

A nice paper that explains the importance of Henderson's and Hasselbalch's contributions to the progress in acid/base is

The Henderson–Hasselbalch Equation: Its History and Limitations by Henry N. Po and N. M. Senozan
Journal of Chemical Education, Vol 78, No 11, November 2001.

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The paper goes over the history of the HH equation. Here is one interesting quote found at the end

The idea of writing the mass action expression in logarithmic format appears to have first occurred to the Danish chemist Niels Bjerrum (1879–1958). Hasselbalch in his 1916 paper states that in writing the mass action expression in logarithmic format he is following an “unpublished work by Bjerrum.” It is interesting to note that in Denmark the Henderson–Hasselbalch equation is often known as the Bjerrum equation. Another curious fact is the absence of any reference to Henderson in Hasselbalch's paper.

The paper mainly does a detailed analysis of the approximation form of the HH.

$$\text{pH} = \text{p}K_{\text{a}} + \log_{10} \left\{ \frac{[\text{Base}]}{[\text{Acid}]} \right\} \approx \text{p}K_{\text{a}} + \log_{10} \left\{ \frac{[\text{Base}]_{\text{o}}}{[\text{Acid}]_{\text{o}}} \right\}$$

Its limitations are what you would expect:

Replacing equilibrium concentrations $[*]$ with their initial values $[*]_{\text{o}}$ is reasonable only (i) for $\text{p}K_{\text{a}}$ values around 5 to 9 and (ii) for acid/base amounts are close to each other. Otherwise, the approximations are really terrible.

In other words, all of this comes down to the “5% rule” which is now being applied to both the acid and to the base in the approximate form of the HH equation.