Finding needles in the right haystack: Double modals in medical consultations

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Double modals (DMs), as in (1), are exceedingly rare in sociolinguistic interviews (Feagin 1979), despite their status as a characteristic feature of Southern US English. The frequency-related challenges presented by syntactic variables seem to be magnified for this construction (c.f. Cheshire 1999), production of which is further limited by geographic and pragmatic constraints (Mishoe & Montgomery 1994). Collecting naturally-occurring DMs is like the proverbial search for needles in a haystack.

(1) a. You know what might could help that is losing some weight. (53207)1
b. My bones might not can take that. (33896)

Our study represents the very first corpus investigation of DMs, through a search of the right 'haystack': the nationwide Verilogue, Inc database of recorded and transcribed physician-patient interactions (~85 million words). Prior work on DMs has largely relied on elicited data (e.g. DiPaolo 1989, Hasty 2010) and post-hoc write-up of observed speech (e.g., Coleman 1975, Mishoe & Montgomery 1994). Neither data type allows for a full examination of the social roles and interactional goals that influence DM production.

The Verilogue corpus provides enough naturally-occurring examples of DMs (N=95), for a detailed sociolinguistic analysis, not only because of its size, but because of the genre of talk represented. Mishoe & Montgomery (1994:14) report that DMs are generally restricted to the pragmatic context of face-threatening negotiations. We hypothesized that medical consultations would be highly favorable to DM use. Potentially face-threatening acts arise frequently in physician-patient consultations, due in part to the co-constructed asymmetry of medical decision-making (ten Have 1991). Indeed, 70% of our DM tokens occurred in discussion of and decisions about treatment. Furthermore, 63% of our DM tokens were produced by healthcare providers (HCPs), affirming Feagin's (1979) observation that double modals are used at all social levels.
DM-producing patients (N=30) were significantly more likely to self-identify as "homemakers" ($p<0.01$) than non-DM producing patients in the same practices (N=2652). Though all DM-producing homemakers were female, no significant gender effects were observed. Rather, the lay-professional differential is perhaps particularly salient for homemaker patients, who may lack professional experience or higher education. Qualitative examination of the data suggests that patients seem to use DMs to downgrade claims pertaining to self-diagnosis (1b) and treatment plans, accommodating the interactional power asymmetry.

When compared to the total set of Verilogue's HCP speakers (N=985), DM-producing HCPs (N=41) represented a significantly higher proportion of the lowest-paying HCP specialties ($p<0.01$), with a particularly high proportion of primary care physicians (PCPs). Lower-paid specialties, such as Psychiatry, Pediatrics, and Primary Care in general, tend to provide long-term, community-based care in the outpatient setting. We argue that PCPs are especially motivated to maintain their patient relationships (i.e., to promote patient adherence) and that they are using DMs as a form of epistemic hedging to weaken promissory claims (1a) and preserve patients' self-perceived agency in the decision making process.

Collectively, we present a complex socio-pragmatic picture of double modal use that could not be seen without a corpus of naturally-occurring speech in a potentially face-threatening speech situation.