--- Extrapolated from the 15-20 March 2024 lectures ---

1

Phones are physical entities, while phonemes are mental constructs that allow us to perceive multiple phones as a single linguistic unit, regardless of their different acoustic properties. In other words, a phoneme is an abstraction representing a set of speech sounds that are functionally equivalent in a given language.

Phonemes act as mental labels that group together similar phones; the phones categorized under the same phoneme, are named allophones. Simply put, allophones are the different possible realizations of the same phoneme.

In summary, phonemes are mental categories that gather multiple phones, called allophones, that share enough similarities to be considered equivalent.

2

Phonemes are the smallest linguistic unit that can distinguish between words. This means that replacing a phoneme with another one can result in a different word with a different meaning. For instance, replacing the phoneme /b/ in *bat* with the phoneme /k/ transforms the word into *cat*. Conversely, substituting one allophone with another doesn't affect the meaning of the word in which they are used.

In summary, if changing one phone to another alters the meaning of a word, they are distinct phonemes; otherwise, they are allophones of the same phoneme. Thus, phonemes are a contrastive element capable of distinguishing between different meanings.

3

Two types of relation exist between allophones: free variation and complementary distribution.

Free variation refers to two or more allophones that are interchangeable in every context: they can occur in the same position within a word, and they can be swapped with each other without altering the word's meaning. For example, in English, the alveolar tap and stop can be used interchangeably, and the same is true for the uvular approximant and alveolar trill in Italian.

Complementary distribution describes situations where each allophone is found in a distinct phonetic context, and it is impossible to interchange one allophone with another. In other words, two or more allophones are in complementary distribution when they appear in mutually exclusive environments, and each of them is confined to a unique and predictable set of contexts. Complementary distribution usually occurs due to the influence of neighboring speech sounds on the articulation of a phone, resulting in one pronunciation in a phonetic environment and a different pronunciation in another environment.