

In 1959, Schaltenbrand and Bailey published a [brain atlas](#) whose coordinate system seems to derive from [Jean Talairach](#) Talairach's space although it shows slight differences. As a matter of fact, the Talairach method allows for proportional measurement of the relative distances of the various [nuclei](#) from standard reference points by using a double grid system on the single patient: the localization is more tailored to the single patient, but it requires more invasive imaging techniques. On the other hand, the [Schaltenbrand atlas](#) is more essential but reports the distances in a more rigid way, based on the measurements provided on microscope sections and without the proportional system verification. The frontal sections are displayed four per page at 4× magnification, with a scaled and labelled transparent overlay attached to each page. The 16 sections, each with the thickness of 1–4 mm and all cut from the same brain, span the region from 16.5 mm anterior to 16.5 mm posterior to the midcommissural plane. The sagittal series is presented in the same manner, but the sections on each page are one or two. The 18 sections are cut at 0.5–2.5 mm intervals, spanning the region between 2.0 and 27.5 mm lateral to the midline. Schaltenbrand and Bailey's myelin-stained sagittal series were widely used because the majority of functional stereotactic operations involve a transfrontal (precoronal) approach to the thalamus or upper midbrain through a parasagittal entry point. The horizontal series, such as the frontal one, is presented at four planes per page at 4× magnification. The 20 sections, all cut from a single brain, span the region from 16 mm above to 9.5 mm below the midcommissural point

Alternative Schaltenbrand definition: <sup>1)</sup> the line passing through the midpoint of the AC & PC, allowing both AC & PC to be imaged on a single thin axial MRI slice. These definitions differ by  $5.81^\circ \pm 1.07^\circ$ . The orbitomeatal line (used in older CT scanners) is  $\approx 9^\circ$  steeper than the Talairach AC-PC line <sup>2)</sup>.

<sup>1)</sup>

Schaltenbrand G, Bailey P. Introduction to Stereotaxis with an Atlas of Human Brain. Stuttgart 1959

<sup>2)</sup>

Weiss KL, Pan H, Storrs J, et al. Clinical brain MR imaging prescriptions in Talairach space: technologist- and computer-driven methods. AJNR Am J Neuroradiol. 2003; 24:922–929

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