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**Perceptual explanations of articulatory variability in the  
realisation of the nasal feature for the consonants**

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This paper illustrates how the perceptual constraints explain the observed articulatory and aerodynamic inter-speakers and inter-languages variability between initial nasal consonants (/n/), and unreleased final consonants (/N/). In the case of /n/, only a short, well-defined region around the consonant release needs to be nasalized for the consonant to be perceived as nasal. In the case of /N/, because of the lack of a nasal release, a longer span is needed for deciphering the presence of nasalisation; contextual nasalization of the preceding vowel can be avoided, but in that case, the nasal murmur has to be long to be perceived (since the first part of the murmur is perceptually masked by the vowel), and/or /N/ has to be released. Such observations argue for the division of the nasal consonant into three parts, onset, murmur and release: the realisation of the nasal feature is aligned around the /N/ onset, and around the /n/ offset. It also argues for a better integration of the perceptual requirements and masking phenomena in modelling the observed variability. Finally, it shows that a feature can be realized very differently depending on the position of the phoneme in the syllable.