

THE PHILOSOPHICAL REVIEW.

INTERNAL SPEECH AND SONG.

AN interesting field of exploration has in recent years been opened to us in the sphere of the psychology and physiology of speech. The results accruing from analysis and experiment, and more especially from the study of the pathology of speech, have been most instructive. The similar problems, involved in the reproduction of musical sounds, have had little attention, strange to say, despite the analogous terms in which they may be stated. It is of some aspects of these two facts — “internal speech,” the *parole intérieure* of the French, and “internal song,” the *chant intérieur*—that I wish to speak in what follows, especially in the way of interpreting the results now widely accepted, in terms of our general psychological theory. What happens, when we have “words in our minds” and “tunes in our heads?”¹

I. INTERNAL SPEECH.

The doctrine of brain function in speech is now pretty clear — thanks to the teaching, principally, of pathological cases. Normal speech is a function which probably involves several so-called ‘brain centers,’ all in dynamic connection with one another. Given a man with the physical apparatus of the act of speaking intact — vocal organs, nerve connections, and brain seat of discharge (Broca’s gyre) — and ask why such a man

¹ A further interesting question concerns “internal writing,” *i.e.*, what have we in mind when we think of written words? — visual figures, visual hand- or pen-movements, muscular sensations of movement? This is interestingly discussed by Goldscheider, *Archiv für Psychiatrie*, XXIV, 1892, p. 503, reviewed by the present writer in the forthcoming number of the *American Journal of Psychology*.