

Section I. How Evolution Produced Writing Humans and How Writing Humans Remade Their World

The teaching of writing takes for granted the ideas that humans are capable of writing and that our students have already learned much and are capable of much more. We take for granted that writing will help students engage with knowledge. We take for granted that their intellects, self-understanding, and spirits will gain from learning to write. We take for granted that particular social roles require writing and that students will benefit by being able to write appropriately to enter those roles. We take for granted that teachers also can write. In sum, we take for granted our time and place in society and the role of writing within it.

When we walk into our writing classrooms, we and our students are engaged in an activity done by no other animal, writing. Marilyn Cooper aptly titled her 2019 book on the teaching of writing *The Animal Who Writes*. What does being a writing animal mean? How did evolution wind up that we should do this? How has writing evolved and how has society evolved since its recent invention, just five thousand years ago? What is it that people need or want to learn about writing to facilitate their lives in this moment of human history and society? Why do our students write and what can motivate them to persist in the hard work of learning to write throughout their lives? These fundamental questions can help us think more deeply about the capacity we are nurturing.

This first section of this collection pursues some fundamental puzzles that my years of teaching writing have left me wondering about: How odd is it that humans write and what does it say about the nature of humans that we do it? What are the consequences of this odd practice for our way of life? How has writing not only changed our lives and minds, but how has it transformed the conditions in which we develop and act in ways that increase the demand for writing? Some animals and even plants communicate transiently in the moment, though without the full affordances, inventions, and flexibility of human spoken language. But the enduring and far-traveling inscriptions of writing seem to be uniquely human, even though today writing absorbs much of the attention and energy of many people throughout the world and has become infrastructural for the organization of society and contemporary life. As a relatively recent invention, writing relies on the preexisting human genetic, cultural, and social endowments that have made the invention possible, even though humans didn't write for much of their existence and even though these endowments have evolved from the capabilities of other life forms.

The opening chapters in this section explore how animals evolved to enable humans to invent writing. How does the way writing emerged reflect and rely on

our prior capacities? Only in the last two decades has the work of evolutionary biologists, neurologists, and primatologists given us robust hints to speculate about these issues. The latter chapters of this section consider how writing has developed in conjunction with social changes. What changes in human life supported the invention and elaboration of writing? How have the affordances of writing changed our way of life, both as social creatures and as individuals? Much of my writing over the years has dug backwards into that history, at first into the formation of scientific writing in recent centuries, and then, relying on the work of others, back through the five millennia of writing, although the sources to draw on were limited in number and focus, mostly from anthropology, archeology, and history.

The chapters here, accordingly, sketch out this murky picture, though no doubt in coming years more details and corrections will become available to offer a more accurate view. Chapter 1, “The Peculiar Emergence of *Homo Scribens*” considers the evolution of information available to life forms, starting with the chemistry of the cell, which is then encoded in the genome. The interaction of the organism and the environment in more advanced life forms embeds more information, which increases with the evolution of sense organs and more developed neurological systems. The processing of increased real-time information gives rise to consciousness that reflects on the being’s state and experiences, including awareness of the actions and knowledge states of other creatures. Among humans the products of that consciousness are socially shared through cultures and language in order to impact the consciousness of other individuals.

The second chapter, “Communication Within and Beyond the Skin Barrier,” takes up the puzzle of how writing is both an internal psychological function and an external social function. Like the previous chapter, this one delves into developments in neuroscience and evolutionary biology to examine writing (and language more generally) as part of a communicative continuum, from internal neurological processes to socially shared language to affect the neurological organization of others. How can the brain and neurological systems be organized so as to produce a consciousness that engages in creative social interaction? How is consciousness transformed through social interaction? How can we nurture the minds of our students to enter more deeply and fully into social interaction through the development of their writing?

The third chapter, “Letters and the Social Grounding of Differentiated Genres,” considers how the recognizable social spaces of human face-to-face communication become transformed into recognizable spaces of textual interaction through the typifications of genre, which in turn mediate extended forms of social organization. As the individual interacts with the written world, how can the reader make social sense of a limited set of symbols, of markings on a paper that seem to exist out of time and place? Yet the meaning only makes sense when it is located in the times and places of social interactions, just as much as speech is.

The fourth chapter, “The Writing of Social Organization and the Literate Situating of Cognition: Extending Goody’s Social Implications of Writing,” pursues

how writing and its genres reorganize social and psychological life. Building on Jack Goody's examination of the social consequences of writing, it provides a framework for considering how the organization of society develops hand in hand with the organization of writing forms that enable new social systems.

The final chapter in this section, "Revisiting the Early Uses of Writing in Society Building: Cuneiform Culture and the Chinese Imperium," shows how the social processes fostered by writing play out in actual historical circumstances by looking at some of the major changes enabled by writing in the ancient Middle East and early China. These early transformations point toward the complexities of modern cultures and social institutions, including governance, the challenges of coordinating large numbers of people under the rule of law, and the growth of various forms of competing knowledge.

Together these chapters help us locate the particular role and function of writing within our society and for the development of our students. They also give us a framework for thinking about what we are trying to accomplish and how we are trying to accomplish it as writers and with our students since we all are these unusual social creatures, *Homo scribens*.

Reference

Cooper, M. (2019). *The animal who writes*. University of Pittsburgh Press.