This paper describes a tissue disaggregation-reaggregation analysis of early amphibian embryogenesis. It has helped to establish the notion that directed cell movements and cell affinity are of major importance in organogenesis. [The SCI® indicates that this paper has been cited over 145 times since 1961.]

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"As an undergraduate at Harvard, my interests in embryology were kindled by the late Leigh Hoadley. I subsequently had the good fortune to become a graduate student of the renowned Johannes Holtfreter who suggested I employ his disaggregation-reaggregation techniques to analyze gradients and fields in neurogenesis. The time and setting for the proposed study were optimal; Holtfreter had some years previously published his classic studies of 'Gewebeaffinität' and the proposed research was an extension of those studies."

"The laboratory was remarkably uncomplicated. Holtfreter performed his own experiments; no technicians, no large research grants, no complex apparatus.

"Equipment consisted of little more than a dry-heat sterilizer, simple culture vessels (furniture castor dishes), a few chemicals, glass needles, and microscopes. Even today, the entire inventory (except for microscopes) could be purchased for a few hundred dollars. There was no pH meter; estimates were made by indicator dyes. Graduate students were required to do their own photography. The drawings in our publica-

1. Holtfreter S. Gewebeaffinität, ein Mittel der embryonalen Formbildung. 