Sociophonetics, semantics, and intention[1]

Campbell-Kibler (2008, 2009) observes that the role of speaker-intention seems to differ in the meanings of primary interest in variationist sociolinguistics on one hand and semantics and pragmatics on the other. Taking this observation as its point of departure, the central goal of the present work is to clarify the nature of intention attribution in general and, at the same time, the nature of these two types of meaning. I submit general principles by which observers determine whether to attribute a particular intention to an agent—principles grounded in observers' estimation of the agent's beliefs, preferences, and assessment of alternative actions. These principles and the attendant discussion clarify the role of alternatives, common ground, and perceptions of naturalness in intention attribution, illuminate public discourses about agents' intentions, point to challenges for game-theoretic models of interpretation that assume cooperativity, and elucidate the nature of the types of meaning of interest. Examining the role of intention vis-à-vis findings and insights from variationist research and the formally explicit game-theoretic models just mentioned foregrounds important differences and similarities between the two types of meaning of interest and lays bare the contingent nature of all meaning in practice.

Keywords: Intention, social meaning, semantics, pragmatics, indexicality, game theory

1. Introduction

> That buzzing-noise means something. You don't get a buzzing-noise like that, just buzzing and buzzing, without its meaning something.
>
> – Winnie-the-Pooh, upon hearing bees buzzing (Milne 2009 [1926]: 6)

Meaning means different things to different people, not least among those who study meaning for a living. As distinct approaches to the study of language meaning expand and increasingly intersect, there is much to be gained from closely comparing different types and notions of meaning and their implications. Recent work along these lines has been very clarifying, illuminating the characteristics of and relations between various types of meaning via properties like conventionality, backgroundedness, and projectivity (e.g. Potts 2003, 2015, Smith et al. 2010) and performativity and interiority (Eckert 2019).

Grice (1957) identified intention—the focus of the present work—as another concept distinguishing between kinds of meaning. The examples in (1) illustrate.

(1) (a) Those spots mean measles.

(b) Those three rings on the bell (of the bus) mean that the 'bus is full.' (Grice 1957: 377)

The spots in (1a) 'mean' measles in the sense that they are informative: they tell us that whoever bears the spots has measles. But this doesn't require that anyone means anything by the spots, or that there's intentionality behind them. In contrast, with (1b) we are invited to imagine a bus driver ringing a bell thrice to signal overtly via preestablished convention that the bus is full. Here, someone is presumed to have acted intentionally to communicate something. Indeed, if we believed the ringing was unintentional (perhaps due to an involuntary convulsion) the peals would no longer lead us to believe that the bus was full.

This brings us to the epigraph above. Pooh hears bees buzzing and concludes that the buzzing must mean something. But do the bees mean something by their buzzing? In a way, it's not such a silly question. After all, one might ask, why should a creature go to the trouble of making sustained, noisy noises if not to

communicate something? But of course buzzing is something bees can't help doing if they want to move themselves about independently. Thus, one need not conclude from a bee's buzzing that the bee means anything by it; it may simply be incidental to a goal of locomotion.

Campbell-Kibler (2008, 2009) observes that the role of intention seems to differ in the meanings of primary interest in variationist sociolinguistics—meanings based in the stances, traits, and personae associated with and indexed by particular linguistic forms—as compared to the meanings of primary interest in semantics and pragmatics—meanings based in and derived from conventionalized, semantic content. This work takes Campbell-Kibler's crucial observation as its point of departure, with the central goal of clarifying how observers (hearers) determine whether to attribute a particular intention to an agent (speaker) and, relatedly, clarifying the properties of and relationships between the two types of meaning just mentioned.

Sections 2–4 constitute the core of this work. Section 2 presents what I take to be central principles by which one determines whether to attribute a particular intention to an agent given their action. Sections 3 and 4 examine the role of intention in each of the two types of meaning of interest. There, I further develop the implications of the principles presented in Section 2 and their relation to notions like naturalness, performativity, common ground, and pragmatic inference. Among other things, I examine multiple cases where the interpretation of a sociophonetic variant doesn't necessarily match up with a speaker's intention—a phenomenon that Campbell-Kibler (2008) notes is hardly rare. I also explain why, especially relative to the case of semantic meaning, there is often room for substantial doubt about whether a speaker meant anything at all by a particular aspect of their utterance's phonetics. At the same time, I examine cases where what a speaker intends by even the semantics of their utterance can be highly contentious, and I show that arguments about what was intended again turn on the principles from Section 2. The examples presented likewise illustrate the practical social and political import of understanding how intention is understood

and attributed.

In Section 5, I examine Burnett's (2017, 2019) work on SOCIAL MEANING GAMES (SMGs), which applies game-theoretic pragmatics (e.g. Franke 2009, Frank & Goodman 2012) to the meanings of primary interest in sociolinguistic variationist research. Drawing on the discussion from previous sections, I argue that aspects of such meaning present major challenges for SMGs, particularly given SMG's assumption of a certain kind of cooperativity between interlocutors. Still, there is value in SMGs' application of formal tools to sociolinguistic theory because the explicitness required of formal models clarifies what various types of meaning do and do not have in common, thus increasing our understanding of each. Indeed, I argue that careful consideration of the role of intention in sociophonetic meaning as inspired by SMGs lays bare the contingent and performance-based nature of all meaning in practice, often untouched by semantico-pragmatic research (though see e.g. Ariel 2004, Franke et al. 2012). Section 6 concludes.

2. INTENTION

In regarding an action one may ask whether a particular consequence was intended by the agent. Let us say that for a (potential or actual) consequence of an action to have been INTENDED by an agent means that the agent performed the action as they did in part for the purpose of bringing about that consequence. Along these lines, let's say that an action (or aspect thereof) was INTENTIONAL if and only if it was committed for the purpose of bringing about one or more of the agent's goals.

These informal definitions will suffice for our purposes. To be clear, I don't mean for an action with an intended consequence to require that the agent can parse out precisely what they did or why they acted as they did in service of that consequence. In attempting to be friendly, for instance, I may do all sorts of things with my posture, voice, etc. that I'm not fully aware of but that I enact purposively toward the goal of appearing friendly. Being in service of an agent's goal, such actions are intentional in the sense of interest in this work, and the goals they serve are likewise intended.

It is worth noting along these same lines that goal-oriented action needn't be consciously orchestrated. As Bargh et al. (2008: 535) put it, '[G]oals can be activated without an act of conscious will [...] and then operate in the absence of conscious guidance to guide cognition and behavior towards the desired end state', noting the separation between structures in the brain related to executive function and conscious awareness. Accordingly, degrees of conscious awareness will not play a central role in the present work. (That said, intuitively we might expect people to assign more responsibility to agents for those aspects of their behavior of which they are consciously aware.)

2.1. Attributing Intention

One claim of this work is that meaning based in sociophonetics is generally less likely to be taken to be intended by the speaker than that based in the semantics of morphosyntactic objects. This raises the general question, at the center of this work, of when a potential consequence of an action is taken to be intended.

To address this question, I begin with the notion of an ACCESSIBLE ALTERNATIVE, which I characterize in (2).

(2) Given an action α performed by A, an alternative action α' is an ACCESSIBLE ALTERNATIVE to α for A iff A, consciously or subconsciously:
   (a) Knew of the availability of α' prior to performing α; and
   (b) Could have performed α'

In essence, an alternative was accessible for agent A if and only if it was an action that A could have performed and that was on some level on A's radar.

Of course, just because an alternative is accessible doesn't mean it's desirable. Actions and their alternatives can come with various potential costs, which may be realized in physical, mental, financial, social, or other terms. Certain actions, for instance, require great effort, making them generally less attractive than other actions. Alternatives also carry potential benefits, which we may think of in terms of the likelihood with which they will bring about desirable outcomes. Such

potential costs and benefits determine how attractive a given accessible alternative is to an agent and, as I will discuss shortly, they in turn play an important role in assessing whether a consequence of an action was intended.

Having defined the notion of accessible alternatives and noted their potential costs and benefits, I now move to the principles governing whether an observer takes a potential or actual outcome of an action to have been intended, given in (3). The principle revolves around how favorably the observer thinks the agent would view the outcome of interest, how likely the observer thinks the agent would think the action was to effect that outcome, and how the observed action relates to alternatives that appear to have been less or more likely to effect that outcome.

Underlying (3) and the ensuing discussion is the presumption that agents and their observers are rational in the sense of attempting to maximize the net benefits (benefits less costs) of what they do (cf. Horn 2004, Sperber & Wilson 2004), and that this presumption of rationality is common ground among them. Where rationality of this kind isn't assumed, the dynamics outlined below fall apart. It is also worth noting with respect to (3) that I do not intend to make any assumptions about the degree of consciousness under which this principle operates.

(3) Attributing intention. Suppose O observes agent A performing action α with potential or actual consequence c. Let M be the set of alternatives that O believes A would have thought were accessible and more likely than α to effect c; and let L be the set of alternatives that O believes A would have thought were accessible and less likely than α to effect c. O is more likely to believe A intended to effect c via α:

   (a) The more O thinks *ex ante* that A would view c favorably

   (b) The more likely O thinks A would have thought α was to effect c

   (c) The less O thinks A believed A was forgoing by selecting α over elements of M

   (d) The more O thinks A believed A was forgoing by selecting α over

elements of L

The first factor listed in (3) is perhaps obvious: We are more likely to think A intended a particular outcome of A's action the more we think that A would desire that outcome. If we think c runs counter to A's goals, we have relatively little reason to believe that A would try to effect c. (3b) is similarly straightforward. The less A believes α will bring about c, the less sense there is in A attempting to effect c via α. If, for instance, we believe A had no idea that α might effect c, we have no reason to believe that A performed α to effect c.

(3c) and (3d) center on how the action relates to apparently accessible alternatives. (3c) says that our believing that A intended some outcome c is inversely related to how much we think A thought A was forgoing (in terms of benefits less costs) by selecting α over accessible alternatives that were apparently more likely than α to effect c. To illustrate, imagine a scenario in which there's an alternative α' that is nearly identical to α except that we think that A views α' as far more likely to effect c while being less costly. Under those circumstances, α' might appear to have a good deal to offer relative to α, being very similar to the action A opted for and at a lower cost, and, as predicted by (3c), we would have reason to doubt that A intended for α to effect c: if effecting c were an important goal for A, why not opt for the alternative far more likely to bring that about and save in terms of costs? In contrast, if we suppose that the cost of α' greatly exceeded that of α but left everything else the same, there's no longer as much reason to question that A intended to effect c. For in that case, there's an easy explanation for why A didn't opt for the alternative more likely to effect c—namely, doing so would've meant incurring far greater costs.

A similar logic underlies (3d), which says that we're more likely to think A intended to effect c the more we think A would think alternatives less likely to effect c had to offer relative to α. Consider a scenario in which there's an alternative α'' that's essentially the same as α except that we think A would believe it to be only a bit less likely than α to effect c but far less costly—making it, ostensibly, a rather attractive option. In that case, A's opting for α offers evidence

that effecting *c* was important to *A*, because *A* incurred far greater cost for just a small increase in the likelihood of effecting *c*.

Before turning to a discussion of language in particular, it is worth underscoring that all four elements of (3) correspond to potential reasons for doubting that an agent *A* intended their action to effect a given consequence *c*. Considering (3d), for example, if there's reason to believe that all the options *A* thought were less likely to effect *c* were inaccessible or unattractive for reasons other than their disfavoring *c* (for instance, because *A* was unable to perform them, or they came at an apparently high cost, or α had other attractive attributes that the others didn't) there is likewise some reason to believe that effecting *c* was not a goal of *A*'s action, but an unintended consequence. It is by this reasoning that we may doubt that Pooh's bees intended to communicate something by their buzzing: if they wished to move themselves about, any accessible alternative less likely to involve buzzing had very little to offer, hence the buzzing was quite plausibly incidental to a goal of locomotion. The issue of room for doubt vis-à-vis intention will quickly become relevant in the discussion of intention in language meaning, to which I now turn.

2.2. Intention and language meaning, broadly construed

The previous section considered actions and consequences in very general terms. I now turn to a particular kind of action: utterances. Like actions in general, utterances have potentially many different parts, costs, benefits, and possible consequences. Among those possible consequences are effects on a hearer. An utterance may for instance cause a hearer to feel a certain way, recall certain concepts, or change their beliefs. In my view, meaning studies should ultimately encompass a broad range of impacts that utterances have on a hearer's emotional and mental state, though I will focus primarily on belief states here.

In talking about meaning and the way the term MEANING is used, it will be useful to have a broad working notion of meaning that's general enough to accommodate a wide array of phenomena labeled meaning in the literature. The notion described

here isn't meant to be absolute; in other contexts, other notions may be warranted. For the purposes of this work, we might think of a form's meaning in the abstract as its potential contribution to suggesting something about the world to a given hearer in a given context. This is consistent with the idea that a word's semantic meaning is a function that may be composed with other word meanings to form a proposition (e.g. Montague 1970), which, when issued via an utterance, may suggest something about the world. It is likewise consistent with the idea that the meaning of an abstract variant of a phonological variable is an INDEXICAL FIELD (Eckert 2008)—a collection of indexically associated stances, traits, etc.—which, when used, may suggest that the speaker embodies or wishes to mark as relevant some subset of that field. Moving away from forms in the abstract, we might say that, for a given hearer, the meaning, in this very broad sense, of a particular instantiation of a form in practice is whatever contribution it actually makes to suggesting something to that hearer.

This very general notion of meaning-in-practice is stated relative to the hearer and says nothing about intention. Let's now incorporate the perspective of the speaker. Suppose a speaker S's utterance u suggests something p to a hearer H. (4) enumerates three relations that may obtain between S, H, u, and p of particular interest herein, related to Grice's (1957) observations.

(4) UTTERANCES AND SPEAKER INTENTIONS. Let S be a speaker whose utterance u suggests something p to hearer H. Among the possible relations between S, u, p, and H are:

  (a) S had no intention concerning u suggesting p to H.

  (b) S intended u to suggest p to H and intended for H NOT to recognize that intention.

  (c) S intended for u to suggest p to H and for H to recognize that intention.

These three different relations between the S, H, u, and p have played differentially prominent roles in studies of meaning in the sociolinguistic tradition

on one hand and the semantico-pragmatic on the other. As alluded to in Section 1, Grice (1957) distinguishes between two types of meaning: 'natural' and 'non-natural'. Natural meaning roughly coincides with (4a), where something provides information independent of anyone intending to provide that information. (Grice's discussion suggests something a bit stricter, but this characterization suffices for our purposes.) This is the 'Those spots mean measles' case. In contrast, to say that *S* meant something by some utterance *u* in the 'nonnatural' sense, according to Grice (1957: 385), 'is (roughly) equivalent to "[*S*] intended [*u*] to produce some effect in an audience by means of the recognition of this intention"'.[2] In keeping with this notion, the vast majority of research on semantically grounded meaning has focused on instances where the relation in (4c) holds (though see e.g. Ariel 2004, Franke et al. 2012). As Campbell-Kibler (2008, 2009), points out, however, this is not the case in sociolinguistic research on phenomena under the rubric of meaning.

There is clarity to be gained by carefully examining how the principles of intention attribution enumerated in (3) and the intentionality relations enumerated in (4) play out in studies of meaning based in the indexicality of sociophonetic forms on one hand and in the semantics of morphosyntactic objects on the other. The next two sections take these two kinds of meaning in turn.

3. Diversity in intentionality in indexical social meaning

To begin, it's worth examining some extant characterizations of the kind of meaning of primary interest in variationist sociolinguistics, typically referred to as social meaning. Campbell-Kibler (2009: 136) defines social meaning as 'social content tied in the minds of a given speaker/hearer to a particular piece of linguistic behavior'. This conception bears no requirement of intention: a linguistic behavior may be socially meaningful to a hearer simply by suggesting something to that hearer about the social world. This is consonant with Eckert & McConnell-Ginet's (2013: 490) claim that verbal performances 'come off as something regardless of intention, mean something [...] because they draw on

similar performances, reiterating what has worked in the past' (emphasis added). (See also Lavandera 1978: 173.)

Podesva's (2011: 234) characterization, incorporating the word *deployment*, suggests some purposiveness on the speaker's part: 'Social meaning [. . .] refers to the stances, personal characteristics, and personas indexed through the deployment of linguistic forms in interaction.' Eckert & Labov (2017: 469–471) similarly allude to purposive action in characterizing social meaning, claiming that true cases 'must be reflected in speakers' situated use of [. . .] variation' (471). They emphasize, however that social meaning 'emerges not simply in the speaker's production, but in the hearer's interpretation in the moment' (470). By this conception, then, a variant's social meaning in practice is not fully determined by the speaker's intention. Indeed, none of these characterizations requires interpretations to align with intentions, let alone requiring anything about intention recognition.

The role of intentionality in social meaning thus varies, as the remainder of this section will further demonstrate. I will now discuss a diversity of ways in which an utterance or variant may be socially meaningful in the broad sense, taking each of the relations in (4) in turn and highlighting what I take to be the key implications along the way.

3.1. No intention

This class of cases aligns with (4a). Suppose, for example, an individual *S* is speaking a dialect of English that sounds to the hearer *H* like a U.S. dialect and like it's spoken naturally and effortlessly by the speaker. And suppose further that, as far as *H* knows, for *S* to use a phonology substantially different from the one *S* is using would require greater effort and come across as forced.

Here we have a link between a linguistic behavior (talking in a particular way) and social content (an association with the U.S.). And, returning to our broad working notion of meaning, the phonetic particulars here are meaningful: they suggest something to *H* about the world—in this case, that *S* is from the U.S.

But, unless some other special aspect of the context suggests otherwise, *H* has relatively little reason to believe that *S* intended to suggest U.S. nationality by the phonetics of their utterance. The principles concerning intention attribution in (3) explain why. As noted above, as far as *H* knows any accessible alternative considerably less likely to suggest that *S* is from the U.S. would require more effort and likely sound forced. In turn, from *H*'s perspective such alternatives have rather little to offer *S*, assuming *S* doesn't want to sound pretentious. Thus, in accordance with (3d), there's relatively little reason to think that *S* specifically intended to signal being from the U.S. phonetically. Rather, the situation is akin to the case of the bees—as far as *H* knows, if *S* is to talk without expending unnecessary effort and potentially sounding strange, *S* will sound like a U.S national. In other words, *S* is 'just buzzing'.

This is a very general dynamic: believing that a speaker *S* intended to effect something *c* by their utterance is facilitated by believing that *S* had an attractive and accessible alternative that *S* thought would be less likely to effect *c*. Otherwise, *S*'s choice of utterance might have been motivated entirely by considerations orthogonal to the likelihood of effecting *c*. By the same token, *S* forgoing an apparently attractive alternative in favor of an utterance more likely to effect *c* provides some reason to believe that effecting *c* was among *S*'s goals.

3.1.1. Intention, naturalness, salience, and social meaning

In this connection, it should come as no surprise that the notion of 'natural' ways of speaking finds its way into discussions of social meaning and intentionality.[3] One thing that makes an action attractive for an agent is its being easy to commit, and speaking in a 'natural' manner, whatever that might involve and however real that notion actually is, intuitively means speaking with less effort. In keeping with (3d), then, insofar as it appears that a speaker *S* has forgone a more natural and hence easier way of talking, there's reason to believe that *S* expended the requisite extra effort towards some goal that *S* believes the more natural alternative wouldn't have served as well.[4] Contrariwise, when the phonetics is

believed to be 'natural' and hence relatively effortless, the evidence for its having a special purpose accordingly diminishes.

This plays out in Campbell-Kibler's (2008: 648) analysis of how the speaker 'Elizabeth' is evaluated by participants in a study of perceptions of phonetic variants of the English *-ing* suffix (ING): it is when Elizabeth uses a variant that participants judge to be less 'natural' for her that she is interpreted as making a 'sociolinguistic move'. The same basic reasoning, again based in 3d, also helps explain Podesva's (2011) claim that SALIENT variants of sociolinguistic variables are particularly useful for speakers wishing to convey social meaning, where tokens are salient by being 'infrequen[t]' or 'phonetically, by exhibiting extreme acoustic values' (237). Inasmuch as there is a direct correlation between the frequency and the ease with which one produces a particular form in a particular context, infrequent forms and forms exhibiting 'extreme acoustic values' presumably take greater effort to produce than their counterparts. When one uses such a form, then, there's reason to believe that the speaker has forgone a less effortful option. If rational, the speaker wouldn't exert extra effort for no reason, suggesting that the speaker hoped to achieve something that apparently otherwise attractive and less effortful options would be less likely to achieve. One plausible explanation, depending on the context, is that the speaker exerted extra effort for the purpose of conveying some social meaning.

3.1.2. Social meaning and undesirable traits

Examining the sociolinguistics literature on social meaning, one finds many cases where a form is interpreted as being meaningful but without any clear presumption by the analysts or their participants that the speaker intended as much. Indeed, sociophonetic perception studies often find, as Campbell-Kibler (2008: 648) puts it, that 'listeners feel entitled to read qualities into a speaker's linguistic cues that speakers are unlikely to have included deliberately'. Levon (2014) and Tamminga (2017), for instance, report that participants in their studies judged speakers to be less 'competent' and 'stupid[er]' when their utterances bore particular phonetic

variants. While one may occasionally wish to appear incompetent, such traits are generally undesirable. Consistent with (3a), then, we are generally unlikely to think a speaker intended for their utterance to make them appear unintelligent or incompetent. Nonetheless, such traits are still part of the social meanings of various sociophonetic variants in the sense of suggesting something to the hearer about the speaker. Given their general undesirability, these meanings are apt to being treated as revealing something about the speaker's true nature, rather than something the speaker hoped to evince. Babcock's (2014) research on folk-linguistic attitudes toward the speech of Boston Mayor Tom Menino is a clear example. Discussing various negative appraisals of Menino's speech, one participant speculated that Menino's political 'handlers' were unable to 'smooth' his accent and thus suggested that he try to 'appeal to the masses', since his accent seemed both unavoidable and lacking in prestige.

3.1.3. Indexical meaning's relative amenability to non-ascription of intention

The preceding discussion foregrounds a point that deserves emphasis. Namely, meaning based in the indexical (or iconic) character of phonetic forms is relatively amenable to being perceived as being unintended.[5] This is because just as bees flying requires rapid vibration of their wings, speaking requires phonetics, which opens the question of whether the phonetic nature of the utterance was just buzzing—that is, whether it was simply in service of and incidental to attempting to articulate the relevant morphosyntactic objects without expending excessive effort—or if it was indeed designed to convey something beyond the semantic message encoded by those morphosyntactic objects (and any pragmatic inferences derived therefrom).

The picture is rather different when it comes to the semantics of morphosyntactic objects. Being convinced that an aspect of an utterance wasn't intended to suggest anything at all is facilitated by being convinced that, given the speaker's other goals and constraints, there was no reasonably good alternative to that aspect available. Morphemes and their superordinate structures in most cases do have

accessible alternatives, often including saying nothing at all. The absurd exchange in (5), focusing on the level of words, illustrates.

(5) A: The mug is over there under the green coffee table.

B: All I see there is a book./It looks like it's on top of the coffee table./I only see a brown coffee table.

A: Yes, that's right.

B: Then why did you say 'mug'/'under'/it was green?

A: Oh, I didn't mean anything by it.

B: ???

Bees' buzzing is incidental to their flying, and my variants of /t/ and /i/ in a given context may simply be in service of articulating the word *tea* in an intelligible and relatively effortless manner, but it would take very special circumstances for one to observe A's first utterance in (5) and conclude that A used the words mug and under and green for some reason having nothing to do with calling up their semantic content. Why should A go to the trouble of saying those particular words at all if A meant nothing by them, especially as part of an ostensibly communicative act? It is indeed generally very strange (though see some exceptions below) to issue some morphosyntactic object, with all of its encoded semantic meaning, with no intention of suggesting something involving that semantic meaning. Morphosyntactic objects, then, are generally harder to write off as just buzzing. Rather, they're generally taken to be intended to suggest something in their own right.

3.2. Intention with intention for non-recognition of intention

The next class of cases of interest aligns with (4b), where *S* intends to suggest something to *H* without *H* recognizing that intention. These cases in a sense depend on the class of cases above: *S* has an intended meaning but hopes that *H* will misidentify *S*'s phonetic performance as belonging to the unintended-meaning class. I may for instance want to sound smart, cool, etc., but emphatically

not want you to recognize that intention, as it may undermine that intention. Campbell-Kibler (2009: 137) puts it this way: '[Some meanings,] such as jaded, lose their meaning when recognized as intentional'.

The relevance of whether or not hearers believe a social meaning was intended is exemplified in Campbell-Kibler's (2008) analysis of participants evaluation of speaker Valerie's use of *-ing*:

> Valerie's use of *-ing* [as opposed to *-in'*] combined with her other characteristics successfully means intelligent to exactly those listeners who do not perceive that move as intentional. Those who think she intends 'intelligence' by her social cues react by seeing her as less intelligent.
>
> – Campbell-Kibler (2008: 655)

In this sense, successfully suggesting certain things may at least sometimes REQUIRE that the intention to suggest so go unrecognized. And this stands to reason. If we are trying to discern the kind of person someone is or the state they're in, we want to get it right, and the appearance of authenticity can be crucial. Being perceived as authentic often depends on being perceived as not going out of one's way to convince others of something about oneself—that is, it often depends on the observer's believing that one is just letting one's true self or state show. A child's cough, for instance, will only earn them a day home from school if it is believably unintentional.

Sociophonetic meaning is particularly facilitative of meanings that speakers intend but don't want to be perceived as intentional. This is precisely because, again, verbal utterances require a phonetic component, and that requirement opens up the possibility that the phonetic nature of an utterance was designed only to make sufficiently clear what morphosyntactic objects the speaker wished to issue, rather than being intended to communicate anything in its own right.

3.2.1. The performativity of sociophonetic social meaning and consequences for trustworthiness

This talk of authenticity foregrounds the notion of PERFORMATIVITY, which has multiple related senses (e.g. Austin 1962, Butler 1993). Here, in the spirit of Eckert (2019), I'm focused on the degree to which the information suggested by an utterance—and one's evaluation of the truth of that information—depends on the delivery, that is, the performance of the utterance itself (along with other aspects of the speaker's behavior). As Eckert observes, sociophonetic social meaning is primarily performative. One's inexplicit claims to coolness or intelligence, for instance, depend entirely on one's success in consistently enacting those traits, which includes any sociophonetic work toward sounding cool or intelligent. Likewise, if one's sociophonetics makes one sound truly angry in a particular context, then, for all an observer knows, one is indeed angry; there is no objective, outside metric against which to test our evaluations. Given the performative and (inter)subjective nature of sociophonetically based meaning, it is thus very often difficult to decisively verify much of what's suggested by the sociophonetic character of an utterance.

In contrast, the semantic content of one's utterances and the evaluation of the truth of that content generally (though with some exceptions) need not depend so heavily on the manner in which one delivers those utterances. The semantics and truth of the sentences *Springfield is the capital of Illinois* and *The square root of 289 is 17*, for instance, can be determined independently of the way in which a speaker delivers them.

In this way, in many cases there is a better chance of establishing whether the semantic content of a speaker's utterance is true than whether the information suggested by their sociophonetics reflects their 'true' self or motives or beliefs. Moreover, while, as discussed in Section 3.1.3, one may in many cases reasonably deny having intended to signal some social meaning via one's sociophonetics, it is generally difficult to deny committing oneself to the semantic content of one's utterance (outside of contexts like sarcasm and involuntary or reported speech).

Taking all of this together, then, the semantic content of an utterance generally provides more decisive information about a speaker's tendency to willingly suggest (un)reliable information to their hearers than does its sociophonetic character. With sociophonetically based meaning, a speaker may persist in acting as though an inferred meaning that has been called into question is indeed 'true', or simply deny ever having intended to suggest it at all.

I will return to the issue of performativity and reliability in the discussion of game-theoretic approaches to meaning in Section 5. At any rate, it should by now be clear that cases where an utterance suggests something but the speaker either didn't intend it to or intended for their intention to go unrecognized are by no means at the periphery of sociophonetic meaning. There are, however, also cases where a speaker intends to suggest something via the same resources and intends for that suggestion to be recognized, to which I now turn.

3.3. Intention with intention for intention-recognition

This class of cases lines up with (4c). Podesva's (2011) research on high-rising terminals (HRT) provides an example. Surveying previous research on HRT (e.g. McConnell-Ginet 1983, McLemore 1991) and incorporating analysis of his own data, Podesva (2011: 245) suggests that across its various uses, HRT 'serves as a politeness strategy enabling the speaker to express concern for the hearer'. Expressing concern for one's hearer is generally compatible with intending to have one's intention be recognized. King's (2018) research on language use in a sex-education class, where a student selectively employs 'Hip Hop styling' prosody to overtly index dominance, provides another example of using phonetics to convey social meaning and intending to have that intention recognized.

One can find similar dynamics at the segmental level. Author (2017) discusses a case involving a speaker who is a highly-educated, friendly, scarce user of the *-in'* form of (ING), where this information about the speaker is common ground between speaker S and hearer H. Asked about S's weekend plans, S says, 'I'm goin' fishin'!'.

Given the rich common ground between *S* and *H* in that example, it is easy to imagine that *S* used the *-in'* form hoping that *H* would recognize (via the principle in (3d)) that *S* used what for *S* is a rare and thus presumably relatively costly form as a way of trying to suggest something to *H* (if *S* meant nothing by *-in'*, why not use *S*'s more frequent form?). In that case, *S* both attempts to signal something and intends for that attempt to be recognized.

The addressee's conclusions about what exactly *S* was trying to signal would depend on multiple contextual factors. As Author (2017) notes, given that it's common ground that *H* is familiar with *S*'s personal traits, one possible conclusion would be that *S* invoked the trait-based meanings of *-in'* (like suggesting that the speaker is casual or easygoing) not to say something general about *S*, but to say something more local—perhaps to suggest that the fishing event will be a casual affair.[6] In any case, what's important here is that *S* may well intend to suggest something to *H* AND have *H* recognize that intention.

Sociophonetically based meaning can therefore occur with any of the three intention relations of interest. A phonetic aspect of a speaker's utterance may suggest something despite the speaker having no intention for it to do so, or the speaker may intend for it to suggest something hoping that that intention will not be recognized or hoping that it will. Nor is it surprising that the first two classes of intention relations receive so much attention in sociolinguistic research: though it's often unclear that a speaker meant anything by the phonetic character of their utterance, that phonetic character is virtually always potentially meaningful in the sense of suggesting something to the hearer. Given its ubiquity, there is plenty to explore and explain as regards phonetic meaning of this stripe.

Before turning to the role of intention in meaning at the morphosyntactic level, a note on the importance of common ground in intention recognition is in order.

3.3.1. Shared awareness of alternatives facilitates intention attribution

There are two points to be made here, both rooted in (3d). First, *ceteris paribus*, a hearer *H* is more likely to think that a speaker *S* intended some consequence *c*

for their utterance when *H* believes that there was at least one other alternative of a certain type accessible to *S* than when *H* believes no such alternative was available—namely, an alternative apparently less likely than the observed utterance to effect *c* but otherwise presumably consonant with *S*'s goals and having distinct advantages of its own (e.g., being less effortful). Second, *H* is more likely to believe not only that *S* intended to effect *c* but also that *S* wanted that intention to be recognized when the existence of such an alternative is common ground between *S* and *H* (in the sense of e.g. Stalnaker 2002), than when it is not. Indeed, it is no accident that in the examples cited in connection with the third class of cases of social meaning there is always an apparently accessible alternative of this type. We see this clearly in Podesva's study of HRT, for instance, where a non-HRT contour is presumed to be available, and in the hypothetical (ING) case, where it's common knowledge between interlocutors that the speaker typically says *-ing*.

To see why *H*'s believing such an alternative was available facilitates *H*'s believing that *S* intended to effect *c*, compare a scenario in which *H* believes *S* did not have such an alternative to one in which *H* believes *S* did. In the former case, *H* thinks that, given *H*'s understanding of *S*'s goals, *S* didn't have any other attractive options available, so for all *H* knows effecting *c* may have been incidental to *S*'s other goals for the utterance. But in the latter case, *S*'s opting for the utterance more likely to effect *c* and forgoing the benefits of the alternative itself provides evidence that *S* desired to effect *c*, or was at least amenable to effecting *c*—if not, *S* could have opted for the alternative. Returning to the fishing case, for instance, had *H* thought that the *-ing* variant was costlier than *-in'* for *S* to produce, then, as far as *H* could have known, there was nothing intentional about the observed *-in'* variants beyond their service in pronouncing the relevant words. This connects to the earlier discussion of naturalness and authenticity: if *S* wants their intention to sound a certain way to go unrecognized, it helps if *H* thinks the *S* has no other easily accessible way of talking available and is just letting their 'natural', true self show.

To the point about common ground, compare (i) a situation where *H* believes there is an alternative of the relevant type accessible to *S* but also believes that *S* thinks *H* is unaware of such an alternative; and (ii) a situation where the existence of such an alternative is common ground between *S* and *H*. As just established, *H* is more likely to believe a variant was intended to effect *c* when *H* believes that there was an alternative of the relevant kind available. Now if in case (ii) *S* strongly preferred that *H* not view *S*'s choice as being motivated by an intention to bring about *c*, *S* could have opted for the relevant alternative. But *S* did not do so, thus providing evidence that, at a minimum, *S* was not strongly opposed to *H* thinking *S* intended to effect *c*. *S*'s choice of variant does not provide the same kind of evidence to *H* in case (i); for in that case, *H* thinks that *S* believes that *H* is unaware of the availability of the relevant alternative and, consequently, *H* thinks that *S* doesn't realize that *H* may well view *S*'s choice as having been intended to bring about *c*. In other words, in (i) *H* thinks that *S* doesn't realize that *S*'s utterance may well suggest an intention to effect *c*. Between the two, then, the common ground case offers extra evidence to *H* that *S* was at least not strongly opposed to *H* thinking *S* intended to effect *c*. In turn, the common ground case likewise is more conducive to *H* positively believing that *S* wanted *H* to think *S* intended to effect *c*.

Given these dynamics, knowledge (or lack thereof) of a speaker's repertoire and sociophonetic tendencies—that is, what alternatives are available to them and the relative costs of production of each—has a crucial impact on interpretation. It makes sense, then, that studies such as Podesva (2011) and Podesva et al. (2015) offer speaker-specific analyses of the social meanings of phonetic forms that incorporate facts about individual speakers' usage patterns.

3.3.2. Looking beyond phonetics

As a segue to the next section, it is worth noting that this discussion of the role of the availability of alternatives of the relevant type in attributing intention applies just as well to meanings rooted in the semantics coded in morphosyntactic objects

as it does to sociophonetic meaning. (Indeed, it generalizes from utterances to actions more broadly, simply by substituting terms like AGENT, OBSERVER, and ACTION for SPEAKER, HEARER, and UTTERANCE.) In both cases, the dynamics depend in the same way upon interlocutors' beliefs about each other and about the properties of an utterance in comparison to such alternatives.

The familiar phenomenon of scalar implicature (e.g. Horn 2004) illustrates. Consider (6) and (7), both evaluated in an otherwise identical context where it is common ground that the respondent is sincere, has full knowledge of the quality of Pat's performance, is aware of terms like great, and prefers to be informative so long as it doesn't require lying.

(6) Fill in the blank: 'Pat's performance was satisfactory.'

(7) Mark the option that applies:
'Pat's performance was: __ unsatisfactory _x_ satisfactory.'

In both scenarios, the respondent has given the same answer, but (6) is more likely than (7) to cause a reader to infer that Pat's performance wasn't great and that the respondent intended for their response to suggest as much. The Gricean (1975) dynamic here can be put in terms of the discussion in this section: with (6), it is common ground that respondent could have used an alternative of the relevant kind: *great*. Being semantically inconsistent with 'not great', *great* would have been less likely than *satisfactory* to suggest 'not great', and *great* had something to offer relative to *satisfactory*, being more informative without requiring any extra effort. The respondent forwent this alternative, however, and opted for one more likely to lead a reader to infer 'not great', providing some evidence that, at a minimum, they could live with a reader making that inference. With (7), however, there is no such alternative and the corresponding evidence vanishes.

This is not to say that in either case an observer would NECESSARILY conclude that the respondent indeed positively intended to suggest Pat's performance wasn't great in (6). Indeed, the respondent may have had no independent desire to suggest as much but felt strictly constrained to tell the truth and believed that

'satisfactory' was simply the most complimentary answer available given that constraint. Ariel (2004) makes this point regarding the word *most*, noting that at times we may desire for rhetorical reasons to suggest 'all', but, feeling constrained to tell the truth, use *most* instead, despite otherwise preferring not to invite a 'not all' inference (see also Horn 2006, Franke et al. 2012). Indeed, the principle in (3a) accommodates this sort of dynamic, where an utterance suggests *p*, but one may still conclude that the speaker didn't specifically intend to suggest *p* because one believes that suggesting *p* runs counter to the speaker's preferences. Nevertheless, by the reasoning outlined above, (6) offers greater evidence that the respondent intended to suggest 'not great' than (7), where there simply wasn't a more favorable option available.

Having developed principles of intention attribution in discussing sociophonetic meaning, and having provided an example of how such principles likewise apply to semantic content, I now turn to a more general discussion of intention vis-à-vis the semantics of morphosyntactic objects.

4. Intention and semantically based meaning

In Section 3.1.3, it was established that while one may well not intend to suggest anything by the socioindexical character of some phonetic aspect of their utterance, it's comparatively rare for one to have no intention of suggesting anything by the semantic character of some morphosyntactic aspect of that utterance. On the other hand, what exactly a speaker intends to convey via their morphosyntax is very often open to question. In this section I will further discuss the role of intention in semantically based meaning, focusing on how our inferences about speakers' intentions vis-à-vis the morphosyntax of their utterances are guided by the principles developed in the previous two sections. I begin by noting cases where one might indeed doubt that a speaker intended to suggest anything at all by the morphosyntax of their utterance. I then turn to a pair of illustrative examples where a speaker's intention is contested, showing how the accompanying debate about the speaker's intentions is rooted in the principles

developed above.

4.1. Morphosyntactic objects without speaker intention

There are certainly some cases where individuals issue a word or more without themselves intending to suggest anything by it. Cases where speech is understood to be involuntarily produced (e.g. sleep-talking) presumably fall under this category. Verbal 'tics' may fit under this rubric in at least some cases, though it should be noted that research on filled pauses, for instance, has revealed correlations between particular filled pauses (e.g. *um* vs. *uh*) and particular discourse situations (e.g. Clark & Fox Tree 2002), suggesting that the forms are, at minimum, differentially suited for particular intentional purposes. Then there are cases where one speaks on another's behalf, which Levinson (1988) argues have received insufficient attention. Du Bois (1993) and Gaenszle (2016), for instance, discuss the case of divination, where the speaker may simply be a channel for a deity's message.

Expressives, too, present an interesting case. On some analyses, felicitously using expressives doesn't strictly require an intention to suggest anything (see e.g. Bach 2006), though it may REVEAL something about a speaker's emotional state. It certainly seems that we sometimes utter expressives not to suggest something but for, say, catharsis (Wharton 2016). But as Blakemore (2013) and Wharton (2016) point out, expressives can be used with an intention to suggest something, even ostensively. Moreover, even when there is no intention to suggest something to another party by using an expressive, expressives are generally harder than phonetics to write off as strictly incidental to one's other reasons for talking, unless for that speaker issuing expressives appears to be involuntary.

There are surely other cases to consider (compulsory speech, recitation, etc.). Still, there remains an asymmetry between phonetics and morphosyntax as regards intention: phonetic forms may be taken as having been issued only in service of articulating some larger word or phrase, but there is no generally applicable analogous explanation for issuing a morphosyntactic object with no

intention of suggesting anything by it. In contrast, it seems that all the potential reasons to believe that a morphosyntactic object was issued with no intention of suggesting anything (involuntariness, catharsis, etc.) apply to phonetics as well.

The remainder of this section concerns cases where a speaker does indeed appear to intend something by the semantics of their utterance, but what exactly was intended is open to question. While instances where speakers intend to have their intentions recognized are the bread and butter of semantic and pragmatic research (though see e.g. Franke et al. 2012), in practice there is often uncertainty even at the level of morphemes and up about what a speaker intends to suggest with their utterance. The following examples illustrate how reasoning about what in particular a speaker intended to suggest is grounded in the theory outlined in (3) and developed in the discussion of intention and sociophonetics.

4.2. Example: Ilhan Omar's statements on Israel and its supporters

In this example it is clear that the speaker meant something by her utterances (and something critical at that), but there was controversy concerning whether she specifically intended for her words to have anti-Semitic force. The case involves U.S. congresswoman Ilhan Omar, who in 2018 and 2019 drew considerable attention for statements she made criticizing Israel and its supporters. The most controversial statements are provided here in (8). Space limitations preclude a comprehensive treatment of these statements and their contexts, nor do I intend to endorse a particular interpretation of them. My focus here is on how discussions of Omar's intentions center on the principles developed and discussed above.

(8) (a) '**Israel has hypnotized the world**, may Allah awaken the people and help them see the evil doings of Israel.' (Twitter, 2012 (since deleted))

(b) '[The level of U.S. Congressional support of Israel is] **all about the Benjamins baby**!' (Twitter, 10 Feb 2019) [*Benjamins* is a slang term for $100 bills]

(c) 'I want to talk about the political influence in this country that says

it is okay for people to **push for allegiance to a foreign country**.'[7]
(Public forum, Washington, D.C., 27 Feb 2019)

Many commentators pointed out that Omar's statements in (8) bear connections to anti-Semitic stereotypes (e.g. Weiss 2019, Beauchamp 2019), and there was no shortage of speculation concerning whether Omar intended for her statements to bear anti-Semitic force. 'Omar, I suspect, knows exactly what she is doing,' wrote *New York Times* columnist Bret Stephens in a 7 March 2019 opinion piece on Omar's statements, and many readers commented for or against this claim (Stephens 2019: n.p). A few illustrative examples are provided in (9).

(9) (a) User DO5: 'Representative Omar [. . .] made anti-Semitic comments. No one naturally states, without some previous introduction, the specific, anti-Semitic tropes developed over centuries.'

(b) User Sarah: '[W]e can't just say it's lack of "tact." After several instances of stepping in it, her approach is either intentional or really, really lazy.'

(c) User Sedanchair: '@DO5 It seems there is a never-ending list of increasingly obscure tropes to draw from [. . .] for use against any critic of Israel.'

(d) User Metastasis: '[. . .] criticism of a government is not criticism of its people [. . .]'

(9a) suggests that it's not credible that Omar invoked three different anti-Semitic tropes simply by chance and hence must have known her words would have anti-Semitic force. This argument links to (3b), which says that we're more likely to think someone intended some outcome the more we think they expected their action to effect that outcome. (9b) gives a similar assessment, suggesting that, at best, Omar has been indefensibly careless in wording her criticisms of Israel. (9c), on the other hand, offers a counterargument to (9a–b), appealing to the principle in (3d) (though not in so many words): according to (9c), there are no alternative utterances critical of Israel but less likely than Omar's statements to

be linked to anti-Semitic tropes. In other words, according to (9c), there is simply no way for Omar to criticize Israel without being accused of evoking anti-Semitic tropes, even if the latter is not among her goals.

(9d) defends Omar against claims of anti-Semitism by suggesting that if she had wanted to criticize Jewish or Israeli people in general she could have done so explicitly, rather than talking about Israel as a state. Linked to (3c), the reasoning here is that among the alternatives accessible to Omar were utterances overtly critical of Jewish people in particular and thus more likely to have anti-Semitic force, but Omar opted against such alternatives, suggesting that expressing anti-Semitism was not her intention. By the same token, however, (3c) also provides a basis for a counterargument because the principle takes into account the costs of alternatives. So, while there were accessible alternatives more likely to express anti-Semitism, such alternatives may have been so socially costly—perhaps costing Omar her seat in Congress—that, on balance, they offered Omar relatively little even if she did wish to signal anti-Semitism. Looking beyond this particular case, (3c) is what permits one to think that although a speaker forwent more direct or potent routes to effecting some outcome *c*, they may still have intended to effect *c*, avoiding the alternatives simply because they were too costly.

4.2.1. On virtue signaling

There is no shortage of other examples where a speaker's intentions in issuing some semantic content are underdetermined by that content and potentially covert. In discussing sociophonetically based meaning, I mentioned that speakers may use specific phonetics intending to suggest something about themselves, hoping for that intention to go unrecognized—for example, to sound cool or intelligent. The same goes for semantic meaning. Bach (2012: 52), for instance, points out that one might say self-deprecating things in order to appear modest, hoping that that intention goes unrecognized because 'recognizing [the intention to appear modest] may vitiate it'. Such is the nature of so-called 'virtue signaling', at least according to some definitions, where one expresses or does something supposedly

virtuous primarily for the purpose of appearing virtuous. Accusations of virtue signaling abound on the Web, as in the tweet in (10) from 4 August 2019. Here the user, whose other tweets support the second amendment of the U.S. constitution and the abolition of government, comments on reactions to two mass shootings in the U.S. from the day before.

(10) @_Kenziepuff: 'Conservatives posting tweets condemning mass shootings is more suspicious than not saying anything. No sane person "supports" those. Further proof mainstream conservatives are simply always reacting to the Left. Virtue signaling is more important to them than the American people.' (Twitter, 4 Aug 2019)

The user argues that it would be a waste of energy for the individuals in question to condemn the shootings simply to inform the public about their stance on the shootings, since it would be taken for granted that they were against the shootings. Hence, according to the user, there must have been some extra benefit to condemning the shootings: namely, appearing virtuous. Put in terms of (3d), according to this user, the alternative of saying nothing, which would be less likely to look like an attempt to appear virtuous, still has much to offer, requiring less effort and being consistent with being against the attacks (which would supposedly be taken for granted). Therefore, the argument goes, there is good reason to think that individuals in question were motivated by a desire to display virtuousness. This argument is not unassailable, however, as users responding to the tweet indicate. Multiple critiques argue that there are reasons for explicitly condemning the shootings other than attempting to appear virtuous, even if one's condemnation may be taken for granted. @bitchesbrokenhx, for instance, writes, 'So expressing any feelings about people being dead is?? Virtue signaling?'

4.3. Summary

As these examples show, while it's rare for a speaker not to intend to suggest anything at all by the semantics of their utterance, what exactly the speaker does intend to suggest is not always clear, and can be both contentious and

consequential. And the same principles that govern the attribution of intention (or lack thereof) in the case of sociophonetic social meaning, which center on beliefs about the agent's preferences, knowledge state, and appraisal of alternatives, apply just as well here. The preceding discussion thus echoes Franke et al.'s (2012) call for increased attention in pragmatic research to scenarios where the usual assumptions of Gricean cooperativity and overt intention aren't taken for granted.

Continuing along these lines, in the next and penultimate section of this paper, I turn to the role of intention in Burnett's (2017, 2019) SOCIAL MEANING GAMES (SMG) model and the RATIONAL SPEECH ACT (RSA) models (e.g Goodman & Frank 2016) to which they are related. These models have greatly enriched our understanding of how messages are coded and inferred in linguistic exchanges. At the same time, focusing on SMGs, I will explain why the foregoing discussion points to a need to make the models more complex. For example, as discussed in Section 3 and contrary to what SMGs and RSAs are designed to account for at present, speakers sometimes hope that their intentions will go unrecognized, certain social meanings seem to depend on being performed in a way that seems natural, and hearers may conclude things from utterances that they think the speaker had no intention of suggesting.

5. INTENTION AND GAME-THEORETIC THEORIES OF LANGUAGE USE

5.1. Background

Central to game-theoretic models of language use and interpretation (e.g. Franke 2009, Frank & Goodman 2012, Burnett 2017) is the idea that, consciously or not, speakers and hearers reason about each other's beliefs in choosing and interpreting utterances, and they know this about each other. A speaker S wishing to convey some information to a hearer H attempts to select the utterance that appears to offer the best mix of being inexpensive and likely to convey exactly the information S wishes to convey to H. Similarly, observing some utterance u, H interprets u relative to H's prior beliefs and the assumption that S selected u as just described. The interaction can be construed as a game in that there are agents

employing strategy to achieve some goals. Influential in game-theoretic research on meaning are RSA models, which situate language use and interpretation in broader theories of cognition as probabilistic reasoning (Goodman & Frank 2016). RSA models have been applied to a wide range of phenomena, offering means for empirically testing quantitative predictions about language use and interpretation and delivering general insights into how these processes work (see Goodman & Frank 2016 for multiple examples).

Building on the insights and architecture of RSAs (as well as Franke 2009), Burnett (2017, 2019) broadened the scope of game-theoretic research on meaning to include social meaning via her SMG models. In SMGs, a speaker *S* attempts to signal something about *S*'s desired persona to a hearer *H* by selecting what *S* reasons to be the most fitting variant(s) given *S*'s goal, and *H* in turn tries to figure out what *S* is attempting to signal—both parties taking into account *H*'s prior beliefs about *S*'s persona. The principal difference between RSA models and SMGs is that whereas RSA models typically involve agents signaling/inferring an answer to some question under discussion (Roberts 1996) based on an utterance's semantic content, SMGs involve signaling/inferring something about *S*'s persona based on the indexical field of the sociolinguistic variant *S* uses.

5.2. Cooperativity, reliable information, and presumption of intention

Among the shared assumptions for RSA models and SMGs to date is a version of Gricean (1975) cooperativity. In these models, it is common ground among *S* and *H* that *S*'s goal in issuing a particular utterance or variant is to provide as much relevant, reliable information to *H* as possible, *modulo* considerations of cost, and that *H*'s goal is to infer the information *S* is attempting to convey and update their beliefs accordingly.[8] In these models, then, both parties' interests are in effect the same as regards the utterance or variant under consideration. As Burnett (2019: 11) puts it: '[B]oth players win if [*H*] correctly interprets [*S*]'s message, updating their beliefs accordingly, and they both lose if [. . . *H*] comes to believe something different about the world than that which [*S*] intended'.

With this basic picture in mind, I will now foreground and flesh out a couple of features particularly relevant to our discussion. First, in these models it is common ground among interlocutors that *S* intends to convey something to *H* via the utterance/variant under consideration, and *H*'s main task is to try to determine what that something is. The meanings these models are designed to capture, then, are those that *H* infers based partly on the belief that *S* is indeed trying to tell *H* something via their utterance/variant. Second, concerning the assumption that *S* will only attempt to convey reliable information, in RSA models this assumption is operationalized by assuming that *H* rules out any possible world that is inconsistent with the semantics of *S*'s utterance.[9] In SMGs, the analog of semantic content for a sociolinguistic variant is its indexical field (Eckert 2008), and indexical fields and personae are both modeled as sets of properties. The assumption that *S* will only attempt to convey reliable information in SMGs, then, is operationalized by assuming that *H* always rules out any persona that shares no properties with the indexical field of the variant *S* uses. Modeling the indexical fields of *-ing* and *-in'* as {competent, delicate} and {incompetent, casual}, for instance, Burnett (2017: 258) notes that in SMGs, if *H* hears '*-ing*, they discard the possibility that the speaker is [both] incompetent and casual'.

The development of SMGs has sharpened our understanding of the dynamics of social meaning. The models force one to be explicit about how things are supposed to work and about the assumptions upon which the system rests. As may already be apparent, however, SMGs to date don't fully square with empirical observations about social meaning in other literature. In the next subsection, I will point out some of the challenges SMGs face, drawing on the preceding discussion.

5.3. Challenges for SMGs

A key set of difficulties for SMGs lies in the assumption that it's common ground among speakers and hearers that their goals are aligned and, in particular, that the variants speakers select always provide reliable information about their personae. It may well be that in many, perhaps even most, contexts *S* and *H* mutually

hope for *H* to correctly apprehend *S*'s intended message and update their beliefs accordingly. However, it is certainly not always in *H*'s best interest to believe whatever *S* intends for *H* to believe about *S*. Rather, *H* would more generally be well served by trying to figure out what *S* is actually like. Whether *S* is actually competent or friendly, or just attempting to appear so, can have important consequences for *H*. Thus, it doesn't follow that *H* will or should come to believe whatever *S* intends for *H* to believe.

Indeed, the preceding discussion suggests that, *ceteris paribus*, differences in the nature of sociophonetic meaning and semantic content provide a reason for hearers to be quicker to doubt the reliability of an apparently intended sociophonetic meaning than the reliability of an utterance's semantic content. Franke et al. (2012) and McCready (2015) point out that if a speaker is found to willingly provide unreliable information, it can cost that speaker in terms of social capital (as in the case of the boy who cried, 'Wolf!'). Even amoral speakers thus have some incentive to tell the truth in the long run, particularly regarding easily verifiable matters of fact (though other considerations may trump that incentive). However, as discussed in Section 3.2.1, given the performative and (inter)subjective nature of sociophonetic social meaning and its relative amenability to denials of intention by the speaker, it is relatively difficult to establish conclusively that a speaker suggested unreliable information via the sociophonetics of their utterances, not to mention that they did so deliberately. Generally speaking, then, we might expect the extrinsic incentive to provide reliable information to be weaker with sociophonetic meaning than with, say, the semantics of objective assertions, and, in turn, we might expect hearers to be more generally suspicious when it comes to sociophonetic meaning than when it comes to semantic content.

Moreover, predictions aside, we know as a matter of fact from extensive empirical work that hearers often do not interpret a speaker's sociophonetics in the way they think the speaker intended. Indeed, as discussed above and as Campbell-Kibler (2009: 137) observes, a speaker's attempt to signal something about their

persona by using a particular sociophonetic variant can fall flat in part BECAUSE it has been recognized as intentional.[10] Recall Campbell-Kibler's (2008) case of 'Valerie': '[Participants] who think she intends "intelligence" by her social cues react by seeing her as less intelligent' (655). SMGs in their current form have no way of accounting for such cases. Given the assumption of cooperativity as implemented in SMGs, *H* assumes that *S* will provide reliable information, and if *H* thinks that *S* intends to signal some property (in this case, intelligence) via *S*'s chosen variants, *H* ought to ascribe that property to *S*.

Podesva et al.'s (2015) study of perceptions of U.S. politicians poses similar problems for SMGs. For instance, the authors found that Barack Obama's speech was 'rated as sounding more intelligent' when his word-final /t/s were unreleased than when they were released. Research on word-final /t/ in English suggests that it is the released variant that would be more likely to be associated with intelligence, given its well-documented associations with traits like articulateness and learnedness (e.g. Benor 2001, Bucholtz 2001). But, again, given the assumptions of SMGs, including the assumption that hearers will take speakers at their word, so to speak, we should be surprised to find a speaker being perceived as having a lower degree of some property (like intelligence) when they use a variant more closely associated with that property (like released /t/) than when they use another (like unreleased /t/).

More generally, as discussed extensively in Section 3, that a hearer *H* believes that a speaker *S* intends to convey *c* via the sociophonetics of their utterance is neither necessary nor sufficient for *H* coming to believe *c* on the basis of *S*'s sociophonetics. *H* may infer things about *S* that *S* had no intention of suggesting; *S* may intend to suggest (true or false) things and hope for that intention to go unrecognized; and so on. Nor, as I hope to have shown above, are such cases marginal in the realm of social meaning. But because of SMGs' assumptions about intentionality and cooperativity, such cases fall outside of their scope in their present form.

5.4. Summarizing, and looking ahead

Having said all of that, though such cases of sociophonetic meaning aren't accounted for by SMGs at present, they are presumably governed by many of the same general principles of probabilistic reasoning, social recursion, and strategic use and interpretation of linguistic resources that SMGs currently employ. It's just that such cases don't involve such strong assumptions about speakers and hearers' intentionality, common ground, and shared objectives. Rather, such cases suggest a need for a more complex model in which, with respect to a particular sociophonetic variant *v*, *S* might well be uncertain about, for instance: (i) whether *H* would interpret *v* as suggesting something about who *S* is; and (ii) whether *H* would interpret *v* as being motivated by a desire to suggest something about who *S* is. On the flipside, *H* may well be uncertain about: (i) whether *S* intended to suggest anything via *v*; and (ii) how well the indexical field of *v* squares with *S*'s actual personality, stances, etc. Adding complexity along these or similar lines is necessary to cover the rich and complex reality of social meaning. Franke et al.'s (2012) work on game-theoretic pragmatics without the strong assumption of cooperativity could prove rather helpful in this regard (see also Franke 2013). While that work focuses on inferences based in semantics, it proceeds from the fact that speakers and hearers need not have the same interests concerning what the hearer comes to believe (*pace* SMGs), but may still apply strategy and reason in using and interpreting linguistic resources.

Before concluding, I turn to a couple challenges for RSAs to date, made manifest by close consideration of the implications of SMGs' underlying assumptions. In this way, by requiring explicitness about how social meaning is supposed to work and situating social meaning in broader theories of rational action, SMGs sharpen our understanding of the dynamics of language use and interpretation beyond the realm of social meaning.

5.5. Related challenges for RSA models

Campbell-Kibler (2008: 654) rightly points out that social meaning in situated use

doesn't simply 'reside in the speaker's intention', thus distinguishing it from the type of meaning with which Grice (1957) was fundamentally concerned. But it is worth further pointing out that, in practice, meaning in context NEVER resides entirely in the speaker's intention, whether it's based in semantics, indexicality, or something else. Franke et al. (2012), for instance, examine a range of a cases in which a rational hearer might be expected infer something from an utterance's context and semantics that the speaker didn't intend at all.

Indeed, lessons from sociophonetic research about gaps between intention and interpretation point to analogues in the realm of semantics-based meaning, presenting additional challenges for models that assume cooperativity. Take for instance the phenomenon of 'hypercorrection' (Labov 2006 [1966]), whereby a speaker, apparently attempting to signal prestige, uses a prestigious variant of a variable more than would members of a more prestigious group with which the variant is associated. By overdoing it, speakers may end up being taken NOT to have the relevant property or properties indexed by that variant. As noted above, SMGs cannot at present account for such cases; the models assume that listeners will regard speakers' sociolinguistic performances as truthful, regardless of how convincing they are in practice.

This same dynamic can occur with semantically based meaning. Just as one can overuse a sociophonetic variant, one can assert something so many times or with such force as to lead the hearer to suspect that the assertion is false. We see this in Queen Gertrude's reaction to the play within the play in *Hamlet*, in which her counterpart 'protest[s] too much' (III, ii): the play's queen's vows of faithfulness to her husband are too overdone to be believably sincere. Like SMGs, RSAs are not presently designed for cases in which a speaker intends to communicate *p* repeatedly, and the hearer recognizes as much, but, eventually, on the basis of the speaker's repeated assertions, concludes *not p*.

More generally, RSAs aren't presently designed for cases in which the hearer believes that the speaker intends to communicate *p* but concludes not *p*. Kao & Goodman (2015) provide an insightful account of irony, which includes hearers

concluding that the opposite of the semantic content of the speaker's utterance is true. But in the cases their models account for, the hearer assumes that speaker intended for the hearer to come to that conclusion—that is, that the speaker wanted the hearer to conclude not *p* even though the semantics of their utterance was *p*—so the assumption of cooperativity remains.

Just as 'protesting too much' can raise suspicions about one's sincerity, even a single instance of an utterance or variant can be delivered in such a way that hearers take the opposite of the apparently intended meaning to be true. I have already discussed several sociophonetic examples of this. But achieving one's goals via the semantic content of one's utterance often requires a credible performance, too. Indeed, all speaking is a performance of sorts, and using aspects of our utterances to change others' belief states in the way we intend requires getting our performances right.

Discourse surrounding a *New York Times* report that, from 1985 to 1994, then private citizen Donald Trump lost more than a billion dollars provides an instructive case. The May 2019 article reported that Trump's 'core businesses [. . .] total[ed] $1.17 billion in losses for the decade' (Buettner & Craig 2019: n.p.). When the hosts of the *Fox News* morning show *Fox & Friends* discussed the story, they depicted it in a generally positive light. Co-host Ainsely Earhardt said of the story:[11]

(11) If anything you read this and you're like, wow. It's pretty impressive all the things that he's done in his life. It's beyond what most of us could ever achieve.

Many observers questioned whether Earhardt could sincerely believe that losing money on that scale is impressive (in a positive sense), and some suggested her delivery betrayed that she didn't actually believe what she was saying. Aspects of her delivery drawing commentary included the focus of her gaze and the fact that she raised her hand in front of her mouth on the phrase *most of us could ever achieve*, taking an arrhythmic pause before the word *achieve*. Example (12) presents a handful of reactions from both media personalities and casual

observers.

(12) (a) Colin Jost of *Saturday Night Live*'s *Weekend Update*: 'Come on, blond lady, even you – even you don't believe that. I mean you – you said the last part into your hand.'[12]

(b) Twitter user @countdown2march: 'Lol they're not even trying anymore. Look at her face when she's saying that bullshit' (Twitter, 8 May 2019)

(c) Late night TV host Jimmy Kimmel on *Jimmy Kimmel Live*: 'She almost couldn't say that word [achieve].'[13]

Each reaction suggests that something about Earhardt's utterance—be it gesture, facial expression, or prosody—indicates that she doesn't truly believe what she's saying. But the comments make no suggestion that Earhardt wants to come across that way. Rather, the interpretation seems to be that Earhardt intends to convey that she does believe what she's saying, but fails to do so. This is in contrast to cases of (cooperative) irony, where the speaker intends to suggest the opposite of what they say and wants the hearer to understand that.

Thus, just as appealing to the indexicality of a sociophonetic variant is no guarantee that one's intended effect will be achieved, so it goes with the semantics of one's utterances. Successfully making an explicit public commitment to a belief or preference (see e.g. Condoravdi & Lauer 2012) means selling it, and sometimes it further requires selling it without looking like you're trying to do so. Even expressives, which Potts (2007: 167) argues 'do not offer content so much as inflict it', can be unconvincingly performed. While it is true that the content of things like swear words isn't open to the same mechanisms of denial as, say, at-issue content, a hearer will only believe that the speaker is in the emotional state conventionally associated with the relevant word if the delivery of that word is believable. Again, while we may generally default to taking speakers at their word (and as Franke et al. 2012 point out, for good reasons), carrying off one's intended communicative goal means delivering a credibly sincere performance. This may

especially be the case for expressions of emotion, opinion, or evaluation like (11), where, as with the case of social meaning (see Section 3.2.1), much of what's suggested cannot be independently verified by objective means.

Developing a game-theoretic model of language use that can accurately predict inferences in cooperative contexts and at the same time detect when utterances intended to be viewed as sincere are likely to be viewed as insincere is a tall order (see Franke et al. 2012 and Kao & Goodman 2015 e.g. for some steps in that direction). But humans' use and interpretation of language demonstrably involves both, among many other complicating factors. Not only do we sometimes doubt the truth of the semantic content we're delivered, but, relatedly, the cliché that it's not just what you say but how you say it is true; and these are facts that we as speakers and hearers must contend with every day. Ultimately, so, too, must our theories of language use and interpretation.

6. Conclusion

The overarching goal herein has been to clarify the nature of intention attribution and what it in turn tells us about meaning. I have argued that decisions about intention ascription are based on very general principles linked to our beliefs about the relevant agent's beliefs, their preferences, and their assessment of alternative actions. These principles make predictions about various aspects of language use and interpretation (concerning, for instance, the role of alternatives, perceptions of 'naturalness', and common ground in intention attribution) and shed light on public discourses about agents' intentions (as in the case of Ilhan Omar) and on the nature of sociophonetic social meaning and morphosyntactic semantic meaning more generally. In comparing these two types of meaning, I hope to have shown that they are both more different and more similar than they might seem. In this connection, I have also identified challenges for SMG and RSA models in their current forms—challenges that I am hopeful this work will help to address.

The better we understand the relation between various kinds and notions of meaning, the better our theories of humans' capacity for meaning-making and

interpretation, in all its complexity, will be. As Grice (1957) and Campbell-Kibler (2008) identified, the role of intention is a crucial piece of the picture.

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Notes

1. Anonymized for submission.
2. Another way of formulating (4c), then, would be to say: '*S* intended *u* to suggest *p* to *H* by means of *H*'s recognition of this intention.' This leaves open whether *S* specifically desires for *H* to recognize the relevant intention, or cares only that *u* suggests *p* to *H*, which happens to require that *H* recognize the relevant intention. I find this formulation less perspicuous, however, and the distinction has no practical bearing on the discussion herein.
3. This use of the word *natural* is not meant to coincide with Grice's notion of NATURAL MEANING, though there is a practical relationship between them.
4. This discussion of the relation between intention and (un)natural ways of speaking highlights a link between (3d) and Horn's (1984) DIVISION OF PRAGMATIC LABOR, whereby marked forms take on marked meanings.
5. The same goes for the indexicality of variants of a morphosyntactic variable (insofar as they are aptly analyzed as such; Lavandera 1978, Romaine 1984). One's use of, say, a stigmatized form of negation may be intended as a statement in its own right, depending on the speaker's repertoire. A separate issue, however, is the semantics of morphosyntactic objects, to be discussed below.
6. Labov (2012: 22) discusses the related case of '[a] Philadelphia travel agency [. . .] with an electric sign spelling out *crusin'*' adding, 'We understand this as an advertisement that we will have a better time cruisin' than we would cruising'.
7. Busboys and Poets. 2019 Feb 27. https://www.facebook.com/busboysandpoets/videos/353129905294312/. Last accessed 29 July 2019.
8. Even in RSA accounts of cases where hearers may conclude that an utterance is literally false, hearers still assume that utterances convey true and helpful information in some sense. So, while a hearer may conclude that 'This cup of coffee cost me $50' is false as an assertion about the actual cost of the coffee, it will still be taken to say something true and relevant about the speaker's feelings about the cost of the coffee. As Kao et al. (2014: 12002) put it, in these

models, it is 'possible for a literally false utterance to be optimal as long as it is informative along the target dimension'.

9. See footnote 8 for discussion of a special case.
10. It is worth noting that Burnett (2017, 2019) claims that the SMG 'framework does not assume that all or even most aspects of message/interpretation selection or utility calculation are conscious or intentional' (2017: 259), but Burnett uses the term INTENTIONAL in that quote differently than I use the term herein. Whereas one might gloss my sense of the term as 'goal-directed', Burnett's seems to require a degree of conscious awareness. As the discussion in Burnett (2017, 2019) makes clear, speakers are indeed presumed to be making goal-directed decisions in selecting their utterances in SMGs. For instance, Burnett adopts the assumption that speakers 'are trying to make the choice that will have the best chance of accomplishing their goals' (2017: 248) and writes of '*S* [having] a set of properties characterizing themselves they wish to communicate to [*H*]' (2019: 11).
11. A video clip of the statement can be found here: https://twitter.com/revrrlewis/status/1126094966609076225.
12. Weekend Update: Trump Lost Over $1 Billion. Aired 11 May 2019. NBC. https://www.nbc.com/saturday-night-live/video/weekend-update-trump-lost-over-1-billion/3954440. Last accessed 21 Sep 2019.
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