

# Scare quotes as deontic modals

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## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>The data</b>	<b>2</b>
2.1	Flexibility of scare quoting . . . . .	2
2.2	Limits of scare quoting . . . . .	5
2.3	Interim summary No. 1 . . . . .	8
<b>3</b>	<b>Conceptual framework for scare quotation</b>	<b>8</b>
3.1	Technical problems with capturing scare quotation . . . . .	8
3.2	Connection between scare quotation and modality . . . . .	10
3.3	Interim summary No. 2 . . . . .	12
<b>4</b>	<b>Deontic modal framework for scare quotation</b>	<b>12</b>
4.1	Computing scare quotation . . . . .	13
4.2	Discussion . . . . .	16
4.3	Interim summary No. 3 . . . . .	17
<b>5</b>	<b>Conclusion and future prospects</b>	<b>17</b>

## Abstract

The aim of the present paper is to propose a formal semantic account of scare quotation (SQ). I present data showing that SQ, though very flexible, is subject to regular and so far largely unnoticed limitations following from the infelicitous use of irony as well as the accessibility of at-issue and not-at-issue content parts. While these effects can hardly be accounted for by assuming that the ironic aspect of SQ involves any sort of negation, they are in harmony with basic assumptions made for deontic modality. Following these observations, I extend the modal framework for quotation proposed by Wiślicki (2020) to formulate a deontic modal account of SQ. The offered account not only predicts the complex behaviour of SQ, but also sheds much new light on the formal nature of irony.

## 1 Introduction

Recent semantic and syntactic inquiry on quotation has pushed the level of understanding and formalizing this category much beyond the one achievable for purely logical and philosophical approaches, dynamically developed since the fifties. In particular, important progress has been made in understanding the sense of quotation being, as illustrated below, not an atomic string of symbols *simpliciter* (Geach 1957; Quine 1960):

- (1) a. His “I really like you” was quite surprising, but I don’t think he really does.  
b. Bush probably “misunderestimated” his guests.

Various semantic approaches (Ginzburg & Cooper 2014; Pagin & Westerståhl 2010) proposed frameworks capturing the fact that even for pure quotation as in (1a), where substitution *salva veritate* is blocked, the material inside the quotes must be left transparent for further operations, e.g. ellipsis. Others (Maier

2014a; Shan 2010) explained why mixed quotation as in (1b), even if retaining all the morphosyntactic properties taking part in the syntactic derivation, incorporates expressions into grammar that would be blocked if not quoted. In this sense they investigated quotation as form-rigid and thus atomic on the one hand, but transparent and thus complex on the other.

Viewed from that angle, there is one type of quotation, called *scare quotation* (SQ), that deserves more attention than it has gained in formal semantics. First, it is more challenging than other types of quotation. Not only does it retain the properties of mixed quotation, in particular the non-compositional semantics and the morphosyntactic transparency, but also provides additional content:

- (2) A: I talked with the president<sub>i</sub>.  
 B: The “president”<sub>i</sub> disregards the constitution!  
 $\nRightarrow$  “He”<sub>i</sub> disregards the constitution.  
 $\rightsquigarrow$  B negatively evaluates A’s use of the expression *president*.

Second, despite a growing interest in the semantics-pragmatics interface properties of SQ, there is no strict framework securing three basic aspects of its formal description. First, what exact formal mechanism is responsible for the emergence of the interpretational characteristics of SQ? While this problem has been investigated for mixed quotation (Maier 2014a; Shan 2010), no relevant extension has been proposed for SQ. Second, what is the formal nature of negative evaluation involved in SQ? While it has been widely accepted as some sort of not-at-issue content part (Gutzmann & Stei 2011; Gutzmann & McCready 2016; Härtl & Seeliger 2019), neither the exact mechanism generating it, nor its place in a formal system has been specified. Third, what is the source of limitations of scare-quoting? While the flexibility of mixed quotation and the pragmatic character of negative evaluation, much less constrained than genuinely semantic operations, might explain the fact that almost every expression can be scare-quoted, the problem of infelicitous SQs has been neither solved nor explained.

It is the aim of this paper to contribute to the discussion on the three abovementioned aspects of SQ. In order to do this, I start in Section 2 form discussing the flexibility of SQ on the one hand, and its limitations as well as (in)sensitivity to tests showing the complex distribution on their at-issue/not-at-issue content parts on the other. Then, in Section 3 I show how these data are problematic for recent proposals and, drawing on Wiślicki’s (2020) approach to quotation, I sketch a conceptual outline of a modal account of SQ. Finally, in Section 4 I check how the framework sketched in Section 3 captures the data discussed in Section 2 when formalized within a strict model-theoretic setting. Section 5 summarizes the results and suggests paths for future research.

In general, I argue that SQ is a type of deontic modality, in harmony with other modal properties of quotation (Wiślicki 2020). The negative evaluation lying at the heart of SQ, as well as various effects showing its limitations, can be accounted for and explained in terms of norms to which the act of uttering the quoted expression poorly conforms. Accordingly, SQ is derived and regulated by a more general part of grammar, i.e. modality, generalized for metalinguistic mechanisms like quotation. The data come mainly from nominals, whose wide range of semantic properties conveniently shows the flexibility and, more importantly, limitations of scare-quoting.

## 2 The data

In this section I scrutinize the range of expressions and contexts in which the SQ effect arises. First, in Section 2.1 I show that the effect of scare-quoting can apply to various content parts of quoted expressions, encoded at various levels of interpretation. Then, in Section 2.2 I discuss limits of felicity of scare-quoting, as well as its sensitivity to tests for the at-issue/not-at-issue character.

### 2.1 Flexibility of scare quoting

Scare quotes are often discussed together with quotes used to emphasize irony, as in (3), or non-literal uses of expressions, as in (4):

- (3) [With no salient speaker uttering the word “clever”]  
 Paul is such a “clever”<sub>ironic intonation</sub> guy!
- (4) [With no salient speaker uttering the word “bicycle”]  
 He made a kind of “bicycle” with an additional engine and wings.

In (3) the intended reading is that Paul is not clever and in this sense the quoted predicate is negated. However, (4) is more delicate. The intended reading is that the vehicle at hand is not a real bicycle. Still, the degree to which it resembles normal bicycles or to which it still counts as a (perhaps very odd) bicycle remains underspecified. Thus, what links the two examples is not straightforward negation, but a kind of rejection of the relevant content part. This is also observed for SQs. To see this, consider first (5):

- (5) A: Look, the president denies his own words.  
B: The “president” is an opposition MP.

Quotes flanking the noun *president* indeed mark the fact that B denies that the person at hand is a president. From the semantic point of view, they involve the rejection of at-issue content (roughly in the sense of Potts 2015). Note, however, that it is not simply negating the predicate *president(x)* that gives rise to the special SQ effect. Otherwise there would be no difference between SQ and straightforward negation as in (6), where the ironic content is not present (for more far-reaching differences between ironic and non-ironic denials, see Härtl & Bürger 2020):

- (6) He is not a president, but an opposition MP.

Rather, the effect arises as a result of downgrading A’s use of expression *president* as false and thus rejecting the relevant content part. This intuition is supported by Itō’s (2020) findings for Japanese, where SQ is felicitous provided the whole sentence is topped by the particle *ne* marking the low informative value of the sentence:

- (7) Hontō “gūzen”            da #∅/✓ne  
      really “coincidence” is #∅/✓ne  
      It’s really a “coincidence”!  
      (cf. Itō 2020)

The same effect can be observed for proper names as in (8):

- (8) A: I have to call Anna Smith.  
      B: “Anna Smith” is now Anna Harris, she got married last month.

Just as in (5), B ironically rejects the at-issue content, i.e. the fact that the name of the person mentioned by A is *Anna Smith*, as false.

This intuition is supported by data from scare quotes flanking expressions with more complex formal structure. Note that the above simple analysis is possible due to the fact that irony in B’s statements is rooted in denying the fact that the person at hand is a president/is called *Anna Smith*. But the problem becomes more puzzling in the case of judge-dependent predicates (Bylina 2017; Coppock 2018), as in (9):

- (9) A: He is a prodigy!  
      B: As far as I can see it, your “prodigy” is just a normal boy.

While being a president is a matter of fact, not opinion, whether or not a person falls under the concept of prodigy is to much extent a matter of personal judgement. Thus while *x* cannot be a president for A but not for B, the same does not hold for being a prodigy. And it is exactly this kind of judgement that underlies B’s statement in (9). Rather than denying the fact that the boy at hand is a prodigy, B expresses his/her opinion which is at odds with the one expressed by A. Put informally, B states that according to him the boy is not a prodigy and that A’s opinion is groundless. Thus (9) is remarkably different from (5) in providing faultless disagreement, i.e. two contradictory statements both of which are true. This, of course, is reasonably ruled out in the case of (5), for which a modification as in (10) is clearly odd:

- (10) ??As far as I can see it, the “president” is an opposition MP.

Accordingly, both (5) and (9) involve rejecting the at-issue content. In both examples the SQ effect does not follow from straightforward negation but from rejecting the use of expression as inappropriate. The objective content of the quoted expression in (5) is rejected as false, the judge-dependent content of the one in (9) as a groundless opinion. Importantly, while the source of rejection is different for each case, it follows from the respective semantic properties of quoted expressions.

These initial observations are supported by further data showing that the character of rejection also depends on the type of content undergoing rejection. Indeed, if the SQ effect is rooted not in

straightforward negation, but in downgrading and thus rejecting someone’s use of expression, it is natural to expect it to arise as a consequence of various types of inappropriateness. The particular use of an expression can be rejected not only as being false or groundless, but, e.g., awkward or impolite. Accordingly, it is expected to involve rejection of various parts of both at-issue and not-at-issue content parts. And this is widely attested for various types of nominals. To see this, take a look at (11), with the same SQ as in (5) placed in a different context:

- (11) A: The president talked about the bill.  
 B: The “president” disregards the constitution!

Here B questions neither the fact that the person A talks about is a president, contrary to (5), nor A’s opinion, contrary to (9). In this sense SQ does not involve rejecting the at-issue content part, as it is generally assumed by Meibauer (2014). Rather, B downgrades A’s use of expression *president* by suggesting that the person does not meet a demand generally assumed for presidents. Put more precisely, what seems to be rejected is part of a presupposition (in the sense of Stalnaker 1974) saying that presidents follow constitutions of their countries, not the the at-issue content in the form of predicate *president(x)*. That kind of SQs involving rejecting the presupposed content arise across various types of nominals, as in (12)–(13):

- (12) A: He was the true Napoleon of my thesis.  
 B: Your “Napoleon” doesn’t understand semantics!
- (13) A: There is “love” written in the sky by a jet pilot.  
 B: Your “love” is just an accidental shape of that cloud.

The proper name *Napoleon* in its non-rigid use presupposes that the person at hand is a competent leader of certain enterprise. For the pure quote “love”, it is presupposed that the relevant string represents a linguistic expression, contrary to the fact. Hence the effect of scare-quoting. Importantly, just as in the case of (11), neither of the two involves negation *simpliciter*. The person described in (12) might have played the crucial role in the process of writing the thesis; so does the cloud in (13) might have had the shape resembling the word *love* (as it is crucial for quotation, cf. Pafel 2011). Accordingly, A’s use of these expressions gives rise neither to falsehood as in (5), nor to a different judgement as in (10), nor to presupposition cancellation *simpliciter*. What is crucial is that, given the relevant contexts, A’s uses of these expressions is partially at odds with the underlying presuppositions and thus ironically downgraded as inappropriate.

Interestingly, the range of content parts that are subject to the SQ-type of rejection is wide, covering information encoded at various stages of computation. Apart from the at-issue content and presupposition, the SQ effect can be encoded at the level of syntactic derivation as well as at the level of particular use of expressions. To see this, consider the following examples:

- (14) [Pointing at the particular person]  
 A: He talked about the bill.  
 B: “He” is a woman!
- (15) A: Did you see that guy?  
 B: “That guy” is the Emperor of Japan!
- (16) A: Did you see his new car?  
 B: He stole “his” new car from my garage!

In (14) the problem concerns formal morphosyntactic features. Given the context, A and B do not disagree on the choice of the relevant person, but on the gender. Having the particular person in mind, B downgrades A’s use of pronoun as incorrectly stating that the person is a man. Assume, as standardly in the minimalist syntax (Hornstein et al. 2005), that  $\varphi$ -features ([PERSON], [GENDER], [NUMBER]) are inserted in terminal nodes occupied by nominals during the syntactic derivation. Then disagreement in (14) is rooted in rejecting the content part obtained as a result of computing the particular  $\varphi$ -feature. Thus the rejected piece of information is encoded at the level of syntactic derivation. By contrast, (15) exemplifies SQ targeting content part regulated by the rules of conventional implicature. A’s use of *that guy* is downgraded not because it picks out a wrong person or mistakenly assigns him certain properties, but because it is inappropriate given the social rank of the Emperor of Japan. This content part, assuming Levinson’s (1983) approach to honorifics, emerges as a conventional implicature. Accordingly, the SQ effect can be rooted in rejecting a conventional part of expression other than the truth-conditional one. Finally, in (16) SQ involves the rejection of the particular use of possessive, hardly regulated by

grammar and rather emerging as a result of various ways of understanding the relation of possession. Here A’s use of pronoun is rejected as assuming the relation of ownership, which is unjustified if the property was stolen.

To close this part of discussion, it is worth pointing out that irony involved in SQ can target content-independent properties of quoted expression. To see this, consider the examples in (17)–(18):

- (17) [Context: Jan cannot master basic English grammar]  
According to Jan, all the students “should studies” harder.
- (18) [Context: Whenever John gets nervous, he starts stammering]  
John again couldn’t find his “k-k-k-keys”.

Contrary to previous examples, here the SQ effect is rooted not in content-related, but form-related properties of quoted expression.<sup>1</sup> In (17) the form marks the improper morphosyntactic relation within the quoted phrase, in (18) disfluency, both becoming objects of irony. While the ability of quotation to contribute to the meaning by exposing an utterance form has already been noticed in the literature (Potts 2007: 405–406), these examples show that the form itself can be a target of irony involved in SQ.

The examples presented above show that scare quotes are flexible with respect to a type of nominal they can ironically quote (common nouns, proper names, pronouns, pure quotations) and aspects of quoted expressions relative to which their use can be downgraded. The latter include the at-issue content, judge-dependent content as well as pieces of information encoded at the level of syntactic derivation, part of presupposition, conventional implicature, the use of pronoun, morphosyntactic relations or the utterance form of quoted expression. However, so far nothing has been said about limits involved in scare-quoting. I will discuss this in the next subsection.

## 2.2 Limits of scare quoting

The apparent flexibility of SQ is rooted in the fact that from the syntactic point of view it is mostly used as mixed quotation and thus inherits its formal properties (Maier 2014a; Maier 2017). On the one hand, it incorporates into grammar any material, including an ill-formed one as in (17), while retaining its morphosyntactic features. On the other hand it imposes certain limitations. First, it allows any material provided it is interpreted as defined in the idiolect of the quoted speaker and, in this interpretation, does not give rise to crash in the course of derivation. Thus for (19) to be acceptable, *misunderestimates* must be a transitive verb, interpreted as a Bushism and agreeing with a subject with formal features [3rd], [SING]:

- (19) I’m afraid that Bush is the only person that “misunderestimates” his guests.

Second, just like any mode of quotation, SQ blocks substituting *salva veritate* a quoted expression with a co-referential/co-extensional one, as in (20). Still, unlike pure and direct quotation, mixed and scare quotation require that the quoted utterance is part of presupposition. Otherwise, as shown by Maier (2014a), they pass the *hey-wait-a-minute* test (Shanon 1976; Fintel 2004), as exemplified in (21):

- (20) A: I talked with him<sub>i</sub>.  
B: #The “president”<sub>i</sub> disregards the constitution.
- (21) [With no salient speaker using the word *president*]  
A: The “president” disregards the constitution.  
B: Hey, wait a minute! Who ever said *president*?

In this sense SQ involves the presuppositional dimension by imposing restrictions on the use of quotation. This shows that SQ should be distinguished from other uses of quotes, as in (3)–(4), marking irony or non-literality (Meibauer 2014; Ludwig & Ray 2017).

The properties shown in (20)–(21) have their more far-reaching effects observed for the ironic aspect of SQ. To see this, consider the example in (22):

- (22) A: I talked with president Smith.  
B: ✓ The “president”/ #“Smith” disregards the constitution!

<sup>1</sup>Interestingly, this difference affects the requirement of marking SQ. In Japanese a sentence like (18) does not require the particle *ne*, contrary to irony targeting content parts, as in (7). This suggests some semantic patterns regulating the optional character of marking quotation (De Brabanter 2020).

This case is more problematic. Not only are the two quoted phrases co-referential, but also each of them has been uttered by the quoted speaker; thus the presuppositional demand illustrated in (21) is met. Nevertheless, the SQ effect is blocked for one of them.

Intuitively, the source of this effect is simple. While irony concerning an attitude towards the constitution is well-targeted when applied to the use of the word *president*, it is blocked in case of proper name. The reason is that for the ironic content to emerge, the content part being an object of irony must be carried by the scare-quoted phrase. The overall content carried by such quoted expressions, in turn, varies relative to the type of expression, which gives rise to differences in acceptability:

- (23) A: Anna Smith<sub>i</sub>/she<sub>i</sub> called yesterday.  
 B: ✓“Anna Smith”<sub>i</sub>/#“she”<sub>i</sub> is now Anna Harris, she got married last month.
- (24) A: The president<sub>i</sub>/ He<sub>i</sub> talked about the bill.  
 B: The ✓“president”<sub>i</sub>/ #“He”<sub>i</sub> disregards the constitution!  
 B: The #“president”<sub>i</sub>/ ✓“He”<sub>i</sub> is a woman!
- (25) A: There is a word<sub>i</sub>/“ghlmp”<sub>i</sub> written on the wall.  
 B: The ✓“word”<sub>i</sub>/#“ “ghlmp” ”<sub>i</sub> is a gibberish!

Nevertheless, as the above observations suggest, the problem does not lie in formal properties of quoted expressions alone, but rather in the interaction between these, the common ground (CG) and the surrounding context. The context updates the relevant part of CG which marks a reason of downgrading the relevant content part and thus allows the participants of discourse to understand irony. For the SQ effect to arise, the result of this interaction must be a kind of match between the relevant part of CG and a piece of information which is contradictory to the one carried by the quoted expression and the context. To see this, let us move back to the above examples. In (22) the context marks the general assumption that presidents follow their constitutions. Since this is contradictory to what is stated by B, the use of the noun *president* is downgraded and thus becomes the object of irony. Still, that kind of match does not hold for the proper name *Smith*. No part of CG provides restrictions on the use of the name *Smith* relative to an attitude towards constitution. By contrast, a use of proper name can be an object of irony if the context marks the fact that the person at hand is misnamed, as in (23). Here it is the pronoun that does not carry the piece information marked by the context. Still, a use of a pronoun can be judged inappropriate due to the gender mismatch, as in (24). Though the formal feature [GENDER] is encoded in pronouns as well as common nouns, it is unambiguous only in the case of the former. Finally, an effect similar to the one observed for (22) holds for pure quotation as in (25). While being a gibberish is contradictory to being a word, the same does not hold for pure quotation, which does not presuppose referential properties of the quoted expression (in this regard it behaves to a certain extent like proper names, cf. Maier 2014b).

The third type of limitations imposed by SQs is connected with the lack of straightforward accessibility of a truth value for the ironic content, exposed by the *that’s-(not)-true* test. As for the non-quotational ironic content, the test was used by Härtl & Bürger (2020) in their discussion on the (not) at-issue character of such expressions. As the authors show, the ironic content is hardly subject to negation if treated as at-issue. However, the same content can be naturally rejected if it is questioned at the presuppositional level by means of the *hey-wait-a-minute* test:

- (26) [After an ambivalent performance]  
 A: Well, that lead singer really delivered every note in place.  
 B: ??No, that’s not true—she hit every single tone!  
 B: Wait a sec—she hit every single tone!  
 (cf. Härtl & Bürger 2020)

This supports other arguments presented by the authors in showing that the ironic content is at least more of a presuppositional than an at-issue character. Still, a closer look at the examples shown above unearths further complications. As discussed by Kaufmann (2012), while the test, at least in the simplest form, is not sufficiently sensitive to capture propositionhood, it reveals some important properties of expressions posing problems for this test in general. Interestingly, though Kaufmann discusses imperatives, SQs to much extent align with such expressions; these observations push the results worked out for irony by Härtl & Bürger (2020) a step further.

First, while imperatives do not pass the simple *that’s-(not)-true* test, they pass its enriched version providing additional confirmation, as in (27):



- (27) A: How do I get to Rüsselsheim?  
 B: Take the S8.  
 A: Oh right, that's true.  
 A: #No, that's not true.  
 (Kaufmann 2012:166)

This line of reasoning opens up an interesting way for investigating SQ. In particular, two effects similar to those shown in (27) are worth pointing out. First, SQs pass the *that's-true* test provided it is enriched by a modal follow-up pertaining to the metalinguistic dimension. Second, even that kind of enrichment does not allow the negated version, i.e. the *that's-not-true* test:

- (28) A: Did you see that guy?  
 B: "That guy" is the Emperor of Japan!  
 A: That's true, I shouldn't say so.  
 A: #That's not true, I don't have to obey all these customary rules.

While the exact type of follow-up largely depends on the content of the quoted expression (exactly like in the case of imperatives, cf. Kaufmann 2012:168), in general SQs do not block the test.<sup>2</sup> Interestingly, what makes replies for SQs, imperatives as well as (not strictly information-seeking) questions acceptable in this regard is a cataphoric relation with modalised propositions:

- (29) A: Who is going to do the dishes?  
 B: That's true, we should have thought of this.  
 (Kaufmann 2012:164)
- (30) A: Do your homework right now!  
 B: That's true, I should have done it yesterday.

As for the absence of felicitous *that's-not-true* replies, Kaufmann (2012) explains it in terms of authority condition. She takes it to be a presupposed content part which allows the evaluation of new information relative to an ordering source corresponding to speaker's will, commands, etc., and not to CG. Apart from conceptual intuitions according to which authority underlies the felicity of giving commands, the evidence for that kind of presupposed piece of content comes from replies where a speaker is rebuked for having no necessary authority :

- (31) A: Go home immediately!  
 B: Hey wait a minute, you are in no position to give me commands.  
 (Kaufmann 2012:150)

Rather than the content as such, B addresses A's authority allowing him to give commands. Moreover, the fact that it passes the *hey-wait-a-minute* test proves that this content part is presupposed, and not-at-issue. Again, a closely related effect can be observed for irony involved in SQs. To see this, consider the following example:

- (32) A: Did you see that guy?  
 B: "That guy" is the Emperor of Japan!  
 A: Hey wait a minute, you are in no position to tell me how to speak.

As discussed in the context of (28), the exact type of rebuke depends on the content being an object of SQ. Nevertheless, the crucial point is that what is rejected in (31) and (32) is not the content of command/irony but the speaker's authority to give the command/criticise the way one speaks by downgrading his/her use of expressions.

The examples discussed in this subsection show that the apparent flexibility of SQs involves certain limitations. These are rooted in a complex relation between the at-issue content and presupposition/CG. On the one hand, various pieces of information, either concerning the existence of quoted utterance, contradictory information or information responsible for *hey-wait-a-minute* and *that's-(not)-true* tests, are parts of presupposition. On the other hand, the felicity of irony as well as possible replies to utterances containing SQs largely depend on at-issue content. Finally, SQs behave to much extent like imperatives w.r.t ways of rejecting or accepting the special content parts, i.e. commanding/advising and irony.

<sup>2</sup>Note that the improper honorific form alone does not allow replies as in (28). Even assuming that slurs encode a negative attitude towards the person at hand (Gutzmann & McCready 2016), this content part does not pass the *that's true* test:

- (1) A: The damn Kaplan got promoted.  
 B: #That's true, I don't like him either.

### 2.3 Interim summary No. 1

In this section I discussed various types of scare-quoted nominals, together with limitations involved in the ironic content. The data show a highly complex relation regulating the at-issue and not-at-issue character of three aspects of SQ, i.e. its scope, underlying mechanisms and the level of encoding the ironic content. First, there is a wide range of properties of quoted expressions, i.e. the at-issue/not-at-issue distinction, formal morphosyntactic features or utterance form, whose downgrading gives rise to the SQ effect. Second, morphosyntactically, SQ is, more often than not, a mixed quotation, and thus it shares its basic properties. Third, the ironic content is sensitive to tests for accessibility of not-at-issue and, when enriched by follow-ups, at-issue content parts.

On top of that, effects marking the dual at-issue/not-at-issue character were shown to be common for SQs and imperatives. In the next section I show that this fact is not accidental, arguing that semantics of SQs is driven by a covert deontic modality.

## 3 Conceptual framework for scare quotation

The data presented in Section 2 contribute at least two points to the current discussion on SQ and irony. First, if SQ is a type of quotation and shares its crucial properties, then it should be framed within a more general semantics of quotation, already shown to be compositionality-wise especially challenging (Werning 2005; Potts 2007; Pagin & Westerståhl 2010; Shan 2010; Maier 2014a). Second, it should specify a formal grammatical category instantiated by SQ. The category should explain the exact role of at-issue and not-at-issue content in regulating the emergence of irony, its limits and accessibility revealed by tests for the propositional/presuppositional character of SQ.

Following these observations, I propose to take SQ as a type of deontic modality, formulated as part of modal semantics of quotation proposed by Wiślicki (2020). I argue that the properties of SQ discussed in Section 2 follow from the use of quoted expressions being ranked low relative to presupposed norms. I start from indicating in Section 3.1 technical points that are problematic for recent proposals concerning SQ in light of the data presented so far. Then in Section 3.2 I present conceptual and empirical arguments based on these data and supporting a modal approach to SQs.

### 3.1 Technical problems with capturing scare quotation

The first major observation, made in Section 2.1, is the flexibility of scare-quoting. Targets of irony span not only substantially different content parts, but also content-independent properties, such as morphosyntactic relations or the utterance form. These facts are important for understanding the emergence of the SQ effect. As summarized by Härtl & Seeliger (2019), there are two basic approaches to the mechanism giving rise to irony. The first approach assumes that irony involves negation. Taking the most straightforward view, Schlöder (2017) lets irony arise as a result of negation ( $\neg f$ , where  $f$  is a target of irony) or of picking out an element from the opposite end of scale, e.g. *terrible* for ironic *amazing*. A more indirect approach had been proposed by Giora (1995), later developed by Giora et al. (1998) and Giora et al. (2005). It takes the computation of irony as involving the literal implicated meaning and the negated one. The greater the gap between the literal meaning and the context, and thus the smaller the gap between the negated meaning and the context, the easier the computation of irony. The second approach takes the ironic content underlying SQ to emerge as a result of an attitude involving a negative evaluation of the use of the quoted expression. It can be driven by hostility towards the use of expression (Predelli 2003a), ironic treatment of the use of expression (Predelli 2003b), distancing oneself from or rejecting the use of expression (Gómez-Torrente 2017; John 2013; McCullagh 2017; Härtl 2018), as well as the lack of commitment to a content part of quoted expression (Hess 2018). There are also hybrid approaches assuming both the contrary meaning relative to what is literally said and a negative evaluation of the denotatum (Härtl & Seeliger 2019).

The data discussed in Section 2 show that not only the first approach is untenable, but also that the second one is on the right track. First of all, it is not true that SQ in general involves negation. It clearly does so in the case of (33), extracted from (5). Assuming a sufficiently fine grained machinery, where negation covers not-at-issue content parts, it might do that in the case of (34), extracted from (11). But it cannot explain (35), extracted from (18), where the target of irony is the utterance form, by definition not subject to (straightforward) negation.

- (33) The “president” is an opposition MP.  $\rightsquigarrow$  s/he is not a president



- (34) The “president” disregards the constitution!  $\rightsquigarrow$  s/he is not a good president  
 (35) John again couldn’t find his “k-k-k-keys”.

Second, there are strong arguments from Japanese supporting the attitude-based approach. As shown by Itō (2020) and discussed in the context of (7), the SQ reading is available in Japanese provided there is the particle *ne* attached to the whole sentence. Since independent observations show that the particle marks the fact that the sentence’s informativity value is judged low (McCready 2009),<sup>3</sup> the negative attitude naturally follows. What the general attitude-based accounts mentioned above lack is a precise mechanism capturing various sources of such attitudes, and thus felicity conditions of irony. Without this, as I show at the end of this subsection, they largely overgenerate.

The second problem concerns the formal nature of ironic content, in particular its place in the layered representation of SQ. According to the most widely assumed approach, the ironic content is part of not-at-issue meaning of SQs. Predelli (2003a), criticised by Horn (2008) and Meibauer (2014), takes this part to correspond to attachment. It is added to the main content part (dubbed *message*) and corresponds to much extent to conventional implicatures. Pointing out problems arising for quoted contradictory information, Gutzmann & Stei (2011) let this content part be conversational implicature. This general approach is supported by Meibauer (2014), Itō (2020) and indirectly by Cappelen & Lepore (2007). According to it, a sentence containing SQ has a two-dimensional representation roughly depicted in (36):

- (36) The “president” disregards the constitution!  
 $\rightsquigarrow$  At-issue:  $x : x$  is called by the speaker  $S$  *president*, disregards the constitution  
 not-at-issue:  $S$ ’s use of the expression *president* is inappropriate

To this extent the approach is closely related to those proposed for simple irony, honorifics or slurs (see Gutzmann & McCready 2016 as well as Castroviejo et al. 2020 for related problems). One of its pros is that it correctly predicts some of felicitous and infelicitous replies targeting the ironic content in SQs. To see this, take a look at (37), extracted from (28) and (32):

- (37) B: “That guy” is the Emperor of Japan!  
 A: #That’s not true, I don’t have to obey all these customary rules.  
 A: Hey wait a minute, you are in no position to tell me how to speak.

If the ironic content is treated as not-at-issue, the fact that it fails the *that’s-not-true* test and passes the *hey-wait-a-minute* test is expected. However, a closer look into data shows that the ironic content cannot be accounted for as not-at-issue simpliciter. First, experimental findings made by Härtl & Seeliger (2019); Härtl & Bürger (2020) show that various content parts giving rise to irony, i.e. negative evaluation and non-literal meaning, are (i) judged not-at-issue to various degrees and (ii) not interpreted as strictly not-at-issue, but rather as being more at-issue than other content parts. This is partially in harmony with the observation showing that the truth value (at least for affirmatives) becomes accessible for replies if they are repaired by follow-ups containing, e.g., modal content, as in (28). Note, however, that this cannot be explained if the ironic content is simply taken as not-at-issue or even if the at-issueness is taken as gradable. Rather, such content parts must be encoded at the at-issue level of semantic representations of SQs, and thus made accessible for certain replies.

Finally, the third problem concerns perhaps the most understudied pieces of data, i.e. those showing limitations of scare-quoting. As mentioned above, the attitude-based approaches to SQ, contrary to those assuming negation, are general enough to capture the variety of sources of irony exemplified in (33)–(35). However, as they stand they are too general to encode these sources within the overall account of SQ. And since the source can affect the felicity of scare-quoting, it should be included in formal representations of SQs. To see this, recall (24), repeated below as (38):

- (38) A: The president<sub>*i*</sub>/ He<sub>*i*</sub> talked about the bill.  
 B: The  $\checkmark$ “president”<sub>*i*</sub>/ #“He”<sub>*i*</sub> disregards the constitution!  
 B: The #“president”<sub>*i*</sub>/  $\checkmark$ “He”<sub>*i*</sub> is a woman!

What the general approaches mentioned above are able to capture is that in each case the speaker judges the use of quoted expression inappropriate, hence the effect of scare-quoting. Thanks to this they do not give rise to the abovementioned problems with negation, which would be also quite severe in the case of (38). However, until the relevant relation between pieces of information that give rise to the

<sup>3</sup>This effect is probably rooted in the fact that *ne* is merely a confirmation particle. It provides no new information and cannot be used when the information introduced by the sentence it is attached to is not part of CG (Hasegawa 2010; McCready 2012).

SQ effect (e.g. being a president, but not a male, and obeying the constitution) is secured by formal representations of SQs, infelicitous examples remain unaccounted for. Since neither of the above general accounts secures these, they do not capture infelicitous cases and thus overgenerate. An interesting step forward is proposed by Itō (2020). Drawing on Lasersohn’s (2005) idea of judge-shifting operators, he takes SQ to involve a salient judge. Combining this with the fact that Japanese provides the overt particle marking the low informativity value of the sentence it is attached to, the general interpretation of a sentence including SQ looks as in (39):

- (39) A: It is really a coincidence  
 B: It is really a “coincidence”!  
 $\rightsquigarrow$  the informative value of proposition including the word *coincidence* as understood by A is low

The significance of this step lies in the fact that it is not the use of expression in general, but the use of expression as understood and uttered by the quoted speaker that is judged inappropriate. To this extent the object of irony becomes much more specified. What is further needed is the exact source, and not just object, of evaluation that filters out infelicitous examples like those illustrated in (38). Note that this source is not included in the quoted utterance or even in its surrounding context. Thus even enriched information concerning the judge and his utterance is not enough. Rather, the source is provided by the surrounding and situational context of the quoting sentence. This context is updated in (39) by phrases *disregards the constitution* and *is a woman*. Accordingly, the relevant pieces of information marked by these phrases should be encoded in formal representations of SQs. I am going to propose that kind of extension within a modal framework sketched in the next subsection.

### 3.2 Connection between scare quotation and modality

A striking fact, discussed in Section 2.2 but to my knowledge never pointed out in the literature, is that though the ironic content involved in SQ is not accessible for *that’s-(not)-true* test, it is accessible for its modalized version:

- (40) A: Did you see that guy?  
 B: “That guy” is the Emperor of Japan!  
 A: That’s true, I shouldn’t say so.  
 A: # That’s true, he has a high social rank.

This observation is important for at least two reasons. First, it is coherent with an intuitive explication of sentences containing SQs which makes use of a covert modal (Bhatt 2006; Kaufmann 2012). This captures the fact that the primary use of quoted expression by the quoted speaker is judged inappropriate by the quoting one:

- (41) “That guy” is the Emperor of Japan!  
 $\rightsquigarrow c$ :  $c$  is the emperor of Japan, was called *that guy* and  $c$  should not be called *that guy*

Second, the observation in (40) provides arguments for taking modality encoded in the meaning of SQ to be not only intuitive, but also necessary. Without the presence of modals, the grammar can explain only the not-at-issue part of ironic content accessible for the *hey-wait-a-minute* test as in (37). Still, it leaves its modal at-issue content part, accessible for the *that’s-true* test, unaccounted for. These two observations, I argue, go in hand with the crucial conclusion from Section 3.1, i.e. that the semantics of SQ should encode the source of the negative evaluation of the use of quoted expression.

In order to account for these effects, I make use of the modal semantic framework for quotation proposed by Wiślicki (2020). Apart from assuming the basis of demonstrative theory of quotation (Davidson 2015), its crucial contribution is that it takes the interpretation of quoted expression to be relativised to a non-actual model. The shifted model provides an interpretation for the idiolect of the quoted speaker in which it is interpreted. Models of idiolects conceptualize Chomsky’s (1986) idea of I-languages, together with a model-theoretic formalization securing rules of interpretation. Thus a sentence containing mixed quotation is roughly interpreted as follows (to be specified):

- (42)  $\llbracket \text{Bush disregards this “mess”} \rrbracket^{\mathcal{M}, w@}$   
 $\rightsquigarrow$  for the accessible model  $\mathcal{M}_{Bush}$ ,  $c$ : Bush disregards  $c$ , has, as defined in  $\mathcal{M}_{Bush}$  for  $w$ , the utterance form demonstrated by the form ‘mess’

This account captures traditional semantic problems arising for quotation, such as its non-compositional character (Pagin & Westerståhl 2010) or the fact that the quoted expression is interpreted as understood

by the quoted speaker (Shan 2010; Maier 2014a). However, the crucial reason for applying it to the present problems is that it provides a modal framework which is in a position to account for strictly modal properties of quotation. The crucial observation underlying this approach is that overt modals taking scope over mixed quotation allow two readings:

- (43) He might have ruled “Yamatai”.  
 $\rightsquigarrow$  it is possible that he ruled whatever he called *Yamatai*  
 $\rightsquigarrow$  whatever he ruled it is possible that he called it *Yamatai*  
 (cf. Wiślicki 2020)

Under the first, standard reading, modality provides possible scenarios a world might be, namely those where the person at hand rules whatever he calls *Yamatai*. Under the second, metalinguistic reading, modality provides scenarios a language used to describe worlds might be, namely those where the land ruled by the person at hand is called *Yamatai*.

A modal framework is promising from the point of view of SQ for at least two reasons. First, SQs are subject to the effect laid out in (43). Note that the same readings are possible if the mixed-quoted *Yamatai* is interpreted as SQ, that is with the ironic flavour. Second, a framework providing modal operations defined for models as sketched in (42) opens up a promising way for capturing the deontic modal content part of SQs shown in (40)–(41).

In order to be in a position to capture SQ, this framework must be developed to a deontic modal account defined for quotation. One basic element of such an account is the source of deontic modal judgments. While there is no generally accepted one model of modality, it is widely assumed that deontic modals are computed relative to salient rules or norms. These underlie judgments that relate propositions to states taken as preferred in a way specified by modal strength (Fintel & Iatridou 2008; Pasternak 2019) or at least taken as normal (Yalcin 2016). Depending on the particular account, the sentence in (44) is mostly interpreted as stating that in all worlds that are ideal, or compatible with the salient norm *Presidents protect constitutions of their countries*, or at least ranked high enough relative to this norm, the president protects the constitution.

- (44) The president should protect the constitution.

Following this approach, I let SQ be driven by salient norms and the fact that the use of quoted expressions is judged as being at odds with these norms. This part of grammar secures and specifies two issues discussed in Section 3.1. First, the fact that in the case of SQ the use of quoted expression is judged inappropriate. Second, the necessity of encoding into the meaning of SQs the source of negative evaluation. The metalinguistic character of such judgements is rendered by relations which, in the case of quotation, provide orderings over situations of uttering quoted expressions, interpreted in the idiolect of quoted speaker. Accordingly, letting CG stand for the common ground, the rough and still simplified interpretation of B’s statement in (40) looks as follows:

- (45)  $\llbracket$ “That guy” is the Emperor of Japan $\rrbracket^{\mathcal{M}, CG}$   
 $\rightsquigarrow$  the situation  $e$  of uttering  $c : c$  as defined in  $\mathcal{M}_A$  has the utterance form demonstrated by the form *that guy*, is below the threshold  $\theta$  relative to the CG-salient norm  
 NORM<sub>CG</sub>: social ranks are respected

Let us now check the general interpretation in (45) step by step. First of all, the interpretation of quoted expressions is relativized to the model  $\mathcal{M}_A$  of the idiolect of the quoted speaker. This is motivated by the fact that quotation, including SQ, allows material that is not defined in the idiolect of the quoting speaker, as in (19). Second, the relativization at hand is scalar, placing the situation of uttering the quoted exoression on a scale determined by the norm. The higher the situation is on the scale, the more compatible is it with the norm. The threshold value  $\theta$  is contextually salient (Lassiter 2017) and approximates the one considered for weak necessity modal *should*. This is motivated by the conceptual semantic properties of SQ. The negative evaluation discussed in Section 3.1 suggests that it is a kind of necessity modal. Still, it does not give rise to effects observed for strong necessity modals. In particular, it does not give rise to non-negotiable requirements (Portner & Rubinstein 2016). This is shown by the fact that the ironic content involved in SQ passes various tests for gradability, as illustrated in (46):

- (46) A: I talked with the president.  
 B: Rather a “president”. Did you see what he had done with the protesters?  
 B: At most a “president”. Did you see what he had done with the protesters?  
 B: He is more a “president” than a (true) president.

Third, the norm becomes part of presupposition as a result of updating CG. The surrounding context suggests a norm relative to which the evaluation involved in SQ is defined and thus adds it to CG. Accordingly, the situation of uttering the quoted expression is ranked low due to the fact that it is at odds with the norm. This is motivated by two factors. First, as shown by Itō (2020), there are overt elements of Japanese grammar (particles *yo* and *ne*) that encode new/old information in CG and relative to this block/allow the effect of scare-quoting. Second, as discussed in Section 2.2, unless the relevant norm is made salient, mostly by the surrounding context, and thus added to CG, the SQ effect is blocked. Finally, a norm itself is presupposed, as standardly assumed for deontic modals. This is in harmony with the effect observed for the *hey-wait-a-minute* test as in (37), showing that the content part carried by such norms is not-at-issue. These elements of grammar provide a framework for formal semantics of SQ. It captures and explains data presented in Section 2 and problems discussed in Section 3.1 as following from a generalized modality. This line of reasoning is not entirely new. In their account of laughter involved in scare-quoting, Ginzburg et al. (2015) take the relevant effect to follow from a clash between the enthymeme and a topos. While the enthymeme is supposed to instantiate the topos, the laughter marks the fact that this assumption fails. Within the framework sketched above, the effect of scare-quoting follows from the fact that the situation of uttering the quoted expression is at odds with the presupposed norm. This not only accounts for numerous problematic issues, in particular the at-issue and not-at-issue content parts, but also makes use of more standard and worked out modal mechanisms.

### 3.3 Interim summary No. 2

In this section I sketched a modal approach to SQ. It is motivated by two factors. First, the existing accounts are too general and coarse-grained to capture problems revealed in Section 2. Tellingly, there is no formal grammatical mechanism capturing the interaction of at-issue and not-at-issue content parts that gives rise to and limits the emergence of SQ effects. Second, these problems are addressed by elements of deontic modality. The modal approach is compatible not only with the intuitive explication of SQ and strictly modal effects it involves, but also with a more general modal semantics of quotation defended on independent grounds by Wiślicki (2020). In the next, final section I show the exact formal way of developing this framework to the one suitable for SQ and discuss how it solves the problematic issues exposed above.

## 4 Deontic modal framework for scare quotation

Formal semantic accounts of deontic modality roughly fall into two general types (see Portner 2009; Katz et al. 2012; Lassiter 2016; Lassiter 2017 for critical comparisons). The Kratzerian quantificational approach (Kratzer 1981; Kratzer 1991) assumes three basic elements, i.e. a circumstantial modal base with accessibility relation, orderings over worlds relative to salient norms, and modal operators involving quantification over accessible worlds. Accordingly, (44) is roughly interpreted as in (47):

$$(47) \quad \llbracket \text{The president should protect the constitution} \rrbracket^{CG} = \llbracket \phi \rrbracket^{CG} \\ \lambda w. [\forall w' : w' \in \text{Best}_{\text{NORM}}(R(w)) \Rightarrow \phi(w')] \\ \text{NORM}_{CG}: \text{presidents protect constitutions of their countries}$$

The competing scalar approach (Lassiter 2017) also assumes orderings, but lets them feed measure functions  $\mu_i : \{p\} \rightarrow N$  from propositions to numerical values. Measure functions preserve qualitative orderings, so that for an ordering relation  $\succ$  corresponding, e.g., to compatibility with a norm, it is true that  $p \succ p' \Rightarrow \mu_i(p) > \mu_i(p')$ . Values of  $\mu_i$  are then related to contextually salient thresholds  $\theta$  regulated by modal strength:

$$(48) \quad \llbracket \text{The president should protect the constitution} \rrbracket^{CG} = \\ \mu_i(\text{The president protects the constitution}) > \theta \\ \text{NORM}_{CG}: \text{presidents protect their constitutions}$$

However, in order to capture the metalinguistic type of modality concerning ways a language, not a world, might be, the modal framework must be developed. In particular, it must provide orderings and norms defined for situations of uttering expressions as defined in shifted models of idiolects, rather than worlds. In the next subsection I make the relevant developments together with computations.

## 4.1 Computing scare quotation

Wiślicki (2020) provides a model-theoretic account of quotation, making use of a hybrid scalar-quantificational approach to modality.<sup>4</sup> First, the framework assumes measure functions derived from qualitative orderings. Here I adapt it to the deontic modal framework for SQ. Such an ordering must meet at least the following demands. First, it must impose orderings over uses of expressions, as required by SQ (cf. Predelli 2003a and the literature discussed in Section 3.1). Second, orderings must be defined for expressions as understood in the idiolect of quoted speakers; otherwise numerous effects arising for quotation (cf. Maier 2014a) remain unaccounted for. Therefore, I let orderings feeding SQ be defined for situations of uttering relativised to models of idiolects and CG-salient norms. I let a norm be a proposition that must be made contextually salient by being added to CG. Then orderings are defined as follows:

- (49) If  $e^{\mathcal{M}_1, w_1} \in \mathbb{E}$  is a situation  $e$  of uttering an expression  $\sigma$  as defined in a model  $\mathcal{M}_1$  for a world  $w_1$  in  $\mathcal{M}_1$  and NORM is a proposition:  $\text{NORM} \in \text{CG}$ , then there is an ordering  $\langle \mathbb{E}, \prec_{\text{NORM}} \rangle$  such that for  $e_1^{\mathcal{M}_1, w_1}, e_2^{\mathcal{M}_2, w_2} \in \mathbb{E}$ :

$$e_1^{\mathcal{M}_1, w_1} \prec_{\text{NORM}} e_2^{\mathcal{M}_2, w_2} \quad \text{iff what is expressed in } e^{\mathcal{M}_1, w_1} \text{ is less compatible with the NORM than what is expressed in } e_2^{\mathcal{M}_2, w_2}$$

Such orderings provide a basis for the negative evaluation of the use of scare-quoted expressions. The utterance in (50) adds to CG the norm in (51), which in turn provides an ordering over situations of uttering:

- (50) The “president” disregards the constitution!  
(51) NORM: presidents protect their constitutions  
 $\text{CG} = \{p_i\} : \text{NORM} \in \{p_i\}$   
There is a non-empty set  $\mathbb{E}$  such that  $\langle \mathbb{E}, \prec_{\text{NORM}} \rangle$  holds.

In order to encode the negative evaluation provided by SQ, the use of quoted expression must be related to the NORM. I let this be secured by the measure function  $\mu_{SQ}$ . Drawing on a partially related account proposed by Potts & Kawahara (2004) for evaluation carried by honorifics, I let  $\mu_{SQ} : \{\langle p_n, e_n^{\mathcal{M}_1, w_1} \rangle\} \rightarrow [-1, 1]$  be a measure function from propositions and situations of uttering to the interval in  $\mathbb{R}$ . A sentence representing each proposition  $p \in \{p_n\}$  contains a scare-quoted expression uttered in  $e^{\mathcal{M}_1, w_1}$ . The measure function preserves the ordering  $\langle \mathbb{E}, \prec_{\text{NORM}} \rangle$ , so that the lower  $e^{\mathcal{M}_1, w_1}$  is on the scale, the closer the value of  $\mu_{SQ}(p, e^{\mathcal{M}_1, w_1})$  is to  $-1$ .

Given this the framework is equipped with orderings derived from norms and measure functions; these are responsible for the formalization of the evaluative properties of SQ. What remains to be defined is a device shifting the model of interpretation from the actual one to that of the idiolect of the quoted speaker. This is required by the fact that quoted expressions are interpreted relative to the way they are understood by the quoted speaker, not the actual speaker, as discussed in the context of (19). Standard modals shift interpretations across worlds delivered by accessibility relation. Wiślicki (2020), extending Kratzer’s (2013; 2016) account of indirect reports, provides the following proposal:

- (52) **[Reportative accessibility relation for quotation]** If  $M : \mathcal{M}, \mathcal{M}_1 \in M$  is a set of models and  $v$  an assignment function such that  $w_{v(i)} =_v w \in W$  and  $w_{1, v(i)}$  is a world of  $\mathcal{M}_1$ , then  $\mathcal{R}$  is an accessibility relation such that  $\mathcal{M}_1 \in \mathcal{R}(\mathcal{M})$  iff every expression  $E$  defined in  $\mathcal{M}_1$  for  $w_{1, v(i)}$  is defined for the quotational context as ‘E’ in  $\mathcal{M}$ , where ‘E’ demonstrates  $E$ .

The accessibility relation as defined in (52) selects models of idiolects which provide definitions of expressions with certain forms and formal features. Worlds are selected by pragmatic factors regulating the assignment function  $v$ . Given this, the operation of enquotation, clearly marked in both written as well as spoken discourse and affecting the online processing also in the case of SQ (Schlechtweg & Härtl 2020a,b), is interpreted as a modal operator Q. It resembles to much extent the familiar  $\Box$ , with the proviso that it shifts models, not worlds, of interpretation. Thus, within Wiślicki’s (2020) framework, the quoted proper name “John” is interpreted as follows:

<sup>4</sup>For various versions, see Herburger & Rubinstein (2019) and references therein. Wiślicki’s (2020) arguments supporting hybrid approach come from embedding two different types of reportative modality under epistemic modals and the fact that modal comparatives allow comparisons between worlds and models. These show that standard qualitative orderings are not enough, contrary to measure functions delivering numerical values based on qualitative orderings.

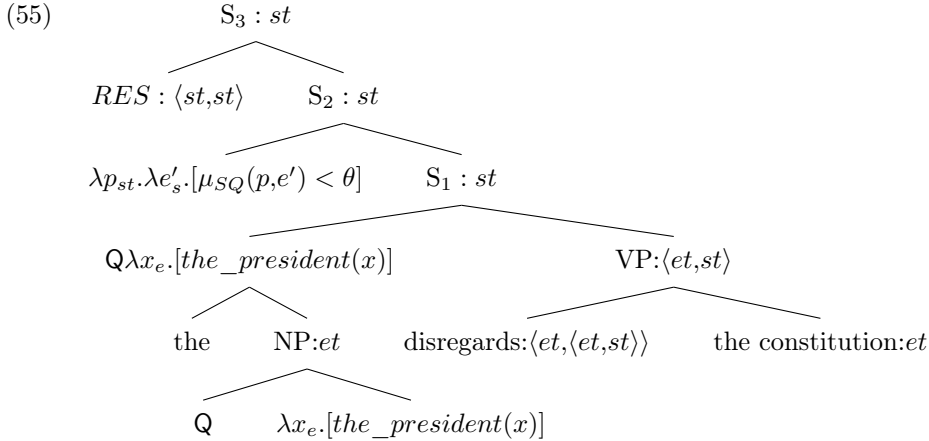


$$(53) \quad \llbracket \text{“John”} \rrbracket^{\mathcal{M}, w_{\otimes}, v} = \text{QJohn} = c : \\ \forall \mathcal{M}_1 (\mathcal{M}_1 \in \mathcal{R}(\mathcal{M}) \rightarrow c \text{ as defined in } \mathcal{M}_1 \text{ for } w_{1,v(i)} \text{ has the utterance form demonstrated by the form } \ulcorner \text{John} \urcorner)$$

The operator secures model shifting and thus opens up a path for the right analysis of SQ. First, the quoted expression can be interpreted in the way and form defined in the idiolect of quoted speaker. Second, it allows the grammar to encode the negative evaluation of the use of expression. This can be done by relating the situation of uttering the quoted expression (as defined in the shifted model) to the NORM by placing it on a salient scale, in much the same way shifted worlds of interpretation are placed on scales assumed for norms as in (47). In order to secure this, I provide the last element of formal grammar, assumed in Wislicki’s (2020) general framework. I let  $RES : \langle st, st \rangle$  be a function restricting sets of accessible objects (cf. Rullmann et al. 2008). In the case of quotation appearing without overt modals, it restricts a set of accessible models to the particular model of the idiolect of quoted speaker. Its special property is that utterances of expressions generated by this idiolect and interpreted in the corresponding model are elements of the domain of the actual world.

Given this, the grammar is in a position to provide a detailed formal representation of SQ. There are three crucial items of this representation, i.e. the quotational operator  $Q$  shifting the model of interpretation, measure function  $\mu_{SQ}$  relating the situation of uttering the quoted expression to the CG-salient NORM, and the function  $RES$  specifying the singleton set of accessible models. To see how this works, consider the sentence in (54) and the arrangement of these items in the simplified derivation in (55):

(54) The “president” disregards the constitution!



Let us now move through the derivation step by step. Forming the VP proceeds standardly. The first major step is the computation of quotation. The operator  $Q$ , being the semantic representation of quotation marker, is attached directly to the quoted expression  $\sigma$  of any type:

$$(56) \quad \llbracket \text{“president”} \rrbracket^{\mathcal{M}, w_{\otimes}} = Q\lambda x_e. [president(x)] = 1 \text{ iff} \\ \forall \mathcal{M}_1 (\mathcal{M}_1 \in \mathcal{R}(\mathcal{M}) \rightarrow x \in \llbracket f \rrbracket^{\mathcal{M}_1, w_{1,v(i)}}), \text{ where } f(x) \text{ as defined in } \mathcal{M}_1 \text{ for } w_{1,v(i)} \text{ has the utterance form demonstrated by the form } \ulcorner \text{president} \urcorner$$

The result is a mixed quoted expression “ $\sigma$ ” retaining the type of  $\sigma$ . In this case it is a quoted nominal (type  $et$ ); in the case of (19) it would be a transitive verb.

The second major step is the merger of the measure function yielding the SQ effect.<sup>5</sup> At the level of  $S_1$  the computation makes salient the NORM by adding it to CG. Then the measure function takes as arguments the proposition derived at  $S_1$  and a situation of uttering, and relates these situation to the NORM:

$$(57) \quad \llbracket S_2 \rrbracket^{\mathcal{M}, w_{\otimes}, CG} = \\ \lambda p_{st}. \lambda e'_s. [\mu_{SQ}(p, e') < \theta] (\llbracket \text{The “president” disreg. the const.} \rrbracket^{\mathcal{M}, w_{\otimes}, CG}) =_{FA}$$

<sup>5</sup>The syntactic position of this item is in harmony with Hacquard’s (2006; 2009) findings on two types of deontics, i.e. *ought-to-do* and *ought-to-be*. The former are subject-oriented and appear low (they are connected to a participant of the VP event), the latter are addressee-oriented and appear high (they are connected to a participant of the speech event). In the case of SQ, the obligation is clearly on the participant of speech event, i.e. the quoted speaker, and definitely not on the subject.



$\lambda e'_s. [\mu_{SQ}(\text{The “president” disreg. the const., } e') < \theta] =_v 1$  iff  
 the situation  $e'$  of uttering  $f(x)$  as defined in  $\mathcal{M}_1$  for  $w_\otimes$  :  
 $\forall \mathcal{M}_1 (\mathcal{M}_1 \in \mathcal{R}(\mathcal{M}) \rightarrow \langle f(x), \text{constitution}, e \rangle \in \llbracket \text{disregard} \rrbracket^{\mathcal{M}, w_\otimes})$ , where  $f(x)$  as defined in  $\mathcal{M}_1$   
 for  $w_\otimes$  has the utterance form demonstrated by the form  $\ulcorner \text{president} \urcorner$   
 is ranked below  $\theta$  relative to the NORM  
 PRESUPPOSITION: NORM=*presidents protect constitutions of their countries* and NORM  $\in CG$   
 and for  $e' \in \mathbb{E}$ ,  $\langle \mathbb{E}, \prec_{\text{NORM}} \rangle$  holds

The result is a two-dimensional representation. The at-issue content part is a proposition stating that whoever is defined in the idiolect of the quoted speaker as *president* disregards the constitution and that uttering this expression as defined in this idiolect is ranked low relative to the salient norm. This gives rise to irony involved in SQ. The not-at-issue content part provides the norm. After being added to CG it secures ordering over situations of uttering containing  $e'$  introduced in the at-issue content part. There is also another, pragmatic aspect of SQ. As discussed in the context of (52), world-shifting, piggybacking on the model-shifting involved in the quotational operator Q, is regulated by the assignment function  $v$ . Wiślicki (2020) shows that this regulation is highly context-dependent. SQ supports this idea. Note that it is incoherent (but not ungrammatical) to scare-quote an expression interpreted in the source utterance at one world and provide a negative evaluation of its use relating it to a different world:

- (58) A: It is possible that he will become a president.  
 B:<sup>#</sup> This “president” disregards the constitution!

Accordingly, the assignment function  $v$  must fix the shifted world as being the same as that of the interpretation of the whole sentence; hence  $w_{1,v(i)} = w_\otimes$ . Nevertheless, this effect is involved only in SQ, not quotation in general; thus it is not part of the operation of enquotation yielding, e.g., pure or mixed quotation.

The final step yielding  $S_3$  provides restriction over accessible models. While at the level of  $S_2$  quantification is defined for all models accessible from  $\mathcal{M}$ , *RES* specifies the particular model  $\mathcal{M}_1$  of the idiolect of quoted speaker. As stated above, utterances of expressions interpreted in this model are elements of the domain of the actual world. This is tantamount to stating that *RES* returns a subset of the set of accessible models such that  $r_\otimes(\mathcal{R}(\mathcal{M}))$  is a singleton  $\{\mathcal{M}_1\}$  where  $\mathcal{M}_1$  is the actual (not hypothetical) model of the idiolect of quoted person:

- (59)  $\llbracket S_3 \rrbracket^{\mathcal{M}, w_\otimes, CG} =$   
 $\llbracket RES \rrbracket^{\mathcal{M}, w_\otimes} (\lambda e'_s. [\mu_{SQ}(\text{The “president” disreg. the const., } e') < \theta]) =_{FA} 1$  iff  
 the situation  $e'$  of uttering  $f(x)$  as defined in  $\mathcal{M}_1$  for  $w_\otimes$  :  
 $\forall \mathcal{M}_1 (\mathcal{M}_1 \in r_\otimes(\mathcal{R}(\mathcal{M})) \rightarrow \langle f(x), \text{constitution}, e \rangle \in \llbracket \text{disregard} \rrbracket^{\mathcal{M}, w_\otimes})$ , where  $f(x)$  as defined in  
 $\mathcal{M}_1$  for  $w_\otimes$  has the utterance form demonstrated by the form  $\ulcorner \text{president} \urcorner$   
 is ranked below  $\theta$  relative to the NORM  
 PRESUPPOSITION: NORM=*presidents protect constitutions of their countries* and NORM  $\in CG$   
 and for  $e' \in \mathbb{E}$ ,  $\langle \mathbb{E}, \prec_{\text{NORM}} \rangle$  holds

The merger of function *RES* ends the derivation. The final result is a proposition with SQ having three crucial properties. First, it is interpreted as defined in the idiolect of quoted speaker. Second, it presupposes a norm imposing ordering over situations of uttering the quoted expression. Third, it ranks uttering the quoted expression low relative to this norm, giving rise to the negative evaluation of the use of quoted expression.

Let us now have a look at how the proposed formal account of SQ captures its properties discussed in Section 2 and 3.1. I start from those that can be traced in (54) and its computation presented in (55)–(59). First, the proposed semantics captures the non-compositional properties following from the quotational character of SQ. The interpretation of scare-quoted expression is form-rigid and relativised to the way it is understood by the quoted speaker, as discussed in the context of (19). Second, it secures the negative evaluation of the use of quoted expression by relating the situation of uttering the quoted expression to the norm. In this sense it implements the attitude-based, and not negation-based approach, as discussed in Section 3.1. This is important for at least two reasons. First, it is coherent with the data from Japanese as discussed by Itō (2020) for the particles *yo* and *ne* involving attitude-related semantic effects. Second, it is not trapped in problems arising for negation (as assumed by Giora 1995; Schlöder 2017, a.o.). As pointed out above, (54) does not state that the person at hand is not a president. The proposed account predicts this effect, as well as another complication arising for negation-based approach, namely the fact that contrary to (54), (60) finally gives rise the effect of negation:

(60) The “president” is an opposition MP!

In the present account both effects follow from the low rank of the situation of uttering relative to the salient norm. In the case of (60), the norm is close to Grice’s maxim of quality, i.e. *speaking truthfully*.<sup>6</sup> The situation of uttering the quoted expression poorly conforms to the norm, hence the effect of negation in (60). Still, neither (54) nor (60) assumes negation as such, which is supported by the above data. Finally, the proposed account correctly predicts the balance between the at-issue and not-at-issue content part. On the one hand, by taking SQ as covert deontic modality, it captures the presence of modal content revealed by the *that’s true* test as in (40), as well as observations from gradability in (46). On the other, it correctly predicts the result of tests as in (37). In the present account, the source of negative evaluation, rejected by A,<sup>7</sup> is the relevant ordering being part of presupposition, not the at-issue content part. This fact captures the positive result of *hey-wait-a-minute* test as well as the negative result of *that’s-not-true* test.

Moving now from effects observed for (54)–(59) to more general issues, the proposed framework bridges the flexibility of SQ discussed in Section 2.1 with its limitations shown in Section 2.2. The first property is secured by the modal logic operator Q and norms underlying the negative evaluation. The former allows quotation to combine with any expression, regardless of the grammatical category or formal semantic type. The latter provides a slot for a wide range of norms that are widely assumed by the users of language as regulating everyday discourse. To illustrate, it is easy to formulate quite uncontroversial norms for as different types of SQ as those in (61), here accounted for within a single account and shown to follow from a uniform pattern:

- (61) a. He stole “his” new car from my garage!  
       NORM: thieves do not become owners of the goods they steal.  
       b. John couldn’t find his “k-k-k-keys”.  
       NORM: linguistic expressions are pronounced correctly.

On the other hand, norms and the fact that they must be made salient explain limitations of scare-quoting discussed in Section 2.2. These follow from the lack of relevant norms as in (62), or simply from the fact that the norm is not made salient:

- (62) A: I talked with president Smith.  
       B: ✓ The “president”/ #“Smith” disregards the constitution!  
       There is no NORM: people with certain names protect constitutions

Again, the negation-based approach is hardly in a position to account for these effects.

## 4.2 Discussion

Having shown how the proposed account captures the variety of effects discussed above, it is now worth taking a look at how it contributes to the recent debate on quotation. There are at least four aspects of this debate that are developed by the present framework. These are the modal character of quotation, the role of quoted speaker in the formal representation of quotation, the balance between at-issue and not-at-issue content part and the demonstrative nature of quotation. Below I discuss these aspects one by one.

First, the present discussion supports and extends the modal approach to quotation proposed by Wiślicki (2020). Not only does it show that SQ, in addition to mixed, direct and pure quotation, involves the same basic modal mechanism, but also specifies another, deontic, type of modality involved in quotation.

Second, it has already been argued (Shan 2010; Maier 2014a; Ginzburg & Cooper 2014) that the interpretation of quoted expression must be relativised to the quoted speaker. Itō (2020) pushes forward these ideas showing that this sort of relativisation has certain hallmarks of attitudinal semantics, involving a judge in the sense of Lasnik (2005). The present account shows that not only this approach is conceptually convincing and empirically well-motivated, but also that it has underlying model-theoretic mechanisms, shifting the model of idiolect of quoted speaker.

Third, there is an ongoing debate on the extent to which quotation is a pragmatic or semantic phenomenon. In a series of articles, de Brabanter (2010; 2017; 2020) provides a wide range of effects

<sup>6</sup>Itō (2020) shows that a quoted utterance can be ranked low on the basis of Grice’s maxim of quantity or other related rules.

<sup>7</sup>More precisely, what seems to be rejected is the authority allowing one to formulate the ordering at hand (cf. Kaufmann 2012).

arguing that these support a pragmatic approach to quotation. Applying the *hey-wait-a-minute* test, Maier (2014a) specifies the division of content of mixed quotation into presupposed and at-issue. Pushing Maier’s line of reasoning by applying this as well as the *that’s-(not)-true* test, I proposed a related division of content for SQ, showing that it follows from basic assumptions made for deontic modals.

Finally, the recent debate, mainly after Davidson (2015), shows that there is growing evidence for the demonstrative character of quotation. This property has been argued not only to go in hand with the fact that quotation can appear without quotes and involve a non-serious interpretation of quoted expression (De Brabanter 2020), but also to involve multi-modal acts of demonstration (Maier 2019; Maier 2020; Steinbach 2020; Steinbach to appear). The offered account shows that this property follows from its semantics based on model-shifting and a core fact concerning symbolic systems, namely the conventional form-meaning pairing secured by a model. To see this, consider (63):

(63) He said “hello” in all East Asian languages.

Had quotation not demonstrated the quoted expression, a theory would not be able to explain the fact that a single expression can simultaneously quote expressions with different forms, defined in different models.

### 4.3 Interim summary No. 3

In this final section I formalised the framework sketched in Section 3 and applied it to data presented in Section 2. The framework extends the modal approach to quotation proposed by Wiślicki (2020) by formulating a deontic modal account of SQ. The strength of the present proposal lies in at least three points. First, thanks to the flexibility of modal operator and deontic norms, it captures a wide variety of scare-quoted expressions, where irony targets substantially different types of content. Second, it follows directly from the technical aspects of deontic modals, i.e. the presupposed character of norms and the modal semantic representation, which content parts are at-issue and not-at-issue. Third, the combination of model-shifting modal mechanism and the demonstrative theory of quotation contributes to the present understanding of both formal and purely empirical aspects of this theory.

## 5 Conclusion and future prospects

In this paper I discussed effects observed for scare-quoted nominals, focusing on so far not scrutinized data from limitations of scare-quoting as well as tests showing the complex balance of at-issue and not-at-issue content parts. Then I proposed a modal framework for SQ and applied it to these data.

The contribution of this discussion is three-fold. First, I formulated and tested a model-theoretic framework capturing the problematic effects rooted in the quotational and ironic character of SQ. The proposed deontic modal account not only provides a precise mechanism deriving and computing SQ, but also identifies its so far underspecified grammatical character, letting it be part of more general category of (deontic) modality. Second, it explains the formal nature of negative evaluation underlying scare-quoting. The effect is accounted for as involving a negated weak necessity modal which places the use of quoted expression below a threshold value within a scale defined for a salient norm. This not only solves problems arising for negation-based approaches, in particular cases where no negation is involved whatsoever, but also explains the presence of modality in the at-issue content part of SQs. Third, it predicts limitations of scare-quoting as well as the scope of not-at-issue content part. The obligatory presence of norms added to CG provides conditions underlying the felicitous use of scare quotes. Their presupposed character, in turn, captures the not-at-issue character of ironic content.

Apart from this, the fact that the complex nature of SQ can be accounted for by letting scare quotes be deontic modal operators opens up at least two paths for future inquiry. First, it invites further research on irony formalized as a strictly modal category involving scales based on salient norms. If proved correct, this would raise the prospect of capturing irony within a generalized semantics of attitudes. Second, it provides a precise framework for investigating the relation between at-issue and not-at-issue content parts involved in irony. Apart from the well-specified formal role of presupposition, i.e. imposing the qualitative ordering required by deontic modality, this concerns an interesting problem of relation between the two content parts. Härtl & Bürger (2020) and Härtl & Seeliger (2019) argue that the way the users of language access at-issue or not-at-issue parts of ironic content is graded, rather than simply zero-one. The argument comes from experiments showing a graded rating of acceptability of sentences involving rejection of various parts of meaning. If this conclusion is correct, then there must be a formal relation between the at-issue and not-at-issue content part responsible for the effect at

hand. The present framework opens up one possible way for specifying and investigating this relation. It provides the relevant link by means of a measure function (at-issue), which preserves the qualitative ordering (not-at-issue). The question to be pursued on empirical grounds is whether the effect of graded access to each content part correlates with formal properties of the measure function linking qualitative and quantitative orderings.

## References

- Bhatt, R. 2006. *Covert Modality in Non-finite Contexts*. Vol. 8. Berlin: Mouton de Gruyter.
- Bylinina, L. 2017. Judge-dependence in degree constructions. *Journal of Semantics* 34 (2):291–331.
- Cappelen, H. & E. Lepore. 2007. *Language turned on itself: The semantics and pragmatics of metalinguistic discourse*. Oxford: Oxford University Press.
- Castroviejo, E., K. Fraser & A. Vicente. 2020. More on pejorative language: Insults that go beyond their extension. *Synthese*.
- Chomsky, N. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.
- Coppock, E. 2018. Outlook-based semantics. *Linguistics and Philosophy* 41 (2):125–164.
- Davidson, K. 2015. Quotation, demonstration, and iconicity. *Linguistics & Philosophy* 38 (6):477–520.
- De Brabanter, P. 2010. The Semantics and Pragmatics of Hybrid Quotations. *Language and Linguistics Compass* 4 (2):107–120.
- 2017. Why Quotation Is Not a Semantic Phenomenon, and Why It Calls for a Pragmatic Theory. In I. Depraetere & R. Salkie (Eds.), *Semantics and Pragmatics: Drawing a Line*. 227–254. Springer.
- 2020. Quotation marks must be optional. *Submitted to this volume*.
- Fintel, K. von. 2004. Would You Believe It? The King of France is back!(Presuppositions and Truth-Value Intuitions). In, *Descriptions and Beyond*. 315–341. New York: Oxford University Press.
- Fintel, K. von & S. Iatridou. 2008. How to say ought in foreign: The composition of weak necessity modals. In J. Guéron & J. Lecarme (Eds.), *Time and modality*. 115–141. Springer.
- Geach, P. 1957. *Mental acts. Their content and their objects*. London: Routledge & Kegan Paul.
- Ginzburg, J., E. Breitholtz, R. Cooper, J. Hough & Y. Tian. 2015. Understanding laughter. In T. Brochhagen, F. Roelofsen & N. Theiler (Eds.), *Proceedings of the 20<sup>th</sup> Amsterdam Colloquium*. 137–146.
- Ginzburg, J. & R. Cooper. 2014. Quotation via dialogical interaction. *Journal of Logic, Language and Information* 23 (3):287–311.
- Giora, R. 1995. On irony and negation. *Discourse processes* 19 (2):239–264.
- Giora, R., O. Fein, J. Ganzi, N. A. Levi & H. Sabah. 2005. On negation as mitigation: The case of negative irony. *Discourse Processes* 39 (1):81–100.
- Giora, R., O. Fein & T. Schwartz. 1998. Irony: grade salience and indirect negation. *Metaphor and symbol* 13 (2):83–101.
- Gómez-Torrente, M. 2017. Semantics vs. Pragmatics in Impure Quotation. In P. Saka & M. Johnson (Eds.), *The Semantics and Pragmatics of Quotation*. 135–167. Springer.
- Gutzmann, D. & E. McCready. 2016. Quantification with pejoratives. In R. Finkbeiner, J. Meibauer & H. Wiese (Eds.), *Pejoration*. 75–101. Vol. 228. Amsterdam/Philadelphia: John Benjamins.
- Gutzmann, D. & E. Stei. 2011. How quotation marks what people do with words. *Journal of Pragmatics* 43 (10):2650–2663.
- Hacquard, V. 2006. *Aspects of modality*. PhD Thesis, MIT.
- 2009. On the interaction of aspect and modal auxiliaries. *Linguistics & Philosophy* 32 (3):279–315.
- Härtl, H. 2018. Name-informing and distancing *sogenannt* ‘so-called’: Name mentioning and the lexicon-pragmatics interface. *Zeitschrift für Sprachwissenschaft* 37 (2):139–169.
- Härtl, H. & T. Bürger. 2020. ‘Well, that’s just great!’—An empirically based analysis of non-literal and attitudinal content of ironic utterances. *MS, University of Kassel*.
- Härtl, H. & H. Seeliger. 2019. Is a so-called “beach” a beach? An empirically based analysis of secondary content induced by ironic name use. In D. Gutzmann & K. Turgay (Eds.), *Secondary Content*. 200–221. Brill.
- Hasegawa, Y. 2010. The sentence-final particles *ne* and *yo* in soliloquial Japanese. *Pragmatics* 20 (1):71–89.
- Herburger, E. & A. Rubinstein. 2019. Gradable Possibility and Epistemic Comparison. *Journal of Semantics* 36 (1):165–191.
- Hess, L. 2018. Perspectival expressives. *Journal of Pragmatics* 129:13–33.

- Horn, L. R. 2008. On F-implicature: Myth-analysis and rehabilitation. *Paper presented at the University of Michigan, Workshop in Philosophy and Linguistics*.
- Hornstein, N., J. Nunes & K. K. Grohmann. 2005. *Understanding minimalism*. Cambridge: Cambridge University Press.
- Itō, K. 2020. Interactions of Ironical Scare Quotations and Discourse Particles in Japanese. *Submitted to this volume*.
- John, N. A. 2013. The Social Logics of Sharing. *The Communication Review* 16 (3):113–131.
- Katz, G., P. Portner & A. Rubinstein. 2012. Ordering combination for modal comparison. *Proceedings of SALT* 22:488–507.
- Kaufmann, M. 2012. *Interpreting Imperatives*. Springer.
- Kratzer, A. 1981. The notional category of modality. In H. J. Eikmeyer & H. Rieser (Eds.), *Words, Worlds, and Contexts*. 38–74. Berlin: De Gruyter.
- 1991. Modality. In A. v. Stechow & D. Wunderlich (Eds.), *Semantik: Ein internationales Handbuch zeitgenössischer Forschung*. 639–650. Berlin: Walter de Gruyter.
- 2013. Modality and the semantics of embedding. *Presentation, Amsterdam Colloquium*.
- 2016. Evidential Moods in Attitude & Speech Reports. *Presentation, UConn Colloquium*.
- Lasnik, P. 2005. Context Dependence, Disagreement, and Predicates of Personal Taste. *Linguistics & Philosophy* 28 (6):643–686.
- Lassiter, D. 2016. Linguistic and Philosophical Considerations on Bayesian. In N. Charlow & M. Chrisman (Eds.), *Deontic Modality*. 82–116. New York: Oxford University Press.
- 2017. *Graded Modality: Qualitative and Quantitative Perspectives*. Oxford: Oxford University Press.
- Levinson, S. C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- Ludwig, K. & G. Ray. 2017. Unity in the Variety of Quotation. In P. Saka & M. Johnson (Eds.), *The Semantics and Pragmatics of Quotation*. 99–134. Springer.
- Maier, E. 2014a. Mixed quotation: The grammar of apparently transparent opacity. *Semantics and Pragmatics* 7:7–1.
- 2014b. Pure Quotation. *Philosophy Compass* 9 (9):615–630.
- 2017. Mixed Quotation. MS, University of Groningen.
- 2019. Picturing words: the semantics of speech balloons. In J. J. Schlöder, D. McHugh & F. Roelofsen (Eds.), *Proceedings of the 22<sup>nd</sup> Amsterdam Colloquium*. 584–592. Amsterdam: ILLC.
- 2020. Speech bubbles as symbolic enrichment. *Submitted to this volume*.
- McCready, E. 2009. Particles: Dynamics vs. utility. In, *Proceedings of Japanese/Korean Linguistics 16*. 466–480.
- 2012. Formal approaches to particle meaning. *Language and Linguistics Compass* 6 (12):777–795.
- McCullagh, M. 2017. Scare-Quoting and Incorporation. In P. Saka & M. Johnson (Eds.), *The Semantics and Pragmatics of Quotation*. 3–34. Springer.
- Meibauer, J. 2014. *Lying at the Semantics-Pragmatics Interface*. Vol. 14. Berlin: Walter de Gruyter.
- Pafel, J. 2011. Two dogmas on quotation. In E. Brendel, J. Meibauer & M. Steinbach (Eds.), *Understanding Quotation*. 249–276. Berlin/New York: Mouton de Gruyter.
- Pagin, P. & D. Westerståhl. 2010. Pure quotation and general compositionality. *Linguistics and Philosophy* 33 (5):381–415.
- Pasternak, R. 2019. A lot of hatred and a ton of desire: Intensity in the mereology of mental states. *Linguistics & Philosophy* 42 (3):267–316.
- Portner, P. 2009. *Modality*. Oxford: Oxford University Press.
- Portner, P. & A. Rubinstein. 2016. Extreme and Non-extreme Deontic Modals. In N. Charlow & M. Chrisman (Eds.), *Deontic Modality*. 256–282. New York: Oxford University Press.
- Potts, C. 2007. The dimensions of quotation. In C. Barker & P. I. Jacobson (Eds.), *Direct compositionality*. 405–431. Oxford: Oxford University Press.
- 2015. Presupposition and Implicature. In S. Lapin & C. Fox (Eds.), *The Handbook of Contemporary Semantic Theory*. 168–202. Wiley Blackwell.
- Potts, C. & S. Kawahara. 2004. Japanese honorifics as emotive definite descriptions. In R. B. Young (Ed.), *Semantics and Linguistic Theory* 14. 253–270.
- Predelli, S. 2003a. Scare quotes and Their Relation to Other Semantic Issues. *Linguistics & Philosophy* 26 (1):1–28.
- 2003b. "Subliminal" messages, scare quotes, and the use hypothesis. *Belgian Journal of Linguistics* 17 (1):153–166.
- Quine, W. V. O. 1960. *Word and object*. Cambridge: MIT Press.

- Rullmann, H., L. Matthewson & H. Davis. 2008. Modals as distributive indefinites. *Natural Language Semantics* 16 (4):317–357.
- Schlechtweg, M. & H. Härtl. 2020a. Do quotation marks affect online processing? Evidence from scare quotes in ironic utterances. *Submitted to this volume*.
- 2020b. Do We Pronounce Quotation? An Analysis of Name-informing and Non-name-informing Contexts. *Language and Speech* 63 (4):769–798.
- Schlöder, J. J. 2017. Towards a Formal Semantics of Verbal Irony. In C. Howes & H. Rieser (Eds.), *Proceedings of FADLI*. 55–59.
- Shan, C.-c. 2010. The character of quotation. *Linguistics & Philosophy* 33 (5):417–443.
- Shanon, B. 1976. On the Two Kinds of Presuppositions in Natural Language. *Foundations of Language* 14 (2):247–249.
- Stalnaker, R. 1974. Pragmatic presuppositions. In M. K. Munitz & P. Unger (Eds.), *Semantics and philosophy*. 197–213. New York: New York University Press.
- Steinbach, M. 2020. Expressing the use-mention distinction at the gesture-sign interface. *Submitted to this volume*.
- to appear. Role Shift - Theoretical Perspectives. In, *Theoretical and Experimental Sign Language Research*. London: Routledge.
- Werning, M. 2005. “Right and wrong reasons for compositionality”. In *The compositionality of meaning and content*. G. S. M. Werning E. Machery (Ed.). Vol. 1. Frankfurt: Ontos Verlag. Pp. 285–309.
- Wiślicki, J. 2020. Quotation as a modality. *MS*.
- Yalcin, S. 2016. Modalities of Normality. In N. Charlow & M. Chrisman (Eds.), *Deontic Modality*. 230–255. New York: Oxford University Press.