The acoustics of name-informing quotation

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Name-informing constructions (NaInfC) involving predicates like *call* as in *Blood poisoning* is also called "sepsis" are instances of pure quotation, a meta-linguistic device used to point to linguistic shapes, see, among others, Cappelen & Lepore (1997). NaInfC inform the addressee about the shape of a lexical concept's conventionalized name, e.g., the name "sepsis", as opposed to *The doctor diagnosed a sepsis*, where sepsis is used denotationally (DenoC). While the semantic and pragmatic properties of (pure) quotation are theoretically well understood, its phonetic realization is widely understudied, with only few studies typically examining the acoustic profiles of reported speech, see, e.g., Bertrand, & Espesser (2002); Jansen, Gregory, & Brenier (2001); Klewitz, & Couper-Kuhlen (1999); Oliveira, & Cuhna (2004). Furthermore, from a semantic compositional point of view, it is an open question whether quotation marks and their acoustic materialization, respectively, are a necessary part of an utterance containing a quotation, cf., among others, De Brabanter (2013).

Our paper aims at investigating (i) whether quotation in general is reflected acoustically and (ii) whether the articulation is sensitive to name-informing quotation. For this purpose, we compared the acoustic parameters of NaInfC (see 1a/b) versus DenoC (see 1c/d) and of non-quoted (see 1a/c) versus quoted (see 1b/d) nouns.

- (1) a. Viele Mönche tragen die **sogenannte Kutte** täglich von morgens bis abends. 'Many monks wear the **so-called robe** everyday from morning to night.'
 - b. Viele Mönche tragen die **sogenannte** "Kutte" täglich von morgens bis abends. 'Many monks wear the **so-called** "robe" everyday from morning to night.'
 - c. Viele Mönche tragen die wohlbekannte Kutte täglich von morgens bis abends. 'Many monks wear the well-known robe everyday from morning to night.'
 - d. Viele Mönche tragen die wohlbekannte "Kutte" täglich von morgens bis abends. 'Many monks wear the well-known "robe" everyday from morning to night.'

In a production study, sixteen female native speakers of German were recorded while reading eight German monomorphemic, disyllabic, and initially stressed nouns of low frequency (Kaper 'caper', Pappel 'poplar', Kutte 'robe', Kippa 'kippah', Koppel 'paddock', Kuppe 'tip/peak', Pita 'pita', Pauke 'timpani') embedded in the four conditions presented in (1). The stressed/initial syllable, the target syllable, of all nouns was open and composed of a voiceless plosive (= target plosive) as well as a vowel (= target vowel). The sentences of the four conditions were identical, the only differences being the absence/presence of quotation marks and the presence/absence of a name-informing adjective that preceded the noun in focus. The two adjectives, i.e., the name-informing sogenannte ('so-called') and the non-nameinforming wohlbekannte ('well-known'), had the same number of morphemes and syllables, and the same stress pattern. Further, the four segments immediately preceding the target syllable of the noun were identical between the two adjectives (see 1). Each subject read all of the thirty-two experimental cases (eight items x four conditions per item) as well as sixtyfour filler cases. The order of the four conditions was counterbalanced using a Latin Square Design. The order of the items varied across participants. Twenty-three other sentences appeared between an item in one condition and the same item in another condition.

The data was analyzed with Praat and several dependent variables were considered. We will focus here only on the following analyses: (A) duration of target syllable, (B) duration of target plosive, (C) duration of constriction of this plosive, (D) VOT of this plosive, (E) duration of target syllable.

tion of target vowel, (F) maximum intensity of this vowel, and (G) maximum F0 of this vowel. Repeated-measures ANOVAs by subject and by item were performed, including the fixed factors QUOTATION MARKS (yes/no) and NAME-INFORMING ADJECTIVE (yes/no), their interaction as well as the random factors SUBJECT and ITEM. The two fixed/independent variables were within-subject/item factors.

Quoted nouns (see 1b/d) were pronounced with significantly longer (A), (B), (C), (D) and a significantly higher (G) than non-quoted nouns (see 1a/c). In addition, NaInfC (see 1a/b) showed a significantly longer (B) than DenoC (see 1c/d). Based on the two main effects, we argue that NaInfC are articulated differently than DenoC and, crucially, that the presence/absence of quotation marks has an influence on the acoustic realization of an item. To conclude, we will discuss the implications of our results for theories of quotation as well as the interface between semantics, pragmatics, and phonetics.

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¹ There was no significant interaction.