This paper presents three arguments for assuming a theory of the syntax-phonology relation in which prosodic constituent structure at the prosodic word (\(\omega\)), phonological phrase (\(\phi\)) and intonational phrase (\(\iota\)) levels forms part of the input phonological representation (PI). There it phonologically expresses the output Word, Phrase and Clause morphosyntactic constituency of the sentence (Selkirk 2011):

Morpho-Syntactic Output Representation (MSO)  \(\downarrow\)  Spellout
Phonological Input Representation (PI)  \(\downarrow\)  Phonology
Phonological Output Representation (PO)

Argument #1. Whether in standard generative phonology (Chomsky and Halle 1968) or in optimality theory (see, e.g. McCarthy 2007), it is assumed that the input phonological representation of a sentence consists of the lexical segmental and tonal properties of the syntactically determined sequence of morphemes or morphosyntactic features of the MSO of a sentence. Assuming moreover that there is just a single locus for the syntax-phonology interface in the grammatical architecture, it follows that the prosodic constituent structure which is defined at the interface between syntax and phonology must also form part of the input phonological representation PI.

#2. By assuming that syntax-grounded prosodic constituent structure forms part of PI, mismatches between the prosodic constituency of PO and the morphosyntactic constituency of MSO are instead understood as mismatches between PO constituency and PI constituency. They can therefore be understood in terms of optimality theoretic phonology, which includes an independently motivated theory of input-output faithfulness constraints calling for identity between the corresponding aspects of the input and output representations (McCarthy and Prince 1995, 1999). In an explanatory, cross-linguistic typology of attested types of constituency mismatches, mismatches involve violations of relevant prosodic faithfulness constraint(s) which are due to lower ranking with respect to conflicting prosodic markedness constraint(s). Evidence from case studies will be given.

#3. Finally, the theory that syntax-grounded prosodic constituency forms part of the PI of a sentence allows for morphosyntactic features of MSO to be spelled out in PI in terms of properties of prosodic structure. In Standard American and British English the features for alternatives-based FoCus and Givenness are spelled out in terms of the presence/absence of prosodic head prominence. The MSO-PI-PO architecture above allows for the spellout constraints for morphosyntactic features like [FoC] and [G] to exploit the phrasal prosodic constituency in PI with respect to which the presence, or absence, of phrasal prosodic prominence in Standard American and British English is defined (Kratzer and Selkirk 2019). It also allows for an account of related mismatches not previously described.