We seek to characterize the evolutionary role played by the transactional record that is the foundation of modern accounting. We theorize that systematic recordkeeping crystallizes memory and, along with other institutions (e.g., law, weights, and measures), promotes the trust necessary for large-scale human cooperation. Our theory yields two predictions: (1) permanent records emerge to supplement memory when complex intertemporal exchange between strangers becomes more common and (2) systematic records and other exchange-supporting institutions co-evolve and feed back to increase gains from economic coordination and division of labor. Many aspects of ancient Mesopotamian recordkeeping are consistent with these hypotheses, suggesting that our evolutionary theory is plausible. We outline ways to directly test our predictions with experiments, ethnographies, and agent-based models, and describe other techniques that can be used to explore the co-evolution of accounting with the human brain, language, and law.
Recordkeeping improves memory of past interactions in a complex exchange environment, which promotes reputation formation and decision coordination. Economies with recordkeeping exhibit a beneficially altered economic history where the risks of exchanging with strangers are substantially lessened. Our findings are consistent with prior assertions that complex and extensive reciprocity requires sophisticated memory to store information on past transactions. We offer insights on this research by scientifically demonstrating that reciprocity can be facilitated by information storage external to tMoreover, the application of the distributed ledger technology in the international medical record-keeping process will phase out the additional administrative units, thus markedly reducing the costs of present intermediaries used for healthcare information exchange. But the essential is that combining these fragmented systems will let us achieve deeper insights and better evaluate the value of care being provided to each patient. Here, the higher level of transparency and full access in the medical record-keeping system worldwide would surely provide a better access to high-quality medical se