Conditional Answers to Multiple-Choice Questions: Three Linguistic Problems (and Solutions) for "if"

Joe Buffington

I. Introduction

Multiple-choice questions are a staple of the law school experience, and they appear on the bar exam in every state in the United States.¹ While it's reasonable to ask whether multiple-choice items are optimal tools for assessing whether students have accomplished curricular learning objectives or demonstrated minimum competence to practice law, the American Bar Association (ABA) requires under its standards for the accreditation of law schools that law schools prepare their students for admission to the bar, and whether schools have done so is measured in large part by their bar pass rates.² If for no other reason, ABA-accredited law schools would seem to have a duty to educate their students in multiple-choice technique.

But how many law school professors are prepared to educate their students in multiple-choice technique, as opposed to the doctrine underlying the multiple-choice items, in their formative and summative assessments? Is it possible to instruct students in best techniques for answering multiple-choice questions without being aware of best practices for constructing such items?

The aim of this short article, in which I use linguistic methodology to probe some problems for using "if" as a conditional qualifier in multiple-choice

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- I. Louisiana is the only state that doesn't administer the multiple-choice Multistate Bar Exam (MBE), but it does administer the multiple-choice Multistate Professional Responsibility Exam (MPRE) as part of its "bar exam"; moreover, its Committee on Bar Admissions states that the "essay" portion of its exam "may" contain multiple-choice questions. See The Bar Exam, LOUISIANA SUPREME COURT COMMITTEE ON BAR ADMISSIONS, https://lascba.org/BarExam/Default.aspx (last accessed Jan. 1, 2019).
- 2. See ABA Standards and Rules of Procedure for Law Schools 2018-2019: Standards 301 and 316, American Bar Association.

answers, is to suggest that the better response to the latter question is no, and from there to inspire new conversations in the legal academy regarding best practices for constructing multiple-choice items. Although the National Conference of Bar Examiners (NCBE) has largely avoided "if" and other conditional qualifiers in Multistate Bar Exam (MBE) answers on the bar exam in the past ten years, such qualifiers still appear on the Uniform Bar Exam (UBE) in certain circumstances.³ Moreover, professors of law continue to use "if" and other conditional qualifiers in multiple-choice answers in their midterms and final exams. What I hope to convince you of is the following:

- The use of "if" as a qualifier in multiple-choice answers is linguistically problematic, in three primary ways.
- It is likely that the problems with "if" that I present here can be mitigated with modest concerted effort.

The specific problems that I present here seem to have gone unnoticed in the general psychometric literature⁴ and represent what I hope will be a seed to a new and fruitful line of inquiry into linguistic issues in high-stakes assessments. Of course, problems for the interpretation of "if" can arise in any language, including legal language, containing an "if" (statutes, contracts, deeds with future interests, etc.), but this short article concentrates on how a "yes, if" style of answer to a multiple-choice question, common on law school exams, is likely to be interpreted by examinees, because this issue is of special importance to legal educators. I will say a few words about the use of other conditional qualifiers, including "only if" and "unless," in passing, but indepth discussion of such qualifiers is deferred to future research.

Before we begin, a bit of a warning: This article uses a linguistic style of argumentation that legal educators may find challenging at first. The challenge is deliberate. Linguistics, which borrows insights from logic and philosophy, is the science of language. It is concerned in part with how the scientific method (which involves empirical observations, formulation of falsifiable hypotheses, and experimentation with controlled variables) elucidates the meaning of words and phrases in human language. I submit that the use of

- 3. According to personal communication with the NCBE, the most recent version of the UBE involves MBE questions that contain conditional answer choices only when a rule of law presented in an answer choice itself contains a conditional qualifier; a conditional qualifier like "if" that is intended to introduce hypothetical facts will appear only in a question stem. However, many retired MBE questions still published by the NCBE as practice questions contain conditional qualifiers in answer choices introducing new facts. As for whether such answers place "unnecessary cognitive demands" on examinees, as the NCBE has claimed, see *infra* note 12.
- 4. For example, the 2002 taxonomy of thirty-one guidelines for writing multiple-choice items presented by Haladyna et al. omits any discussion of the problems presented in this article, which seem particularly likely to arise in assessments related to the practice of law, which often involves conditional answers and hypothetical facts. *See* Thomas M. Haladyna et al., *A Review of Multiple-Choice Item-Writing Guidelines for Classroom Assessments*, 15 APPLIED MEASURE. IN EDUC. 309 (2002); *see also* THOMAS M. HALADYNA & MICHAEL C. RODRIGUEZ, DEVELOPING AND VALIDATING TEST ITEMS (2013).

linguistic methodology to probe the problems for using "if" in conditional answer choices to multiple-choice questions, digging deep into the weeds of how language works, is most appropriate, because-to twist an infamous turn of phrase by President Bill Clinton-the problems (and solutions) for the use "if" in multiple-choice answers depend on what the meaning of the word "if" is.

II. The Meaning of "if"

Even if you have pursued graduate education in linguistics, philosophy, computer science, or one of a few other fields, defining the meaning of the word "if" in isolation proves to be surprisingly difficult.⁵ Fortunately, what matters for our purposes is how "if" works in context, so let's proceed by presenting a sentence in which an "if" occurs and then think about the meaning of that sentence as a product of the meanings of its parts. Consider first the sentence in (I).

If the plaintiff proves the elements of her claim, then she will prevail. (I)

Currently, most linguists who examine the semantics of "if" propose that the meaning of an "if-then" sentence of the generalized form in (2), where p and \mathbf{q} are variables for sentences, is something like (3).

- (2) If \mathbf{p} , then \mathbf{q} .
- In all situations in which **p** is true, **q** is true. (3)

Applying the translation in (3) to the sentence in (1), the meaning of (1) is this: In all situations in which the plaintiff proves the elements of her claim, she will prevail. This translation is intuitively correct in the sense that, as applied to (1), it suggests that knowing that the plaintiff has proved the elements of her claim is sufficient for knowing that she will prevail, i.e. knowing **p** is sufficient for knowing q, Indeed, a popular conception of how "if" clauses work is that they state *sufficient* conditions. Of course, the fact that the formula in (3) provides an intuitive meaning for the sentence in (I) doesn't mean that the sentence in (I) is *true*. For example, the sentence in (I) doesn't take affirmative defenses into account. I will say more about that, as well as the intuition that "if" encodes sufficient conditions, in Section III.

But first, let me amplify the suggestion that the formula in (3) provides a good translation of "if-then" sentences by contrasting it with an alternative formula that facilitates a bad translation of such sentences, one that many legal educators likely learned before entering law school. If you took an undergraduate course in logic, you probably learned that the meaning of an

(a) If it rains you will need galoshes

[the speaker is the "assumer"] (b) The dean believes that if it rains she will need galoshes. [the dean is the "assumer"]

(c) No one believes that if it rains they will need galoshes. [everyone is a potential "assumer"]

For example, simply saying that the word "if" is synonymous with the word "assuming" is 5. inadequate, as the identity of the "assumer" varies between the sentences in (a) - (c):

"if-then" sentence of the generalized form in (2), instead of something like (3), is something like (4).

(4) Either **p** is false or **q** is true (or both).

As useful as it might be for some purposes in computer science and other fields, (4) provides a bad translation of "if-then" sentences as speakers of English use them. At the root of the trouble is the fact that (4) indicates that an "if-then" sentence is true whenever the "if" clause (the **p** sentence) is false, making (1) true, for example, even in situations in which the plaintiff does not prove the elements of her claim-but prevails regardless. However, speakers of English tend to report that (1) shouldn't be used to describe situations in which the plaintiff will prevail regardless.⁶

In other words, the formula in (4) provides a bad translation of (2) because speakers of English use "if-then" sentences to encode a *dependency* between the "if" clause and the "then" clause, but the truth of (4) depends only on the independent truth of \mathbf{p} and \mathbf{q} . Thus, for example, (4) suggests that both (5) and (6) must be true.

- (5) If 1+1≠3, then 1+1=2.
- (6) If I+I=3, then 2+2=6.

According to (4), (5) is true merely because the sentence in the "then" clause (the **q** sentence) is true, and (6) is true merely because the sentence in the "if" clause (the **p** sentence) is false. But speakers of English have different intuitions about the truth of (5) and (6). Most speakers say that (5) is false (or impossible to interpret), and many say that (6) is true. This can't be the case if (4) is an accurate translation of (2), because then both (5) and (6) would be unambiguously true.⁷ Again, what seems to be happening when speakers of English interpret an "if-then" sentence is that they calculate the dependency between **p** and **q**, rather than the independent truth or falsity of **p** and **q**. Thus (5) seems false, if interpretable, to most speakers, because the fact that 1+1 equals 2 doesn't depend on the fact that 1+1 doesn't equal 3, and (6) seems true to many speakers, because they see a dependency between 1+1 equaling 3 and 2 times 1+1 equaling 2 times 3, i.e., 6.

In still other words, (4) is a bad translation of (2) because when someone responds to an "if-then" sentence like (I) by claiming that the sentence is false, what they are saying is not that \mathbf{p} is true and \mathbf{q} is false, which is the only context in which the formula in (4) is false, but rather that there are some situations in which \mathbf{p} is true and \mathbf{q} is false–that is, they are saying that \mathbf{p} is *not* a

- 6. Some speakers report that (1) should be interpreted to mean also that if the plaintiff doesn't prove the elements of her claim then she will not prevail. This is tantamount to saying that (1) should be interpreted as "If and only if the plaintiff proves the elements of her claim . . ." and is equivalent to replacing "(or both)" with "(but not both)" in (4). I will touch on this problematic interpretation in Section III and footnote 7. For now, note that most scholars (and many linguists) characterize such an interpretation as a misinterpretation.
- 7. In each of (5) and (6), **p** is false or **q** is true, but not both, so using "(but not both)" in (4) makes no difference.

sufficient condition for \mathbf{q} , i.e., that there is no such dependency between \mathbf{p} and \mathbf{q} . This is a subtle distinction—muddied by the fact that although the \mathbf{p} sentence in an "if-then" sentence like (I) is usually expressed in the present tense, it is typically interpreted as referring to a future event—but it is an important distinction, for reasons that will become clear in Section III. For now, let's accept that when a speaker of English responds to the sentence in (I) by saying "That's not true!" they are not saying that the plaintiff proves (or will prove) the elements of her claim and will not prevail; instead, what they are saying is that there are imaginable situations in which the plaintiff proves the elements of her claim and yet will not prevail—suggesting once again that the translation in (3) is a better translation than (4) of an "if-then" sentence of the generalized form in (2).

This doesn't mean that the translation in (3) is without its problems, however. I turn to three of those problems now.

III. Three Problems for Using "if" in Multiple-Choice Answers

As suggested in Section II, the appeal for the formula in (3) as a translation of an "if-then" sentence of the generalized form in (2) is that it encodes a dependency between **p** and **q**; specifically, (3) encodes the idea that knowing **p** is *sufficient* for knowing **q**. This is precisely why readers who were attuned to the possibility of affirmative defenses were inclined to object to the sentence in (1) as false: merely knowing that a plaintiff has proved the elements of her claim is insufficient for knowing that the plaintiff will prevail, since it is possible that the defendant will successfully raise one or more affirmative defenses. Confronted with such an objection, the speaker of (1) might respond with sentences like (7) or (8).

- (7) I wasn't talking about affirmative defenses. What I said was true.
- (8) Oh. I wasn't thinking about affirmative defenses. I guess what I said was false.

Linguists and philosophers of language have long been aware that, in spite of the intuitive correctness of (3) as a translation of (2), it is effectively impossible to say that a sentence \mathbf{p} ever states a sufficient condition for another sentence \mathbf{q} -as exemplified by the following dialogue, often discussed in the philosophical literature:

- (9) If kangaroos had no tails, then they'd topple over.
- (10) But what if they used crutches?

If you are familiar with the laws of classical physics and the anatomy of kangaroos, you may be inclined to judge the sentence in (9) as true, but even then, (10) seems to be an appropriate reply. Confronted with the reply in (10), the speaker of (9) might respond with either something like (11) or something like (12).

8. The dialogue is usually attributed to the philosopher David Lewis. *See* DAVID LEWIS, COUNTERFACTUALS (1973).

- (II) I wasn't talking about such silly situations. What I said was true.
- (12) Oh. I didn't think of that. I guess what I said was false.

In essence, the choice between (11) and (12)—and likewise between (7) and (8)—seems to be determined by the speaker's calculation of which imaginable situations are acceptably plausible or reasonably similar to reality, even if they're not real. It would seem, then, that the formula in (3) needs to be revised to something like (3').

(3') In all situations in which **p** is true that are (still) plausible, **q** is true.

The idea behind the parenthetical "(still)" in (3') is that \mathbf{p} may be false in reality, but that doesn't mean that a speaker can't utter an "if-then" sentence using \mathbf{p} ; in simpler words, "if-then" sentences can be used to express counterfactual reasoning. Nor does it mean that in doing so the speaker isn't still making a claim about plausible situations. That's the relative virtue of the formula in (3') . . . and, of course, that's also its vice. Speakers of English may disagree as to which imaginable situations qualify as (still) plausible, especially when they are considering situations in which something that is believed to be false is assumed to be true.

And this is the first problem with using conditional answers that are constructed with an "if": speakers of English may disagree as to which situations are being described by such answers. Consider, then, a (rather unrealistic) multiple-choice question like the one in (13), which is presented with a single answer choice for efficiency of exposition.

(13) Will the plaintiff prevail in her claim against the defendant?

(A) Yes, if the plaintiff proves the elements of her claim.

Imagine a scenario in which a professor designates (A) as the correct answer choice because no affirmative defenses are available to the defendant. Can the professor rely on students to identify (A) as the correct answer? Consistent with my own classroom experience, many professors say no. They inform me, for example, that their students avoid answers like (A) on the basis of the possibility that a court will not follow the law. In other words, just as we can't be sure that kangaroos won't use crutches, we can't be sure that a court will do what it's supposed to do—that is, we can arguably imagine still-plausible situations in which it doesn't.

Similarly, consider a (more realistic) multiple-choice question from a torts exam like (14).

- (14) Will the plaintiff prevail on a claim against the defendant for false imprisonment?
 - (A) Yes, if the defendant intended to confine the plaintiff.

Imagine a scenario in which a professor designates (A) as the correct answer choice because all of the other elements for false imprisonment can reasonably be interpreted to have been satisfied in the fact pattern and no affirmative defenses are available. A student might avoid (A) because the student might interpret it as potentially referring to situations in which the other elements for false imprisonment have *not* been satisfied, even though that is what the fact pattern was written to establish. In other words, with an "if," (almost) anything goes. So the first problem for "if" is that while it intuitively encodes sufficient conditions, no conditions are ever truly sufficient.

The second problem for the use of "if" is that it is sometimes interpreted as "if and only if," and also sometimes simply as "only if." Intuitively, "only if" encodes *necessary* conditions, which makes it a prime candidate for a logically perfect multiple-choice answer to a question testing just the elements of a cause of action. For example, (B) would be a logically perfect answer to (14).

(B) Only if the defendant intended to confine the plaintiff.

For reasons I won't explore here, for an answer like (B) to be reformatted so that the response being qualified ("Yes") is included without a conjunction, as in (B'), is linguistically odd for most speakers; in other words, most speakers prefer the linguistic format in (B'').⁹

(B') Yes, only if the defendant intended to confine the plaintiff.

(B") Yes, but only if the defendant intended to confine the plaintiff.

But what matters for our purposes is that when a conditional answer to a multiple-choice question is written in the format in (15), students sometimes interpret the "if" as an "only if."¹⁰

(15) **q**, if **p**

Consider, then, a multiple-choice question on a torts exam like the one in (16).

- (16) Will the plaintiff prevail on a claim against the defendant for battery?
 - (A) Yes, if the defendant caused a contact with the plaintiff that was offensive.

Imagine a scenario where a professor designates (A) as the correct answer because all of the elements of battery other than the quality of the contact (which must be harmful *or* offensive) are satisfied in the facts and no affirmative defenses are available. A student might avoid (A) because the student might interpret (A) as stating a necessary condition, encoding the wrong

(a) Only the dean wears galoshes. \rightarrow (a') The dean wears galoshes.

(b) The dean wears galoshes only if I do. \rightarrow (b') The dean wears galoshes if I do.

This is good news for examiners who wish to use "only if" to unambiguously encode necessary (and not necessarily sufficient) conditions, but it is bad news for examinees who interpret "if" as "only if."

 Or possibly as "if and only if"-but to illustrate the problem, I discuss only the "only if" interpretation.

^{9.} This is only one of many linguistic mysteries surrounding "only if." For example, adding "only" to a sentence usually preserves the truth of the sentence, but changing an "if" to an "only if" does not preserve the truth of the sentence as worded with "if." For example, the truth of (a) seems to entail the truth of (a'), but the truth of (b) does not seem to entail the truth of (b').

dependency between "yes" and the language following the "if." For many readers, this might seem like a mistake. But there are reasons for believing that this "mistake" might be justified. Consider the following question and corresponding answers.

- (17) May I go see a movie tonight?
- (18) Yes, if you wash the dishes.
- (19) If you wash the dishes, then yes.

Imagine that you are the guardian of a teenager who wants to see a movie and who needs your permission to do so. If the teenager were to ask you the question in (17) and you were to respond with either (18) or (19), you would seem to be stating (as suggested by the earlier analysis of "if") that washing the dishes is sufficient for your permission—meaning, for example, that if, after washing the dishes, the teenager puts a jacket on and heads for the door, but then you stop the teenager and say the sentence in (20) below, the teenager would be upset . . . indeed, the teenager might have a cause of action against you for breach of contract.

(20) You also have to take out the trash.

Now consider the same question as in (17) but with the answers in (18') and (19') instead.

(18') Yes, if you wash the dishes. Also if you take out the trash.

(19') If you wash the dishes, then yes. <u>Also if you take out the trash.</u>

How do you interpret the underlined portions of (18') and (19')? To be sure, not everyone agrees, but many speakers report that the underlined portion of (18') adds an additional *necessary* condition for permission, as if "Yes, if you wash the dishes" were stating a necessary condition in the first place. And some such speakers report that the underlined portion of (19') adds an alternative *sufficient* condition—that is, washing the dishes and taking out the trash are each sufficient for permission to see the movie.

Why should this be? One potential, if partial, explanation is that, especially in light of the comma, it is natural to read—or, in cases like (18') and (19'), reread—a "**q**, if **p**" statement with something like focus on "if." It is well known that phonetic focus on an element, often represented in writing by italics, is correlated with an interpretation of uniqueness, as if "only" were silently in the syntax of sentences with italicized elements. Thus the sentence in (22), unlike the sentence in (21), naturally implies that the professors don't wear galoshes (only the dean does).

- (21) The dean wears galoshes.
- (22) The *dean* wears galoshes.

So if answer choices in the form of (15), where **q** precedes **p** (as is the case in MBE answers), are interpreted as if they were written as in (15'), with focus

on "if," it is not surprising that they would be interpreted as stating necessary rather than sufficient conditions."

(15') **q**, *if* **p**

Regardless of whether this explanation is on the right track, it is clear that syntax matters. As seen in the contrast between (18') and (19'), the syntactic form in which an answer choice qualified with an "if" is presented can influence how the sentence is interpreted.

A third problem for the use of "if" as a conditional qualifier in multiplechoice answers is that some students have difficulty interpreting "if" clauses as potentially counterfactual. In other words, they are inclined to avoid an answer choice in the form of (15) above simply because **p** is false (or potentially false). I have to confess my own bias here and say that this feels like a mistake to me, as I have no problem using garden variety "if **p** then **q**" or "**q**, if **p**" sentences to express counterfactual claims. For example, (23) seems true to me even if it is sunny when I say it, and I know it.

(23) I need an umbrella if it is raining.

It is conceivable, however, that there is an emerging (or re-emerging) dialectical difference here: Some students may need "extra syntax" (say, conditional mood in the \mathbf{q} sentence and/or subjunctive mood in the \mathbf{p} sentence) to signal counterfactuality, as in (23').

(23') I would need an umbrella if it were raining.

Indeed, many professors have informed me that some of their students avoid answer choices with "if" as the conditional qualifier because the "if" clause was apparently inconsistent with the facts. Consider again the question in (14) and its answer choice (A), repeated here.

- (14) Will the plaintiff prevail on a claim against the defendant for false imprisonment?
 - (A) Yes, if the defendant intended to confine the plaintiff.

Imagine a scenario in which a professor designs the fact pattern on which (14) is based to establish that the defendant likely did not intend to confine the plaintiff—but designates (A) as the correct answer choice because all of the other elements for false imprisonment are satisfied and no affirmative defenses are available. A student might avoid (A) because the student correctly inferred from the fact pattern that the defendant likely didn't intend to confine the plaintiff, reasoning that had the professor been assessing counterfactual reasoning, the question would have been written as in (14') and/or the answer choice would have been written as in (A').

- (14') Would (or could) the plaintiff prevail on a claim against the defendant for false imprisonment?
 - (A')Yes, if the defendant had intended to confine the plaintiff.
- 11. This raises particular concerns for examinees who have exam questions read to them by proctors.

Again, syntax matters.

To summarize, we have good reason to believe that "if" *does* encode sufficient conditions, modulo the fact that no condition is ever truly sufficient, but there are linguistic reasons why students might avoid answer choices worded with "if" as the conditional qualifier: First, they may be troubled by the fact that an "if" clause can never state a truly sufficient condition. Second, they may interpret an "if" clause as stating a necessary condition and not necessarily a sufficient one. Third, they may assume that an "if" clause must be consistent with the facts, i.e., that an "if" clause can't be counterfactual.¹²

I have suggested that these "mistakes" may be justified—in other words, these interpretations may not be misinterpretations at all but rather reflections of legitimate semantic disagreements or dialectical differences between speakers. In the end, however, it might not matter whether this is right, so long as we recognize these linguistic problems as problems and come to a consensus as to how to solve them.

IV. Some Solutions for Using "if" in Multiple-Choice Answers

I hesitate to assume that it hasn't taken you long to read to this point, especially in light of how deeply we have been digging into the weeds of how language works, but if that is the case, one might be optimistic that not much time is required to at least identify the three primary problems for the use of "if" in conditional answer choices to multiple-choice questions. To the extent that identifying a problem is the first step to solving it, one might suggest that we have made an auspicious start. Indeed, it seems likely that if professors who use "if" as a qualifier in conditional answer choices to multiple-choice questions were to take a small amount of class time (without digging too deeply into the weeds) to teach their students that an "if" clause states conditions that are sufficient, not necessarily necessary, and potentially counterfactual–and take care to write questions that are consistent with such interpretations–we would be in a better position than we are currently in regarding such items.

But there is more that we can do. For example, professors of law can instruct their students to assume, when answering multiple-choice questions, that

12. The linguistic problems noted in this section seem to be unrelated to the NCBE's claim (alluded to in footnote 3) that for an "if" clause in an answer choice to introduce a new fact into a fact pattern puts "unnecessary cognitive demands" on the examinee. It's not clear to me that any such cognitive demands are unnecessary – or, to use a psychometric phrase, "construct-neutral" (meaning that the demands are unrelated to the trait being measured by the test) – if the minimum competence of an attorney involves an ability to contemplate multiple hypothetical resolutions to a legal scenario, each of which involves the assumption of additional facts. Donahue (2008), writing for the NCBE, claims that psychometric research supports the proposition that "[a]ll of the facts necessary to answer [an MBE] question should appear in the fact pattern," but she doesn't cite to any specific research, and she doesn't explain what she means by "should." See Beth E. Donahue, Recent Changes in NCBE's Multiple-Choice Examination Programs, 77 THE BAR EXAMINER 26 (2008); see also Susan M. Case & Beth E. Donahue, Developing High-Quality Multiple-choice Questions for Assessment in Legal Education, 58 J. LEGAL EDUC.272 (2008).

courts will follow the law.¹³ They can also instruct their students that " \mathbf{q} , if \mathbf{p} " answer choices should be "read" without focus on "if." They can also instruct their students that such answer choices can be correct even when it isn't clear whether \mathbf{p} is consistent or inconsistent with the facts.

Moreover, law school professors can write exam instructions—ideally shared with students in advance of the exam—that remind students how conditional answer choices should be interpreted. They can also write questions in such a way that the problems above are mitigated. For example, to minimize the chance of an "if" being interpreted as an "only if," answers to a multiple-choice question like (16) might be rewritten in a format suggested by the contrast between (18') and (19'), as follows.¹⁴

- (16') Will the plaintiff prevail on a claim against the defendant for battery?
 - (A')If the defendant caused a contact with the plaintiff that was offensive, then yes.

Note that I am not suggesting that any particular interpretation of a " \mathbf{q} , if \mathbf{p} " or similar answer choice is "correct." In fact, I am convinced that many readers will, at least at first, be inclined to interpret some of the examples I have presented here in different ways than I have.¹⁵ The point is that professors and students should be interpreting answer choices that contain "if" as a conditional qualifier in consistent ways, and that ensuring such consistency requires concerted, but likely modest, effort.

Still, I would submit that conversations like the ones I hope to have inspired by this article should occur not only between professors and students but also among professors as members of a faculty united in the pursuit of academic fairness and student success. For example, faculty members might vote to adopt a uniform interpretation of "if" in multiple-choice answers for the sake of consistency across doctrinal assessments or to promote stability between doctrinal courses and academic support programming—and perhaps even to advance uniform assessment standards across the legal academy at large. I would further submit that discussions like the one suggested here should occur between the legal academy and the NCBE as it strives to "ensure

- 13. This is not to say that professors and students shouldn't discuss whether courts *will* follow the law, or whether the law is just.
- 14. Some languages do not permit conditional clauses at the end of sentences. Consequently, the "q, if p" format may be more difficult for examinees who speak English as a second language to process. This raises the complex issue of the extent to which high-stakes assessments in English should accommodate speakers of English as a second language, an issue I will not discuss here. *See* Jamal Abedi, *Language Issues in Item Development, in* HANDBOOK OF TEST DEVELOPMENT 377–98 (Steven M. Downing & Thomas M. Haladyna eds., 2006).
- 15. For example, speakers may have different interpretations of (18') and (19') depending on whether the examples are read or heard. The order of presentation of the examples may have an effect, as well.

that the bar examination continues to test the knowledge, skills, and abilities required for competent entry-level legal practice in the 21st century."¹⁶

V. Future Directions & Conclusion

I offer this short article as a starting point for closer inspection of what it means to qualify an answer choice with an "if." I have identified three linguistic problems for using "if" as a conditional qualifier in multiple-choice questions, but this is not to suggest that there might not be others. Moreover, "if" is obviously not the only possible conditional qualifier for a multiplechoice answer; "unless" is another candidate, and it has its own problems. For example, for reasons linguists still don't fully understand,¹⁷ an expression of the form in (24) behaves differently from an expression in the form of (25).

- (24) No, unless \mathbf{p} .
- (25) Yes, unless **p**.

In short, a "no, unless **p**" expression seems to encode that **p** is necessary for "yes," whereas a "yes, unless **p**" expression seems to encode that **p** is sufficient for "no." Thus, the phrase following the ellipsis in (27) as a response to (26) is natural, but the phrase following the ellipsis in (28) is not.

- (26) May I go see a movie tonight, in spite of the rain?
- (27) No, unless you take my umbrella ... and maybe not even then.
- (28) Yes, unless you take my umbrella ... and then maybe.

Moreover, it is worth looking more closely at "because" (the most common qualifier in modern MBE answer choices) and other nonconditional qualifiers, which may present their own linguistic problems.¹⁸ Indeed, compiling a list of contemporary best practices for constructing multiple-choice items specific to the needs of law school faculties (and bar examiners) is something to aspire to.

But while much work is yet to be done, and many mysteries remain, the three problems for using "if" as a conditional qualifier in multiple-choice problems that I have identified here seem sufficiently well understood that it is time for legal educators to start solving them in the course of constructing more valid, reliable, and fair assessments of legal competence.

- 16. The quoted language is taken from the webpage of the NCBE's Testing Task force appointed in January 2018 to reassess the UBE as a valid and reliable examination of minimum competence to practice law. See Next Generation of the Bar Exam, TESTING TASK FORCE, https:// www.testingtaskforce.org/ (last accessed Jan. 1, 2019).
- 17. See, e.g., Prerna Nadathur & Daniel Lassiter, Unless: An Experimental Approach, in 19 PROCEEDINGS OF SINN UND BEDEUTUNG 426 (2014), https://semanticsarchive.net/Archive/ TVIN2I2Z/sub19proc.pdf (last accessed Dec. 10, 2018).
- In forthcoming work, I intend to show that only a particular interpretation of "because" qualifies it as a viable qualifier in multiple-choice answers on the MBE.