material appeared in FID or DQ. Our central hypothesis is that if FID is indeed a form of mixed quotation, verbatim repetition of the quoted material should be equally acceptable in the FID and DQ conditions. Conversely, if FID conveys only propositional content without necessarily preserving linguistic form, synonym substitutions in FID should not be degraded relative to verbatim repetitions, in contrast to DQ, where a commitment to formal identity should predict a preference for exact repetition.

Although theoretical approaches to FID abound, empirical investigations that go beyond the discussion of isolated examples are scarce. Furthermore, unlike previous experimental work on FID, which has primarily focused on the interpretation of perspective-sensitive elements (e.g., Kaiser 2015), we examine the preservation of linguistic form as a criterion for quotation-based accounts, using the verbatim requirement as a diagnostic. The present study thus shifts the focus from viewpoint interpretation to lexical identity as a core commitment of the MQ approach. To our knowledge, this has not been systematically tested yet, and we aim to contribute empirical insights to current accounts of FID and MQ. Chapters 2 and 3 outline the theoretical background for the pilot study with an emphasis on the characteristics of MQ and different approaches to describing FID. Chapters 4 and 5 present our experimental method and the results of our pilot study, and Chapter 6 discusses the implications of our findings for recent theories of FID and (mixed) quotation.

2. Mixed quotation

Quotation is a metalinguistic device that allows speakers to refer to language itself, and different forms of quotation reflect different ways in which linguistic material can be represented. Traditionally, four main types are distinguished: pure quotation, direct quotation, indirect quotation, and mixed quotation (e.g., Cappelen & Lepore 2007). Pure quotation involves mentioning an expression without using it denotationally. In sentences like (1), the focus lies entirely on the linguistic form, and the quoted material is semantically inert within the larger clause structure (Davidson 1979). By contrast, DQ represents a verbally or mentally uttered expression verbatim, typically marked by quotation marks and often introduced by *verba dicendi* or *cogitandi* as in (2). While DQ preserves the original wording, it maintains a clear boundary between speaker and quoted linguistic material, thus allowing for integration of previous utterances into a new discourse. Indirect discourse, as in (3), adjusts the original wording of an utterance (2) to the context of utterance of the actual speaker, for instance, through shifting pronouns and tense. MQ occupies a hybrid position between these two poles. It allows speakers to embed parts of a prior utterance verbatim into a new syntactic and semantic context, combining the use and mention components of quotation. Thus, in MQ, the quoted material contributes to the at-issue content while simultaneously invoking the very linguistic form attributed to an original speaker. In this way, linguistic features of the quoted material, such as dialects or sociolects, can be reflected within a new utterance (Potts 2007, Maier 2015). In examples like (4), the quoted phrase contributes semantically to the sentence while also pointing back to the exact words used by the original speaker (De Brabanter 2017).

- (1) “Sofa” has two syllables.

- (2) She said, “I’m tired”.
- (3) Emma said that she was tired.
- (4) Ben declared he’s going to “kick up a huge fuss” today.

As De Brabanter (2023) argues, the presence of quotation marks is not a necessary condition for quotation, even in the case of hybrid or mixed quotation.¹ What licenses the quotative interpretation is then not the typographic marking, but the speaker’s intentional act of quoting. That implies that quoted material is linked to an original utterance situation by an iconic act of depiction rather than by a dedicated syntactic operator or graphemic marking. Numerous examples demonstrate that MQs can occur without quotation marks, particularly when the quoted material is contextually salient or recognizable to the reader. Consider example (5), taken from De Brabanter (2023) and originally from the news magazine *New Statesman*, where *poor, yearning, tired huddled masses* is an altered quote from the inscription on the base of the Statue of Liberty, written by Emma Lazarus.

- (5) So ended the attempts of these poor, yearning, tired huddled masses to gain asylum in the US.

Crucially, accounts of mixed quotation differ with regard to the status of the lexical identity required between the original (source) utterance and the quoted (target) instance. The depiction framework allows for alterations of the source utterance, claiming that selective resemblance to a salient target utterance suffices for a quotational interpretation. On this view, quotation is licensed by the speaker’s act of depiction and the hearer’s recognition of the target, rather than by strict form identity. By contrast, other accounts tie quotation more tightly to a contextually established level of verbatimness between the source and target utterance (Maier 2014b). Once such a standard of precision, or verbatim requirement, is set, the speaker is committed to reproducing the quoted material accordingly. A key consequence is opacity: MQ is not transparent when lexical material is substituted with synonyms, since what is preserved is not only propositional content but also linguistic form. Thus, synonym substitutions in the target utterance may violate the conditions on mixed quotation, even when they would be acceptable in other instances of quotation, like indirect discourse (Maier 2014b).

A domain in which quotation is particularly prominent is narrative discourse. Narrative texts are characterized by overlapping communicative configurations in which multiple potential sources of utterance may be implicated, often through several protagonists. Typically, at least three communicative instances are distinguished: the author, the narrator, and the protagonist (Zeman 2018). These instances may overlap within a single stretch of discourse, giving rise to structurally complex constellations of perspective and voice. Such overlapping utterance situations create a setting in which linguistic material can be attributed to different communicative instances without explicit marking (e.g., graphemically). Therefore, narrative discourse has become a central testing ground for theories of quotation and perspective representation in recent linguistic research. The subtle interplay between narrator and protagonist perspectives becomes especially apparent in FID. In what follows, two prominent approaches to FID are outlined, and their fundamental assumptions are contrasted. On this basis, the pilot study is derived as an empirical contribution to the debate concerning the representational status of FID and its potential analysis as an instance of mixed quotation.

¹ For the recent article, I use hybrid and mixed quotation synonymously (see De Brabanter 2023).

3. Semantic and pragmatic accounts of FID

FID is a narratological device that has traditionally been described as a mixed form between direct and indirect discourse (e.g., Fludernik 1993). Its most striking feature is the perspectival ambiguity that arises through the combination of narrator and character viewpoints. Although FID has long been a subject of interest in literary studies, it has only recently attracted growing attention in linguistic research, particularly with regard to its formal description. FID is characterized by the anchoring of referential expressions to the context of the narrative instance, which are usually realized by the 3rd person singular, the use of verb forms in the preterite and indicative, and the occurrence without an introductory *verbum dicendi* (Eckardt 2015). It typically appears without graphematic marking such as quotation marks, which complicates its demarcation from the surrounding narrative discourse and facilitates subtle transitions of narrative modes (Fludernik 1993). Consider example (6), adapted from Maier (2015), as an instance of FID.

- (6) Ashley was lying in bed freaking out. Tomorrow was her six year anniversary with Spencer and it had been the best six years of her life.

Crucially, non-speaker-oriented referential expressions and tense are bound to the narrator's perspective and thus generally assumed to be non-shiftable in this context, while indexicals like *tomorrow* are interpreted with respect to the context of utterance of the speaker (i.e., Ashley). In DQ, on the other hand, all context-dependent expressions are licensed through the context of utterance of the speaker, as illustrated in (7), and in indirect discourse, they are shifted to the context of utterance of the narrator, as in (8).

- (7) She thought to herself, 'Tomorrow is my six year anniversary with Spencer'.
(8) She thought to herself that the next day was her six year anniversary with Spencer.

It is characteristic of FID that the contexts of utterance of the narrative instance and a character overlap during the processing of a text passage. This mixture results in a dual anchoring of utterances, blending narrative framing with figural subjectivity (Kaiser 2015). Formally, this dual anchoring has prompted different semantic and pragmatic approaches to account for the interpretive structure of FID. One influential proposal is the two-context approach, as developed by Schlenker (2004) and refined by Eckardt (2015). Under this view, FID is interpreted relative to two sets of contextual parameters: one pertaining to the narrator's context of utterance and another to the protagonist's context of utterance or thought. Crucially, the theory predicts a systematic division of labor between these two contexts, indicated by a context-shifting parameter. Rigid indexicals, such as pronouns, are anchored in the narrator's context of utterance. In contrast, shiftable expressions, including temporal adverbials and evaluative particles, reflect the character's perspective through anchoring to their context of utterance (Eckardt 2015). This approach allows the encoding of subjective information through context-shifting without the explicit use of quotative structures.

An alternative theoretical account frames FID not merely as a context-shifting but as a quotational device. Building on earlier observations by Banfield (1982) and Recanatì (2001) and formalized by Maier (2014a, 2015), this quotation-based analysis interprets FID as a covert

form of MQ. In contrast to the two-context model, the MQ approach treats the shifted parts of an FID passage as instances of quotation. That is, they retain their status as reproduced linguistic material rather than being adapted to the narrator's context. Thus, the interpretation of FID as MQ posits a covert operator that anchors the quoted material to the character's original words or thoughts, thereby preserving both the form and epistemic perspective of the source utterance (Maier 2015). As discussed in Chapter 2, there are different approaches to the notion of verbatimness between source and target utterances in MQ. Under the assumption that FID is a form of MQ in Maier's (2014a, 2015) sense, it is plausible to treat it as instantiating a relatively high contextual standard of precision, as it is used to render a protagonist's perspective through their individual language use. Empirical and theoretical motivations for this assumption are manifold. For instance, cases where FID preserves non-standard linguistic features such as sociolects, dialectal forms, or emotionally charged lexis suggest that the embedded content is not merely a paraphrase of the character's speech or thoughts but retains the very wording of the source utterance (Maier 2015). Moreover, the presence of perspective-sensitive and speaker-oriented elements such as epistemic adverbials or expressive particles in FID (Kaiser 2015) lends further support to the hypothesis that FID operates as a representational mode in which original figural language is preserved (Maier 2015). In this sense, the semantic and pragmatic anchoring of the quoted material to the source utterance is emphasized: it is interpreted as language reproduced verbatim, not merely regarding propositional content, but also invoking a commitment to formal identity and opacity (Maier 2014b).

The MQ account also accommodates the observation that FID often gives rise to interpretive ambiguities: it is frequently unclear whether an utterance is to be attributed to the narrator or the character. From a quotation-based perspective, this ambiguity is not a defect but a feature of the mode, arising from the selective quotation of character language combined with unquoted elements adapted to the narrative context. This distinction follows from the fact that only certain categories of expressions, for instance, indexicals and expressive items, can be preserved verbatim as quoted material, while morphosyntactic features such as tense and person typically undergo unquotation to fit the surrounding narration (Maier 2014a, Maier 2015). Crucially, Maier (2015) dispenses with the need for a rigid grammatical split between shiftable and unshiftable indexicals and instead attributes perspectival shifts in FID to the pragmatic interplay between quotation and unquotation. Evidence for this view comes from the observation that in some cases of FID, the protagonist's epistemic authority can override expressions that are considered unshiftable in other accounts, such as pronouns and proper names (Maier 2015). A quotational approach allows more flexible shifts based on pragmatic mechanisms rather than treating context-dependency as the main force behind the dual anchoring of perspective-sensitive expressions in FID passages (Maier 2015).

Based on Maier (2015), we assume that if FID can be understood as a case of MQ, that is, a structure in which linguistic material is both used and mentioned, it should preserve the verbatim requirement through consistency with the linguistic form attributed to the protagonist's original utterance or thought. This would support the claim that FID licenses similar identity effects between an original utterance and its subsequent use, as in MQ. Furthermore, synonym substitutions are predicted to be degraded relative to exact repetitions, since MQ is expected to be opaque with respect to lexical substitution (Maier 2014b). According to this view, FID could function as a form of covert MQ: a structure that embeds verbatim content without overt quotation markers or a reporting clause, while still maintaining a semantic commitment to the wording of the original utterance. If this analysis is correct, then FID should behave similarly to DQ regarding the consistency of linguistic form, and the quoted

material in an FID passage should be interpreted as the protagonist's verbatim utterances and not as paraphrases by the narrator.

The pilot study identifies the verbatim requirement as a critical diagnostic for evaluating whether FID can be treated as an instance of mixed quotation. Consequently, if the quoted material in FID is interpreted verbatim, as in DQ, then exact repetitions should be judged more acceptable than synonym substitutions in a rating study. In contrast, if the speaker-oriented material in FID is not interpreted verbatim, synonym substitutions should be evaluated on a par with identical repetitions. It is important to note that it is not in question that perspective-sensitive elements in FID overlap with those found in DQ. In fact, this observation constitutes the starting point for Maier's (2015, 2014a) proposal to treat FID as a form of quotation. The present study, however, does not investigate this overlap *per se*. Rather, it examines whether the verbatim requirement associated with DQ (where a full shift to the protagonist's context of utterance occurs) is comparable to the partial shift to the protagonist that we observe in FID. Establishing such effects would provide empirical support for the hypothesis that FID involves a commitment to linguistic form between source and target utterance. The next chapter builds on this hypothesis by presenting empirical evidence from a pilot study that tested the effect of identity relations across DQ, FID, and a neutral control condition.

4. Method

The pilot study aims to test whether identity relations between quoted material hold for FID and DQ. To this end, we combined acceptability ratings with reaction time measures in a reading task comparing FID, DQ, and a neutral control condition without quotation. The synonym condition violates the verbatim requirement while preserving propositional content, whereas the mismatch condition violates both form and content. The crucial comparison is therefore the verbatim repetition and the synonym substitution across presentation modes: Under the assumption of opacity in quotation-based accounts, synonym substitutions should be degraded relative to verbatim repetitions when the antecedent is interpreted as a quoted form in DQ and FID. We expect this effect to be less pronounced in the neutral presentation mode without any form of quotation. This approach allows us to assess whether verbatim repetition of linguistic material yields different effects on acceptability ratings and reaction times across conditions, and whether FID elicits processing patterns typically associated with (mixed) quotation.

4.1 Participants

$N = 183$ native German speakers were recruited via the online platform Prolific (mean age = 34.39, range = 18–72, $N = 58$ female, $N = 120$ male, $N = 2$ non-binary, $N = 1$ no response). Recruitment via Prolific resulted in a geographically heterogeneous sample of native German speakers. $N = 2$ participants were excluded from the analysis due to incomplete or missing data, resulting in a final sample of $N = 181$ participants.

The number of participants was determined using G*Power (Faul et al. 2009). An a priori power analysis for a one-way ANOVA with three groups, assuming a medium effect size ($f = .25$), an α level of .05, and a target power of .80, indicated that a minimum of 159 participants would be required. The final sample of 181 participants therefore exceeded the required number, ensuring sufficient statistical power. The data are available via <https://osf.io/mx4ah/>. Participants were compensated at a rate of £9 per hour.

4.2 Materials and Design

Short German texts that only differed in quotation type (FID vs. DQ vs. neutral) were presented to examine whether the verbatim requirement holds in FID compared to DQ. The texts consisted of four sentences, including two sentences to provide context information, one critical sentence that appeared in either FID, DQ, or neutral mode, and one concluding sentence. In the DQ condition, the sentences contained a *verbum cogitandi* (*dachte, überlegte, erschrak*) rather than a speech verb to ensure comparability with the FID materials, which typically evoke a character's internal rather than external state (i.e., thinking vs. speaking). In the FID condition, markers that typically indicate FID and are associated with the evaluative content of a salient attitude holder, such as particles, exclamatives, and shifted referential expressions, were integrated to facilitate FID interpretation (e.g., Kaiser 2015, Fludernik 1993). Each FID sentence included one exclamative and one speaker-oriented particle (*ja, wohl, doch*), was not embedded under a reporting clause, and was not marked with quotation marks (see 10b for a sample item). Speaker-oriented particles were equally distributed across all FID and DQ sentences to reduce potential biases. Likewise, the *verba cogitandi* introducing the DQ sentences were balanced across the stimuli.

The experiment employed a within-subjects design with three conditions (FID, DQ, neutral). Each participant read 30 items with 10 items per condition. Conditions were counterbalanced across participants so that each participant saw only one combination of presentation mode and target word. The experiment lasted approximately 15–20 minutes, including instructions and a brief practice phase. Randomization of conditions reduced potential response biases. No filler items were included to minimize duration and complexity and to ensure sustained attention and comprehension. Examples (9–11) illustrate the three conditions below.

(9) Direct quotation (DQ)

- a. Lisa erwartete Gäste für den Abend. Sie bereitete eine Gemüsesuppe vor.
Lisa expected guests for the evening. She prepared a vegetable soup.
- b. Sie dachte: „Ich brauche ja noch Karotten!“
She thought: “I still need carrots!”
- c. Lisa ging in den Supermarkt, um welche zu kaufen.
Lisa went to the supermarket to buy some.

(10) Free Indirect Discourse (FID)

- a. Lisa erwartete Gäste für den Abend. Sie bereitete eine Gemüsesuppe vor.
Lisa expected guests for the evening. She prepared a vegetable soup.
- b. Sie brauchte ja noch Karotten!
She still needed carrots!
- c. Lisa ging in den Supermarkt, um welche zu kaufen.
Lisa went to the supermarket to buy some.

(11) Neutral

- a. Lisa erwartete Gäste für den Abend. Sie bereitete eine Gemüsesuppe vor.
Lisa expected guests for the evening. She prepared a vegetable soup.
- b. Sie brauchte noch Karotten.

She still needed carrots.

- c. Lisa ging in den Supermarkt, um welche zu kaufen.
Lisa went to the supermarket to buy some.

After reading the short texts, participants were asked to rate three follow-up sentences. The rating items differed solely in the degree of lexical similarity to the target word: one repeated the original word verbatim, one contained a synonym, and one used a word that belonged to the same semantic field as the target word but created a mismatch (e.g., a vegetable that was incongruent with the previously mentioned vegetable). Since absolute synonymity is generally considered to be rare and lexical alternatives often differ in subtle distributional or connotative properties (Edmonds & Hirst 2002), synonym items were selected based on comparable corpus frequencies to the target words using data from the Leipzig Corpora Collection (Leipzig Corpora Collection 2024). Care was taken to avoid regionally or stylistically marked synonyms.

A Likert scale was implemented using smiley icons (1 = least happy, 5 = most happy). Participants were instructed to select the smiley that best reflected how well the sentence matched the preceding text. The three follow-up sentences were presented sequentially in randomized order. After each response, the next sentence appeared on the screen. This prevented direct comparisons between the three sentences. In addition to acceptability ratings, reaction times were measured from the onset of the follow-up sentence until participants selected their response on the Likert scale. Examples (12a–c) illustrate the three rating items.

- (12) Lisa kauft...
Lisa buys...
a. Karotten.
carrots.
b. Möhren.
carrots (synonym).
c. Zwiebeln.
onions.

We hypothesized that if FID is indeed a form of quotation, verbatim repetitions should be rated as highly acceptable in both FID and DQ, with comparable reaction times across the two conditions. In both FID and DQ, the mismatch condition was expected to yield lower ratings and longer reaction times. By contrast, if FID does not preserve linguistic form verbatim, verbatim repetitions in FID should not be preferred over synonym substitutions, and reaction times should not differ between verbatim repetitions and synonym substitutions.

5. Results

In a first step, acceptability ratings for the three response types (verbatim, synonym, mismatch) were compared. The statistical analysis was conducted using R (R Core Team 2024). Outliers in acceptability ratings were identified using a ± 2 SD criterion (Baayen 2008). This procedure did not result in the exclusion of any data points. Reaction times were excluded after log-

transformation if they exceeded ± 3 standard deviations from the participant’s mean (Whelan 2008). This resulted in the exclusion of 118 observations (0.72% of trials).

Table 1: Means and standard deviations of Likert-scale ratings by response type

Type	M	SD
Verbatim	4.78	0.59
Synonym	4.06	1.15
Mismatch	1.31	0.72

Descriptively, participants showed clear sensitivity to lexical similarity: Across all conditions, sentences that repeated the original word verbatim received higher ratings than those containing a synonym, which in turn were rated more acceptable than mismatching items (see Table 1). This indicates that participants generally preferred verbatim repetitions over synonyms or semantically related but mismatching items.

Table 2: Means and standard deviations of reaction times (ms) by response type

Type	M	SD
Verbatim	1893.34	1788.48
Synonym	2541.60	2411.19
Mismatch	2132.44	1765.37

For the acceptability ratings, the assumption of normally distributed residuals was violated (Anderson–Darling test, $p < .001$), whereas the assumption of homoscedasticity was met (Levene’s test, $p = .93$). A similar pattern emerged for reaction times (Anderson–Darling test, $p < .001$; Levene’s test, $p = .054$). Therefore, non-parametric Kruskal–Wallis tests were used to evaluate the effect of response type statistically (Ogle et al. 2025). This approach is appropriate for ordinal data but does not allow testing interactions between presentation mode and response type. Consequently, no interaction effects were statistically assessed. The Kruskal–Wallis test for rating data was highly significant, $\chi^2(2) = 11341$, $p < .001$. Given the large number of observations per group and the strong rank separation, the magnitude of the χ^2 statistic is expected; the corresponding effect size was $\varepsilon^2 = .70$, indicating a very large effect (Tomczak & Tomczak 2014).

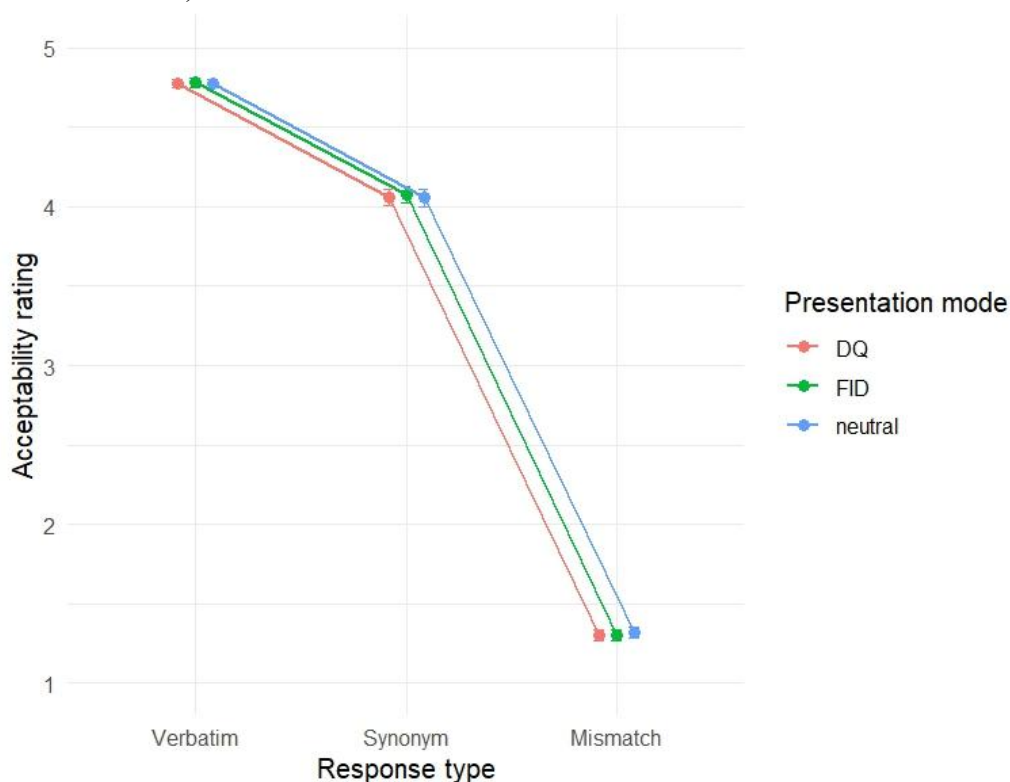


Figure 1: Likert-scale ratings for presentation modes and response types

Post-hoc comparisons using Dunn’s test with Bonferroni correction revealed significant differences between response types (all $p < .001$). Sentences with verbatim repetitions were rated significantly higher than those with synonyms, which in turn received higher ratings than sentences with mismatching items. A similar pattern emerged for reaction times across the three response types. Across all conditions, the verbatim items elicited the fastest responses, followed by mismatching and synonym items (see Table 2).

A Kruskal–Wallis test across response types indicated significant differences in reaction times, $\chi^2(2) = 705.76$, $p < .001$. Post-hoc comparisons using Dunn’s test with Bonferroni correction revealed significant differences between response types (all $p < .001$).

Figures 1 and 2 display the full Response Type \times Presentation Mode pattern for ratings and reaction times. No significant effects were found when analyzing whether presentation mode (FID, DQ, neutral) influenced the acceptability ratings, all $p > .05$ (verbatim: $\chi^2(2) = 1.06$, $p = .59$; synonym: $\chi^2(2) = .51$, $p = .77$; mismatch: $\chi^2(2) = .55$, $p = .76$). The same non-significant pattern was obtained when the analyses were based on participants’ mean ratings (all $p > .05$). Notably, the absence of a presentation-mode effect indicates that the relative synonym penalty did not differ between FID, DQ, and the neutral condition in the present design.

The analysis of the influence of presentation mode on reaction times yielded similar non-significant results with $p > .05$ for all tests (verbatim: $\chi^2(2) = 1.37$, $p = .50$; synonym: $\chi^2(2) = 3.08$, $p = .21$; mismatch: $\chi^2(2) = 1.17$, $p = .56$). The presentation mode in which the original expression appeared did not significantly influence participants’ reaction times for verbatim, synonym, or mismatching items (see Figure 2).

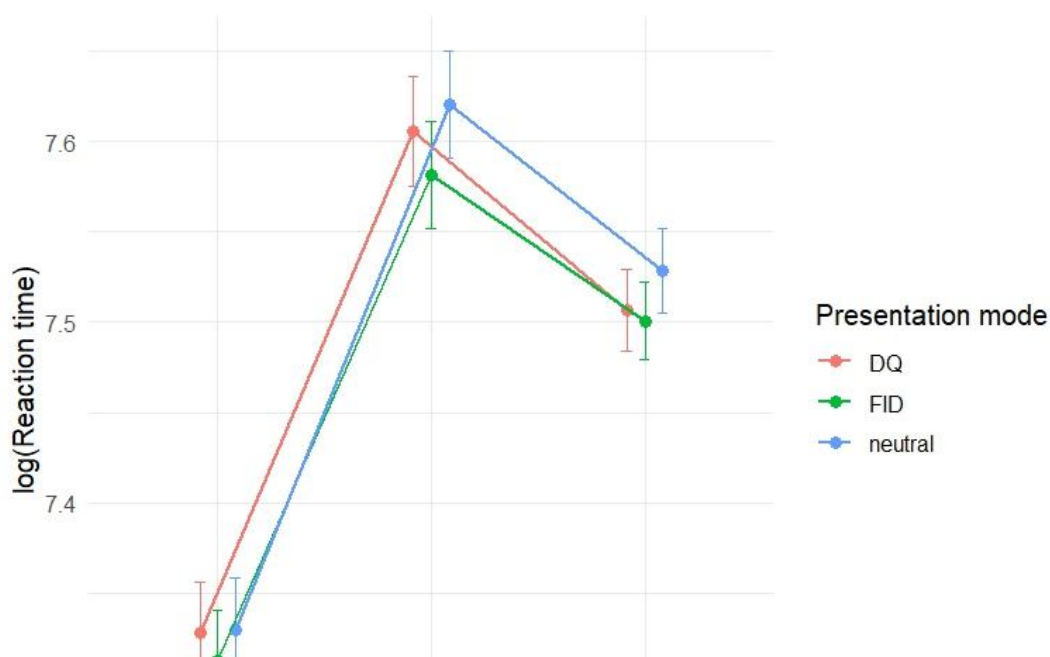


Figure 2: Reaction times for presentation modes and response types

Taken together, these results indicate that participants reliably preferred verbatim repetitions over synonyms or mismatches in both acceptability ratings and reaction times, but that this preference did not depend on whether the text was presented in FID, DQ, or neutral mode.

6. Discussion

The primary aim of the present pilot study was to investigate whether FID behaves similarly to DQ with respect to the processing of lexical identity relations between an original utterance and its subsequent repetition. To test this, we used the verbatim requirement (Maier 2014b) as a central diagnostic. The hypothesis was that if FID constitutes a form of (covert) quotation, then exact repetitions of previously embedded material should be judged equally acceptable in FID and DQ, and reaction times should not differ between the two modes. Overall, our findings are consistent with this assumption. At the same time, a similar pattern emerged in the neutral condition, and the present results do not provide evidence that the synonym penalty is specifically driven by quotation context in FID but rather suggest that participants are highly sensitive to lexical identity in discourse continuations. This pattern is compatible with an MQ analysis of FID, but the present data cannot establish that the verbatim requirement is specific to quotation contexts.

Crucially, the pattern observed in the present data is compatible with recent theoretical accounts that posit a covert naming predicate in cases of MQ (Härtl 2025). According to this view, even in the absence of explicit quotation markers or speech-report predicates, quotations semantically encode a naming relation that links a linguistic form to a referent or propositional content. Under this account, FID could be modeled as a structure that embeds a phonologically unrealized quotation operator, thereby satisfying the verbatim requirement without explicit markers (see also Kirk-Giannini 2024). The empirical observation that participants judged verbatim repetitions equally acceptable in FID and DQ suggests that FID may instantiate such a covert quotational structure. That is, although the quotation operator in FID is not phonologically realized, the preservation of form implied by participants' ratings is compatible with the hypothesis that FID embeds not only content but also a linguistic label, thus functioning semantically on par with overtly quotational expressions. Our findings appear less compatible

with the two-context approach of Schlenker (2004) and Eckardt (2015), since FID seems to transmit not only propositional content but also to preserve the lexical form of the original utterance. In contrast, the robust preference for exact repetitions observed here suggests that lexical identity plays a role in interpretation, which is more naturally captured by a quotation-based account. One way to reconcile these findings with a two-context model would be to enrich it with a mechanism that preserves certain linguistic forms in addition to contextual parameters, but, to our knowledge, such an extension has not been explicitly proposed in the literature so far.

A notable distinction between typical instances of MQ and FID concerns the level of structural granularity at which quotation operates. While MQ typically targets isolated constituents such as NPs or VPs embedded within a matrix clause, FID tends to integrate full propositional content into the overarching discourse structure through unquoting elements such as referential expressions (Maier 2015). This distinction can also be described in terms of transparency and opacity in MQ. While certain morphosyntactic adaptations to the surrounding context (e.g., tense) are licensed in FID, the pilot study indicates sensitivity to the acceptability of verbatim items compared with synonym substitutions in discourse continuations. This is compatible with the assumption that the lexical form of the quoted material is preserved in FID. Our results thus align with Maier's (2015) proposal that FID results from the interplay of quotation and unquotation and situates the present findings within a broader theory of selective transparency in quotation. As Kirk-Giannini (2024) observes, current semantic accounts of MQ are primarily designed to capture constituent-level phenomena, which raises the question of whether these frameworks are adequately equipped to model a finer-grained selective mechanism of quoting and unquoting that is not restricted to constituents. While the present findings suggest that at least some interpretive mechanisms associated with MQ may extend to FID as well, further theoretical elaboration is needed to account for the structural and interpretive properties of FID within the broader theoretical framework of quotation.

However, for the acceptability ratings, significant differences between verbatim, synonym, and mismatching items were also found in the neutral text presentation mode. Since in the present study FID and DQ were compared based on differences in verbatim requirement, similar effects in the neutral condition might indicate that the form identity of the lexical material was more decisive for the ratings than the interpretation of the text mode. Participants might have primarily responded to the formal overlap in the verbatim condition rather than to differences in the presentation mode. This finding underscores the necessity for methodological refinement in the evaluation of acceptability ratings in subsequent studies. For instance, a potential limitation of the present study is that the experimental manipulation targeted lexical identity at the word level. While this operationalization was well-suited to test the verbatim requirement in FID as proposed by the MQ approach, it remains an open question whether the same preference for exact repetition over synonymous substitution would extend to larger constituents (e.g., phrases or clauses). Given the prevalence of paraphrastic variation at these levels, future research should examine whether FID behaves like DQ when more complex linguistic units are repeated or reformulated.

While the reaction time data largely mirror the acceptability ratings in showing a clear preference for verbatim repetitions across all presentation modes, synonyms were processed more slowly than mismatching items. One plausible explanation is that the processing advantage for verbatim items reflects lexical priming, i.e., facilitation through recent activation of the identical lexical form (Neely 1977). Under this view, participants may have responded more quickly to verbatim items simply because the relevant lexical form had recently been

activated in the preceding text. This explanation aligns with findings from psycholinguistic research showing that lexical repetition can yield robust speed advantages independent of contextual integration (McNamara 2005). This assumption is consistent with the fact that the reaction time differences held across all conditions, including the neutral mode. In contrast, the slower responses to synonyms may reflect additional semantic processing demands, as participants had to evaluate contextual appropriateness beyond surface form identity (McNamara 2005). It is plausible that participants engaged in evaluative comparison processes, assessing whether the synonym is contextually and pragmatically appropriate with respect to the previously presented text, thus incurring higher processing costs and longer reaction times. While both mechanisms are processing-based, they operate at different levels of representation (form-based vs. meaning-based) and may jointly account for the observed reaction time differences. From this perspective, the absence of reaction-time differences between FID and DQ does not necessarily undermine the quotation-based interpretation of FID but rather indicates that more refined experimental designs are required to isolate quotation-specific processing effects.

Another methodological refinement concerns the experimental procedure. Since each text was presented in its entirety on a single page during the online experiment, participants may have compared conditions across items and thus developed hypotheses about the purpose of the study. In this context, it is also questionable whether a single sentence is sufficient to elicit an FID interpretation, or whether processing takes place at a broader discourse level (see, e.g., Maier 2014a). Thus, methodological adjustments, for instance concerning the linguistic features intended to induce an FID interpretation (e.g., particles, exclamatives, deictic and evaluative expressions), could be implemented in similar experimental settings. Furthermore, linear or cumulative mixed-effects models could be used in future analyses to account for random variation across participants and items. Such models would allow testing of potential interactions between presentation mode and response type. We therefore conclude that future studies employing more complex methodological approaches are necessary to corroborate the present results and to address follow-up research questions that extend beyond the scope of the current paper.

The main empirical contribution of the pilot study is thus twofold: we found a robust effect of lexical identity sensitivity in discourse continuations, and we identified a central methodological challenge in verbatim-based diagnostics of FID, namely disentangling quotation-driven opacity from general repetition preferences. The observed null effect should be regarded as a tentative indication that quotation in FID may function similarly to DQ and that the interpretation of FID as a form of MQ is plausible. However, we regard this evidence as preliminary, and the evidential strength of the diagnostic applied to FID requires further methodological refinement, especially since the same pattern of results was also observed in the neutral condition. This suggests that the effect may not be specific to a quotation-based approach. The findings should therefore be interpreted with caution: the data are consistent with the hypothesis that FID can support verbatim interpretation in a manner functionally equivalent to DQ. Future studies with more refined manipulations and greater statistical power will be needed to validate this claim.

7. Conclusion

The present study examined whether identity relations between an original utterance and its subsequent repetition are processed similarly in FID and DQ, and whether FID can be interpreted as an instance of MQ. Motivated by recent accounts that analyze FID as a form of MQ with a covert operator, we tested whether verbatim repetition is equally acceptable in both modes. The findings suggest that participants reliably preferred verbatim repetitions independent of presentation mode, indicating that FID may support identity-based interpretations typically associated with (mixed) quotation. However, the pilot study should be regarded as a first step toward empirically operationalizing such diagnostics. While the present data are compatible with the view that FID may instantiate a covert quotational structure, further research is needed to disentangle quotation from potential priming effects and confirm the robustness of this pattern.

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Peter Hofmann
Department of English and American Studies
University of Kassel
Kurt-Wolters-Straße 5
34125 Kassel
Germany
e-mail: peter.hofmann@uni-kassel.de