Billed as her “last novel,” *Subscript* addresses Brooke-Rose’s theme of the legibility of being on the grandest of scales—evolution. Both science fiction and science theory, the novel traces the vulnerability and durability of the record of life from the prokaryote cell 4500 million years ago to modern man at the end of the Magdalenian period 11,000 years ago. In *Through Other Continents: American Literature across Deep Time*, Wai Chee Dimock ventures to write literary criticism in which she “rethink[s] the shape of literature against the history and habitat of the human species, against the ‘deep time’ of the planet earth, as described by two scientific disciplines, geology and astronomy” (Dimock 6). In *Subscript*, Brooke-Rose writes fiction that attempts to rethink the novel on the grand geologic scale of “deep time.”

In her last novel, Brooke-Rose uses her characteristic present-tense, speakerless narrative sentence with a twist: the narrative consciousness mirrors evolutionary development, with its diction expanding to include new concepts. *Subscript* begins in a perpetual present before subjectivity and singularity. It launches us into a world of material mass. This
is a daunting challenge for the genre of the novel. We begin the book in the world of “stuff,” the sugars and acids of matter, the “sweeties and salties and sharpies of glow and burn, of lucent acid, of lime and metal and other bitters. Bubbling away” (Subscript 1). Before individual cells, before chromosomes, we find ourselves in what has been called “the primitive soup.” Brooke-Rose’s characteristic “scientific present tense” (Invisible Author 140) takes on added resonance in a text in which the subject is science on a grand scale. The challenge is to represent the starts and stops of biological development in a “scientific” present tense. Science, science fiction, and science theory are playfully fused in the use of this constraint in the novel. Studying the “truth” claims of relevant science textbooks, Brooke-Rose took copious notes from a myriad of texts such as The Major Transitions in Evolution, which begins: “Living organisms are highly complex, and are composed of parts that function to ensure the survival and reproduction of the whole” (Smith 3). Her own archive, housed at the Harry Ransom Humanities Research Center at the University of Texas, Austin, includes folders containing newspaper clippings and extraordinarily detailed reading notes on the biology, botany, physiology, and environment of the millions of years of organic development she traces in the novel. Brooke-Rose translates this objective scientific present into the fictionalization of life before human consciousness, memory, and language. In her use of speakerless present tense, science theory (specifically, theories of evolution) is imagined as if from inside matter itself: “Inside the acid strand the forever must exist. From the waiting, the absorbing, the churning, the growing, the repeating. For ever. And ever” (Subscript 1). With no “forever and ever, amen,” Subscript replaces God with its own creation story. The transformation from nucleic acids to proteins to eukaryote cells (cells with nuclei) is fictionalized, as is the “birth” of DNA, the encoding of heredity, out of the “forever” of mere replication (“The code is born. The code of behaviour, for the bits of many parts, that carries the foreverness. Is the code really necessary? For many forevers there’s life without a code, without the forever copying of the code and without all these new foodmix workers” [Subscript 3]).

Around the sixth chapter of the novel the organism identifies itself as female, although it isn’t until the tenth chapter that males are referred to as “they” and the thirteenth chapter that this enduring female consciousness receives the name Aka (Subscript 127). It is Aka who tells us that the “point of the story” of the human clan is “[t]o follow birth not death. Although many died on the way” (Subscript 153). Subscript can be regarded as a tale of Eros or the life-instinct, described by Freud in
Beyond the Pleasure Principle as that which “by bringing about a more and more far-reaching combination of the particles into which living substance is dispersed, aims at complicating life and at the same time, of course, at preserving it.” Yet although the narrative fundamentally traces life, the narrative commitment to follow the trail of life never compromises Brooke-Rose’s attention to the threat of textermination, the obliteration of both life-forms and their inscriptions. In the high stakes game of evolution, the unbearable lightness of being ends in the extinction of multiple life-forms along the way. The title Subscript, however, signals that Brooke-Rose’s concern is not only with the see-saw of life and death, the survival and extinction of forms of life, but also the record of the evolutionary struggle in its geological, biological, and cultural traces. The narrative concerns itself with “life and survival and transmission” (Subscript 59). Both the earth and the organism contain material traces of absent forms, evidence that biologists, archeologists, and, more recently, geneticists have woven into evolutionary theories. This is indeed fertile ground for a scholar/novelist like Brooke-Rose.

Like her other novels which use twentieth-century scientific, technological, and cultural changes as their premises for new forms of defamiliarization, Subscript is fueled by the explosion of genetic discoveries around the turn of the twentieth-first century. Combined with new archeological findings, these discoveries promise an unparalleled retrieval of the human record. These scientific discoveries allow the “signatures” of the ancient ancestors of human beings to be read by archeologists, population geneticists, and linguists. The dictionary definition of “subscript” is (1) “that which is written underneath, a writing at the bottom or end of a document, etc.; a signature” and (2) “a subscript letter or symbol.” The title resonates throughout the novel. Underwriting all of life is the genetic “code,” THE book of memory and forgetting. It provides the record of millions of years of organic adaptation and obliteration. DNA contains information in which human hereditary is encoded. And, like other codes found throughout Brooke-Rose’s fiction, it offers material for narrative. The “stories” woven from this material are referred to as “code stories,” sometimes accepted and sometimes mistrusted by the evolving narrative consciousness:

The tangle of moss and fern hides many animals, mostly the same size, and many smaller, that crawl slowly in slime and are good to eat, like the others with crackly shells. All rivals, but as food much harder to catch than under water, when food simply seemed to float in, whereas the activity needed to catch food now is almost unbelievable compared
to the still stance and gentle undulations below. But that may be just a code story. For the code invents stories about many many warmturns past and unknown, often hard to sort out into what the body glimpses and what the code lays down.” (Subscript 34)

Explicit references to the “code” disappear almost entirely from the text once human consciousness evolves to a certain developmental level. As Brooke-Rose told Lorna Sage in an interview, “Incidentally, as my creatures slowly become human, from around chapter 9, the Code vanishes. Into their unconscious perhaps. They’re much closer to the genetic code as animals or even as cells. This again is fiction.” The code becomes more internalized as the novel progresses, the “tale of suffering” leaving its trace on the organism’s body: “The journey towards the rising light takes many many lightturns and many moonturns, imprinted as a tale of suffering in every cell of every animal” (Subscript 41).

To “sort out . . . what the body glimpses and what the code lays down” is, indeed, one of the main projects of the narrative. The code archive is beyond desire, an unseen dictator whose messages are obeyed often unconsciously (“The code is much too busy replicating and recombining, forecasting or at least ordering, to record absolutely everything, let alone communicate. But some remains in the body, for the body also remembers, even if it forgets that it can remember” [Subscript 30]). Subscript extends and expands the record of suffering we have traced from its inscription in “The Foot,” in which pain from the phantom limb is a constant companion. Brooke-Rose’s texts ring changes on the bodily inscription of suffering—in Out, the genetic make-up of the unnamed male consciousness has been altered irreversibly by some unspecified radioactive event; in Such, the unconscious of the male protagonist is indelibly imprinted with the trauma of his death and rebirth; in Thru, the text itself is hystericized, its very letters inscribed with the signs of trauma and pain (“ruth”); in Xorandor, the “syntax” error programmed into Xor 7 endangers human civilization. In Subscript, genetic history is the tale that weds survival and suffering. In each of these narratives, the writing on the body inscribes and transmits a cultural predicament. Suffering and its material traces serve as cultural reminders that guard against the “oblitopia” feared in Amalgamemnon. The potential for obsolescence and oblivion generalizes from individual consciousnesses, like the protagonists of Out, Such, Between, and Thru; Mira in Amalgamemnon and Verbivore; Jipnzab in Xorandor; and Emma, Kelly, and the other characters in Textermination, to the totality of the human archive. Increasingly, her texts absorb themselves with what Derrida has called “the
vulnerability of the effaceable document.” Brooke-Rose’s “techniques for living” are survival strategies for the genre of the novel, ensuring new forms for telling the human story. The lipograms, including the linguistic and grammatical constraints in *Subscript*, help her to defamiliarize this story from the point of view of the always threatened organism.

I have suggested earlier that Brooke-Rose’s novelistic pleas to “save the text” have personal as well as philosophical import. The necessity to maintain the “patience of vigilant language” (to return to Blanchot’s phrase) in the face of potential annihilation of the record involves a trust between writer and reader, a pledge to use and preserve language carefully (and to use careful language). On the one hand, as we have seen, Brooke-Rose trusts her novels to fully embody the life of an idea as they embed their techniques for living. On the other hand, increasingly, with *Stories, Theories and Things, Invisible Author*, and most recently in *Life, End Of*, she has insisted on telling the story of her compositions so that its important elements not be overlooked or forgotten. In the nonfictional contexts of interviews and essays, she makes visible what may have gone unnoticed about her method (in *Life, End Of*, this “intrusion” of the invisible author occurs within the memoir itself, in a chapter devoted to the author’s narratorless narrative sentence). As Derrida puts it, “The archive is as precarious as it is artificial, and precisely in that very place where the signatory puts on guard, appeals, beseeches, warns against the risk of whatever might come along as he says ‘to annihilate this work.’” (“Typewriter Ribbon” 345). Derrida is speaking of prefatory remarks found in the Geneva manuscript of Rousseau’s *Confessions* in which Rousseau “adjures” future readers to “save the body of the inscription” (“Typewriter Ribbon” 346). But he is speaking generally of an author’s apostrophe to future readers to preserve his archive. In regard to *Subscript*, Brooke-Rose’s own version of this call to save the text from textermination is a two-paged chart diagramming the method of the novel and providing a note to future translators that she has also provided to her literary executor. She enjoins her translators not to deviate from the grammatical constraints observed in the original as they translate from one language to the other, particularly in regard to her use of pronouns. The chart lists chapter number and title, time, period, creature, and constraint (see Figure A, pages 172–173). “These constraints,” she says in her prefatory note, “must be observed, whatever the language translated into,” as the constraints are “subtle and invisible” and, therefore, potentially obliterated in translation.5

What concerns Brooke-Rose the most about translation is the pos-
sible erasure of her initial refusal to use pronouns and their carefully charted appearance as the narrative of *Subscript* progresses. Why is this constraint so important and what is its relation to the continuing thematic of the archive? Brooke-Rose’s scrupulous addition of pronouns is calibrated to the development of the organism in the genetic archive. The pronouns, deliberately omitted from the first three chapters, before the appearance of reptiles 300 million years ago, gradually appear in sequences tied to what might be called cultural developments (although appearing before the advent of human culture). The singular impersonal (“it”) is at first restricted and then appears in chapter 4 to denote a sentient entity. In the same chapter the plural impersonal pronoun (“they”) surfaces to convey an inchoate, but developing, sense of group differentiation. In chapter 8 this differentiation passes to the point of in-group and out-group feeling—the second person plural (“we”) appears to emphasize the social identification among the presimian chimpanzees. Possessive pronouns also suddenly appear to denote tribal appropriations. Two rare examples of first- and second-person singular (“I” and “you”) denote moments of interpersonal relationship. Personal pronouns, only in masculine form, occur in the narrative once *Homo habilis* appears in chapter 11. It is not until the emergence of Aka in her anatomically modern ancestral guise that feminine pronouns, including “she,” appear (chapter 16). As is the case with other formal constraints in her work, form mimics content in *Subscript*. The narrative schema is keyed to evolutionary stages. Gradually, with the increasing complexity (though not “progress”) of organisms, language evolves, including the development of pronouns to stand in for evolving consciousness, social grouping, and individuation.

One of the most interesting byproducts of eschewing impersonal pronouns at the beginning of the novel is the formalization of an archive unrelated to consciousness or event. And yet, despite the declarative statement and precise description of phylogenetic detail (“the pack’s eyes are set in wider flatter rounder faces and look together out front, sharpening all they see”), the sense of sensation and speculation, rather than objectivity and omniscience, reigns: “And after endless forevers, the scattered strands of many parts now stretch slowly and reach out to each other, though each so different, and try to work together. That’s apparently better than each separately. Strands learn that. Feel the advantage” (*Subscript* 1). Sensation as experienced but not necessarily processed or reflected upon by the organism, characteristic of her signature narrative sentence in *Out*, finds its perfect complement in the earliest evolutionary stages of *Subscript*. Here, Brooke-Rose traces what she has described
as “the constant impact of outside phenomena on an active but not always reflective consciousness” (“Interview,” Invisible Author 154). Just as Text extermination presents the characters’ eye view of “the dissolution of character,” Subscript represents the way the inside feels as it encounters an outside. The challenge at the beginning of the narrative is to convey immediacy without subjectivity. Although the narrative is “speakerless,” the exclamations and interrogatives give the sense of interior language, all before the advent of language: “Merely repeating the sequences in the acid strand but hardly changing the strands at all. Why change? All’s nice down here in the soft hot bubbly. And yet” (Subscript 2). Although no one “speaks,” the narrative retains a feel of improvisation and speculation. This speculation mimes both the role of hypothesis in the scientific method and the bewilderment of the organisms who experience a kind of continuing present, uncertain of past and future (“Shall we have to move? It seems the code was right and we’ve had to move before. We haven’t been here for ever after all, it’s not a foreverness” [Subscript 79]).

“A fly straddles another fly on the faded denim stretched over the knee” (Out 11)—just so Brooke-Rose’s first lipogrammatic novel begins. Subscript returns us to a stripped-down world of sensation and primitive need. As opposed to the imagination of disaster in the Intercom Quartet, even the time of prediction, dread, and hope of Amalgamemnon, in Subscript we are meant to experience what it feels like to live in a present with no imagined future. Both the postapocalyptic world of Out and the prehuman world of Subscript represent the exigencies of basic survival in relation to the risk of movement. Yet the difference is striking: after the nuclear disaster, with its aftermath in a reversal of the color bar, the sick white man in Out is immobilized; he fears movement and change. “Sooner or later, the knee will have to make a move, but now it is immobilized by the two flies, the lower of which is so still that it seems dead” (Out 11). Description is careful, precise, joyless, even painful, as if the wounded human observer envied the flies their stasis and lack of consciousness and complexity. In contrast, relying heavily on description of the physical environment in the absence of any narrative observer, narration in Subscript represents change, despite its obvious risks, in joyful, poetic terms:

Zing! Zinging out through the glowsalties the pungent ammonia earth-farts in slithery clay and all the rest to make simple sweeties and sharpies and other stuffs. Dust out of vast crashes and currents now calmer as the crust thickens and all cools a bit.
The phrase “What delicious risks” appears in the first chapter, and its gesture of welcoming risk and movement, although later balanced by homing and burrowing instincts, drives the narrative. Evolution is treated as a grand, albeit dangerous, adventure, a master narrative that is played from the inside out, with a “zing” of excitement rather than the portentousness of a creation story. In my “Discussion with Christine Brooke-Rose” (following chapter 10), Brooke-Rose expresses her lack of interest in the form of the *bildungsroman*, which charts the education of the protagonist over time and experience. One can think of *Subscript* as a strange and creative alternative to the genre of the novel of education and development and one of the most ambitious diasporic novels ever written. It is a “clan tale,” or “Journey from the Setting Sun,” as Aka refers to it (*Subscript* 153). In addition to the regulation of pronouns according to the evolving consciousness, other disciplined refusals of the traditional comforts of fiction are striking. Stripping fiction of its normal technologies, the novel begins at the beginning before consciousness, character, and language, indeed, in imitation of a point before the beginning of time. If *Thru* begins in metaterritory, warning the reader to beware of danger zones, *Subscript* constrains us to begin in a place and time before the comforts of story and storytelling. We witness the emergence of story from description, event from summary, a transition from the participial continuous present to a present out of which drama emerges.

Indeed, although evolution is the master narrative, emergence itself could be said to be the most significant subscript or understory in the narrative. For during the course of the story, we get to witness the emergence of life, language, time, and story. The text has us consider the following: How does life emerge from “stuff,” genes from “junk,” complexity and variety from “foreverness” as mere replication (*Subscript* 1); denotation from noise, reference from index, personal pronouns from impersonal pronouns, community from individual entities and, conversely, subjectivity from tribal identity; two genders from the masculine, and desire from need? Each of these transitions is marked and traced in Brooke-Rose’s narrative, as we follow the tracks of material processes—accidental, involuntary, murderous, fortuitous, adaptive, and resistant. Chance, risk, error, loss, all become part of the story, beginning with the “zingy” joy in mudville. The novel subscribes to the scientific
theory that evolution is not purposeful, but adaptive; it deliberately eschews a teleological narrative with a desired end. The narratorless present tense tracing the organism’s perceptions of the body and the world conveys how it might feel to be in the midst of bewildering, fascinating change without secure purpose or continuity.

Beyond the evolution in pronouns, Brooke-Rose captures this sense of experiment and accident in her diction. Both in the chart of *Subscript* and her interview with Lorna Sage, she described her semantic as well as grammatical constraints: in fictionalizing the sensations of her increasingly complex “creatures,” she deliberately confined herself to “what they can know” (*Invisible Author* 171), “never using a word for to-them-non-existent concepts” (see Figure A, pages 172–173). Although this constraint might sound pedantic, it generates considerable play in the language right from the beginning of the novel, a kind of guessing game for the reader that mimics the uncertain hermeneutic gropings of the creatures. The semantic constraints are often more noticeable than the grammatical, so that we become aware of being subjected to limitations of naming. It is as if we had one hand tied behind our backs as we search for clues to the words that describe but do not name. The novel begins within a cartoonish, comic, lyric, and exclamatory style. Pleasure of a very rudimentary kind is conveyed in the joyful exclamatory “zing.” This joyful exclamation is then refined further into an adverb describing a certain exuberant feeling (the creature is “feeling zingy” [*Subscript* 13]). (The onomatopoetic language has a faint resemblance to the lyrics of Judy Garland’s Trolley Song: “Zing, zing, zing went my heartstrings.”) Compound, Anglo-Saxonate words like “earthfarts,” “glowsalties,” “warmturns” and “foodrot” capture both the evolution of language and the volatile, eruptive and compounding actions and reactions of the earth’s beginnings during the millions of years that marked the transition from prebiotic to biotic life. Words agglutinate like particles. Energetic constructions are formed. Concepts, such as power, are described pages before the word itself appears (*Subscript* 8): “And the sweety acids become very active and mingle, pushing others around a bit, changing stuffs into other stuffs around the scattered acid strands” (*Subscript* 1–2). The concept of family is evoked before its emergence; it is described as “a new inside group feeling, not just a pack feeling” (*Subscript* 63). Instead of naming each new entity, we get descriptions of dynamic actions:

Until suddenly, one stick of stuff, or maybe many more, gets enclosed by one other.
Plonk.
Gobbled up.
It becomes two. One inside the other. (Subscript 3–4)

A nucleus is born when bacteria and host cell connect; the transition from prokaryote cell to eukaryote cell occurs in onomatopoeic language that might accompany comic book action. The term “animation” seems more appropriate to this vivid and exuberant language than “anthropomorphism.” The narrative offers a primitive reenactment rather than anachronistic comparison between the life of a eukaryote cell and that of a human being.

The scene above in which a nucleus forms is also the first record of a singular event; “plonk,” records a specific action that presumably happened once after millions of years of (participial) churning, waiting, absorbing. Not only does the nucleus emerge from the prokaryote cell, but event emerges from summary. The iterative, simmering “soup” gives way to the singularity of a depicted scene as a nucleus forms. Something happens. We watch as the narrative rises above the threshold at which plot is born. Brooke-Rose’s challenge is to translate the master narrative of evolution fictionally both accurately, according to scientific evidence, and dramatically in such scenic moments.

The disparity between the two time sequences of geologic and human time is a source of Brooke-Rose’s humor in the text, her title page, and her chart. Chapters with the titles “Twenty-five million years later” emphasize the ludicrousness of writing a novel, accustomed at best to the span of family generations. The joke behind the “dating” derives from how bizarre it is to calculate so roughly over such a huge span of time. Two “time” sequences govern Brooke-Rose’s chart, two types of dating: one sequence that moves forward from the beginning (the organism’s trajectory) and one sequence that dates from the present back to the past (the paleontologist’s perspective). The chart shows two columns of dates—the first, the “Titles” dating forward (4Kmyl) and the second, the “Time” dating from the “present” (4500 mya). In zigzag formation it is possible to derive a time for one chapter, such as chapter 4 (305–290 mya) by taking the latest “time” of chapter 3 (405–370 mya) and subtracting the “title” of chapter 4 (65 myl). Brooke-Rose once pointed out in conversation the “joke” of the back-dating, the way the “present” continually moves but so insignificantly in comparison with geologic time that it does not affect the scientific back-dating at all.

The more serious side of the disparity between geologic and novelistic time emerges with the thematic of witness and memory. What
does it mean to picture, to fictionalize, to imagine an event that took place millions of years ago before anyone was there to witness it? How is the trace of a moment recorded—materially in the earth and in the genes, fictionally in a novel about evolution? What is the bond between novel and archive? In “Typewriter Ribbon,” Derrida speculates on a recent archeological discovery in France of the “intact cadaver” of an insect “surprised by death, in an instant, by a geological or geothermal catastrophe, at the moment at which it was sucking the blood of another insect, 54 million years before humans appeared on Earth.” Another “report” captures the moment of “jouissance” in which two midges “made love,” the trace of which is captured in amber. Derrida goes on to say:

It is one thing to know the sediments, rocks, plants that can be dated to a period when nothing human or even living signaled its presence on Earth. It is another thing to refer to a singular event, to what took place one time, one time only, in a nonrepeatable instant, like that animal surprised by catastrophe at the moment, at some instant, at some stigmatic point of time in which it was in the process of taking its pleasure sucking the blood of another animal, just as it could have taken it in some other way, moreover. . . . There are many things on Earth that have been there since 54 million years before humans. We can identify them and analyze them, but rarely in the form of the archive of a singular event and, what is more, of an event that happened to some living being, affecting an organized living being, already endowed with a kind of memory, with project, need, desire, pleasure, jouissance, and aptitude to retain traces. (Derrida 331)

It is this kind of dramatization of event, perception, choice, and accident that Brooke-Rose fictionalizes when she translates evolutionary theory into a narrative of evolution, prehistory into novelization. The challenge she sets for herself is how to capture the project, need, pleasure, and aptitude that predates mankind, how to localize desire in a living instrument of perception and information before mammalian consciousness exists. The tension between what Genette calls the iterative and the singular is exaggerated in a plot that extends over almost 4500 million years. In this kind of text, the words “until” and “suddenly” work overtime:

until suddenly, one stick of stuff, or maybe many more, gets enclosed by one other. (Subscript 3)
Until at last, after many unwelcoming bays and more egg scatterings and losses, the exhausted creatures enter a quieter, a warmer sea. (Subscript 18)

Until the offspring, suddenly as soon as adult, disappear. (Subscript 28)

Suddenly, before any answers can possibly be given, if meant to be given, the lake disappears. Well, perhaps it’s still there underneath, if waters can flow on top of each other without mixing. (Subscript 54)

Perceptions are increasingly localized in the consciousness of the organism, but we are unsure if the “event” summarizes a million-year process or represents an exemplary moment in time. We cannot always distinguish between a sudden perception of an action that occurred thousands of years ago (such as the disappearance of the lake) and a potentially mistaken perception (the lake might not have disappeared but may remain underneath the land). Although deictics (here, there, now, then) increasingly represent a located consciousness perceiving the world, what do these words actually represent on such a vast historical and geographical scale?

As Richard Fortey writes in Life: An Unauthorised Biography: A Natural History of the First Four Thousand Million Years of Life on Earth (a book Brooke-Rose consulted in writing Subscript), there are enormous difficulties in writing the “story” of evolution, specifically, in relating one discovery to another over so many millions of years. How can a story of life be told that depends upon some causal connections, when the novel covers such a huge swath of time and space? Fortey refers to a putative description by Isaac Newton in which Newton “described his sampling of phenomena from the physical universe as a kind of beachcombing, where by he could pick up only the brightest shells that caught his eye from an infinite litter on the strand.”8 (“And as to monster predators,” the narrative tells us in Subscript, “that’s another story or part of the same story, about huge scaly animals as tall as trees that ruled everywhere, destroying every forest and all smaller animals as they went” (Brooke-Rose, Subscript 74). What does the locution, “that’s another story,” mean in the narrative of evolution? Fortey goes on to say that “all stories need a chronology. Geological time is paradoxical and difficult. The further back in time we go the more obscure are the events, the less certain the narrative” (Fortey 27). If we go back 3500 million years ago, “the possibility for aligning an event in one part of his world with that in another might be askew by some millions of
years. . . . The past is continually erased, and the record of the most distant time survives only by a chain of minor miracles” (Fortey 27–28). How can discoveries of life-forms millions of years and thousands of miles apart be knitted into a continuous narrative? Brooke-Rose follows current evolutionary theory in refusing to view evolution as progress toward the creation and development of man. Indeed, she deliberately works against the pressure toward “development,” exerted by both the genre of the novel and an androcentric understanding of evolution.

In her attempted fidelity to scientific theory, Brooke-Rose tries to capture the nonprogressive and discontinuous elements as part of the archive. In later sections of the novel, she represents both the simultaneity of development of life-forms in different places and the disappearance of species not in the direct line of descent of man. Hominids encounter each other in tribes and possess a rudimentary historical consciousness of concurrent development that has occurred in different places over long periods. Indeed, the explicit emergence of storytelling as an activity in chapter 14 allows for acknowledgment of other tribes and clans, predecessors whose lives continue in language. The role of storytelling accelerates with the European migration in chapter 16. Stories of how various clans arrived in Europe and encountered one another circulate throughout the narrative, providing conjectures about the movements of the Paleolithic populations of Europe.

In a new rhetoric of the unreal, storytelling transmits stories of the extinct as well as the dead. Near the end of the novel, storytelling brings with it a whiff of the future, as the traveler brings stores of astonishing cultural developments from afar (a displacement from time to space). However, in the early sections of the novel the code allows for recognition of the gaps, accidents, errors, and unsuccessful adaptations that mark the story of evolution. It serves as the book of forgetting as well as memory: “The code may be a present memorial to ancient memory but never explains anything at the time. Or very little. . . . The code is much too busy replicating and recombining, forecasting or at least ordering, to record absolutely everything, let alone communicate. But some remains in the body, for the body also remembers, even if it forgets that it can remember. The body knows that it has landgear, like others. Even those mottled monsters with vast long bodies and tiny legs had that. Of a sort. But they didn’t survive. Or else went elsewhere” (Subscript 30). The code serves as an explanatory fiction for the creatures who project intention, carelessness, and neglect onto the code, as each creature tries to understand its place in the chain of biologic development: “A
huge deep envy of erectness, carried in some ancient memory lost by
the careless code, ripples through the entire group of smaller kin scat-
tered all over the landmass” (Subscript 36). “The frail memory of erect-
ness hovers and is gone” (Subscript 48). Erectness envy, so to speak (the
double entendre occasionally surfaces) is one of the persistent, if fragile,
memories retained in the body, a remnant saved for future use. In this
way, Brooke-Rose represents chance and adaptation. The acknowledg-
ment is sometimes explicit, as when we come across the line “something
unassimilable has occurred” (Subscript 23). Or it appears in the thoughts
of the creatures: “Why are these changes never explained?” one of the
creatures thinks. “They just happen, and the body somehow adapts to
them” (Subscript 46). In Amalgamemnon, modal possibilities are proposed
and entertained; in Subscript, the speculation of roads not taken are
called “intimations of other versions” (Subscript 73). The theme of traces
found throughout Brooke-Rose’s fiction meshes with evolutionary the-
ory, as disappearance requires detective work by creature and reader
alike: “Impossible to know for sure now exactly where the sea was
or wasn’t, unless the plants still taste too salty” (Subscript 41). “Some
movement in the code intimates that they’ve [the huge ones] vanished
from everywhere, for good” (Subscript 72). “[L]iterature is full of loose
ends,” Brooke-Rose points out, comparing it to evolution (“Interview
Invisible Author 170). Like the characters who disappear suddenly from
the narrative of Textermination, we gain and lose organisms throughout
Subscript.

In the evolutionary context of Subscript, the threat of obsolescence
found in Brooke-Rose’s novels takes on added meaning. From the sick
white man in Out, “out” of a job after the color reversal, to Mira Enketei,
the soon to be out of work classicist, to the out of work characters in
the texts of Textermination, Brooke-Rose concerns herself fictionally with
redundancy, obsolescence, and use. In Subscript, the theory of adaptive
use is often fictionalized in terms of the labor required by the organism.
Sentences describing chimps becoming bipedal echo other examples in
her fiction of the perceived need to be useful: “Using the backlegs for
long, however, is very painful, and tiring. The legs ache, especially in
the ankles and behind the knees, and even all the way up the back of the
neck. Because the head shoots forward. It hurts less if we force the head
and shoulders backwards, but then that hurts too, in the back. Why do
we try so hard if it hurts so? Something must be driving us. The desire
to be different perhaps. Or the need to see about the high thin shag,
what animals are lurking there” (Subscript 93). These detailed descrip-
tions of the difficulty of ordinary physical labor reappear in Brooke-Rose’s final memoir, *Life, End Of,* with the poignancy and irascibility of old age.

Although teleology is eschewed, the narrative at various points considers the relationship between chance and labor in the phenomena of emergence, when something changes into something else, either gradually or in a sudden “plonk.” In these often contradictory instances, alternative explanations are entertained dialogically, without resolution; a single occurrence suggests the possibility of a drive toward increasing complexity and the counterforce of chance and lack of purpose:

As if the code, or some superior mastercode of the code, were directing everything towards more and more interlocking dependencies.

That’s impossible. There’s too much slapdash workmanship and sloppiness in the acid strings to see any kind of purpose in it all, or why all these living creatures couldn’t just have remained sticksful of stuff. Which no living animal can do without. Says the code. (*Subscript* 46)

Evolutionary debates surface in the interior musings of the creatures as well as in the representation of successive life species. Stafania Cassar writes in “Science as Post-Theory? Discourses of Evolution in Christine Brooke-Rose’s *Subscript,*” that Brooke-Rose studied both neo-Darwinian theories of evolution (that it is nonteleological and mechanical) and vitalist theories that suggests the organism’s inner drive toward increasing complexity. Despite the fact that Brooke-Rose does not list Bergson’s *Creative Evolution* as one of her twenty-seven sources for the novel, Cassar applies Bergson’s theories in *Creative Evolution* to the sense of the increasing development of consciousness in *Subscript.* Although Cassar is more interested in the specifics of the evolutionary debate than is relevant to the present discussion, the vitalism in Bergson, like the idea of some kind of life force in Freud, is indeed apposite to Brooke-Rose’s novelistic representations. Uninterrupted progress and design are contradicted in the novelization of evolutionary theory; however, the evolving consciousness of Brooke-Rose’s creatures does suggest the organism’s deliberate and deliberative internal quest to thrive. Cassar sees this as evidence that Brooke-Rose “resurrects and represents this suppressed ‘other’ of evolutionary discourse [directionality and purpose], thus contesting the assumptions and structures of thought underlying the neo-Darwinian theory of evolution” (Cassar 203). Rather than viewing the representation of both chance and interior consciousness
as an intervention in evolutionary debate, however, I believe Brooke-Rose was more interested in the way theoretical debates can “translate” creatively into fiction. _Subscript_ represents what a theory of chance and adaptation would feel like on the inside if the organism increased its awareness of its own sensations. Would there not be an inner need to believe that one’s labor effected change? What would it feel like, Brooke-Rose seems to ask, if a creature were to experience emergences on its very pulses, in its perceived sensations and increasing abilities to interpret these changes?

The pathways of the pronouns play a significant role in the writing of evolutionary theory charting the increasingly sophisticated cultural intimations of like and unlike creatures, including gender formation. The pronoun “we” measures the development of a sense of community based on identity and difference. A choral feeling emerges, particularly apparent in apostrophic questions like “Shall we have to move?” (_Subscript_ 79). Brooke-Rose notes two “exceptions” to the refusal of the pronouns “you” and “me” (I found three, on pages 76, 77, 81).

Yes, we can look into each other’s eyes, and exchange meanings and deep appreciation of each other’s beauty and being. You, me, the eyes say. (_Subscript_ 76)

Sometimes we stare at each other from different trees, as if to start up play, but they seem both friendly and unfriendly. We know you, they seem to say, we’re like you but you’ve grown away, for your own good reasons, so we’ll keep our distance. (_Subscript_ 77)

We know you, they signal with their tails. And we have to signal the same back, not with our tails since we have none, but with heads shaking side to side. (_Subscript_ 81)

Issues of identity frighten the tribe of presimian chimps as they confront “a large, stout kin animal, still with tail and more fur”:

We’re all left oddly upset. Us. Not us. Shall we turn into anything like that? Or were we like that before? Or is it one of us, gone beserkly wrong? Vulgar even. Or beserkly right. It was very alluring. (_Subscript_ 81)

The few uses of the first-person singular (“I” and “me”) develop the scene of interpersonal recognition and confirm the speech mode. The
greater refinement of identity and identification intensifies with the emphasis on sex and gender that begins in chapter 10. The consciousness represented is clearly gendered female (as opposed to earlier descriptions of the female sex): “But many feel completely settled here, especially the females. Each of us belongs to one male who willingly goes off seeking fleshfood while we collect sweet fat roots and stalks and berries to go with it or feed our young under the few trees, or just sit and break stones” (Subscript 99). From this point on, the narrative is “inside one female per chapter,” as Brooke-Rose has said (Invisible Author 170), although Aka is not named until chapter 13. Again, the development of pronouns plays an important role in the representation of cultural evolution, with possessive pronouns (male only—“he/his/him” in chapter 11), entering into the narrative. The sudden appearance of these possessive pronouns signals the more monogamous culture in which the female belongs to one male, part of a tribe with one male chief: “The owner male stays behind, with his young supporters and their females, who treat him as the new chief” (Subscript 117).

The invention of language is attributed to the females of the species, demonstrated first implicitly by the increasing interest the female consciousness takes in the practice of naming. It begins with the female’s sense of the need to communicate while working together: “But there’s a great need to exchange pictures and feelings behind our eyes. About the shape of stones” (Subscript 108). The practicality governing the development of language, however, is clearly superseded by the sheer joy the female takes in making and exchanging noises:

But there’s more to it than just a different kind of noise. The real fun is to attach a noise to a doing, and then to remember it. And have everyone else remember it. So we break a stone and utter E from the depth of the throat as we break. . . . And we soon discover that if the mouth closes suddenly it stops the voice, and if it opens again at once the breath continues but without the voice, P, P, P. . . . Some get discouraged. There are so many bits of any doing and so many doings and not enough noises. (Subscript 108–9)

Increasingly, the females recognize their own superiority with language and they regard speech as the province of women. The women keep their secret pleasure (and skill) from the males. Sometimes these communication skills are buried for millennia as cultural reversion occurs. Later, there is a distant memory among the females of a past that included
more sophisticated language: “Yet here, with some of the females from the old tribe, in our eyes, when we sometimes try to utter as we work and look at each other, there is a strangely anguished story exchanged, of how some of our ancestors invented something very exciting and somehow it came to nothing. How can that be?” (Subscript 120). Without the more highly developed language of the past, the sense of time has diminished (“Most of them can’t follow, can’t even distinguish now from always” (Subscript 122). The chief does offer speech (“So the other thing the chief has to say comes out soon after, in more noises and gestures. Tribe up” (Subscript 125), but the female creature, now a member of the species *Homo erectus*, realizes inchoately that the group has “long forgotten how to link noises to so many things, and we’ve never learnt to link noises to each other” (Subscript 125).

By chapter 13 (seven hundred thousand years later), males have learned to appropriate speech, as in *Amalgamenon:* “The meeting has gone on almost since lightrise. But then, males do so enjoy hearing males make speech” (Subscript 127). The female story has it that females “invented language,” and then “the males discovered it and took it over and thoroughly improved and complicated it” (Subscript 127). Comically, Brooke-Rose describes, without naming, the competitive masculine behavior of interrupting one another:

And they do this to each other too, never letting one male finish but barging in with a louder voice so that both are making noises at the same time and no one can hear either of them till one of them stops, always the one with the softer voice. Unless the chief speaks, then all are silent.

Perhaps it’s our fault, because we teach them to talk in the first place, when they’re very young, and maybe we don’t do it well enough. (Subscript 128–29)

Females become the storytellers, the ones who sing the young to sleep with myths and stories (“But also because we tell stories. And sing our very young to sleep. In songs that tell stories” [Subscript 129]). Even so, it is Gedem, the male master of stonework, who becomes a wordmaster, inventing “small link noises” and with them, plot itself: “IF one thing or doing, THEN another. Or WHEN one thing or doing, THEN another. After all that’s what we do all the time, whether preparing to mate or skinning an animal or, surely, hunting and foraging. What’s hard is to remember the noises for it. But even the slow ones grasp this link and
learn to use it. In fact this kind of linking seems easier than learning to link noises to things and doings” (*Subscript* 135).

As in her other novels, in *Subscript* Brooke-Rose explicitly attends to questions of grammar. Tenses, possessives, pronouns, plurals—the increasing conceptual sophistication of the *Homo erectus*—is tracked in descriptions of grammar without benefit of grammatical terms. Take, for example, the description of tenses and iterative versus singular verbs: “he adds noises to the noises for the doings, when single or several, or when done, or being done, or still to be done, or not done at all. But that’s very hard to grasp” (*Subscript* 136). As always in Brooke-Rose, the concept of absence is both fruitful and elusive. Despite the importance of Gedem, women are the Wordwomen (*Subscript* 176) and language teachers (*Subscript* 191) (as they are the prophets in *Amalgamemnon* and translators in *Between*). In chapter 16, the history of modern man detours into the story of Neanderthal culture, the species once thought to be a stage in human development, only to have been exposed as a detour from, not a point on, the adaptive path. A captivity narrative, the chapter charts the capture and rape of the female ancestor of modern humans by the Neanderthals (a variant of the history as told by Herodotus). In chapter 17, the disappearance of the Neanderthal is the subject of a “clan congress” on the European landmass. Baludin, the male host of the meeting, explains the disappearance in proto-Darwinian terms, speaking of the better organization and better instincts for survival in the humans. Aka protests the cold and calculating description of the extinction of the Neanderthals (as their forced captive in chapter 16, “she” senses something close to humanity in them). Brooke-Rose has fun ending the chapter on a note of protoimperialism, the will to live fast becoming, in the rhetoric of the leader, “the will to better ourselves. The will to conquer the world” (*Subscript* 187).

In the two final chapters of the novel, art and travel, also male activities, provide a counterpart to this imperialism. In both, Aka longs to have the freedom available to the male of the species, particularly the freedom to imagine and represent what does not exist in the small world she inhabits. Again, the attraction is to something not yet there; speculation and alternative possibilities are theorized. In various permutations, the female longs to consider what is beyond experience, what does not yet exist, in the form of art, fantasy, dreams, and the future (a proto-Brooke-Rose!). In the penultimate chapter, which takes place 20,000 years ago, the woman follows Bitarzute, the artist, into his cave to watch him paint. Discovered at the entrance of the “sacred cave,” she is
forbidden to enter it; Bitarzute, “the magic imager” assumes that she has followed him because she is seeking sex. After having sex with her, he abandons her to return to his work and expects her to leave. Instead, she secretly watches him paint. And what she sees is the delight in creation that has stalked Brooke-Rose’s women protagonists throughout her novels: “He wails and yells to the hammering rhythm like a woman at peak. It’s breathtaking. It’s godmade. It’s alive” (Subscript 194). Somehow, Aka understands the immortality of art, its quickness, the way it continues to live. She steals back into the cave and paints on the wall, a woman’s hand: “leaving its other self on the wall as a pale hand on a red wall. It lives! It stares out, fascinated. It’s much better than the fish” (Subscript 196). The artists reach for something expressive, something imperfectly understood, something not already there.

In the final chapter, an Odysseus-like foreign traveler comes from the East to tell of distant places and more advanced societies, a time-traveler of sorts who predicts the future for the clan because he has seen it. He tells of homesteading “a plot by the women to keep us from moving” (Subscript 202), and presents a verbal picture of agriculture and domesticity, with all that attends these developments—territoriality and nationalism, animals as beasts of burden, labor-saving devices, diseases, medicine. The traveler leaves the clan but his words haunt them, “The mind can only feel and hear his vibrant but now absent presence” (Subscript 210). A new Aka longs to see the inside of the Sacred Cave and plumb the mysteries of art generated by the male image makers. She tries to pump the male artist, Izuri, for information on the images he has created on the walls of the Sacred Cave. The Basque name locates the final scene in a region of Europe dotted with ancient caves that shelter painted records of these ancient civilizations. Ironically, the novel ends with Aka in the Sacred Cave only by virtue of a life-threatening fall into its darkness. She loses, and then briefly regains, consciousness. With broken bones and in great pain, she hovers at the edge of consciousness, so that the concept of time, so hard-won over millions of years of hominid development, slips back, through the intrusion of bodily agony, into the “foreverness” with which the book began. Aka can momentarily see the cave paintings with the help of an impromptu lamp she creates. She feels some disappointment in the lack of imagination she perceives in the paintings. She thinks, “From the way Itzuri talked we all imagined flaming red bulls charging and orange horses galloping and fish flying and birds swimming, well, rock can be air or water or anything” (Subscript 214). The novel ends with what seem like feverish hallucinations
that transform the art into another rhetoric of the unreal, the marvelous. On the wall, monsters appear with “two heads, a woman’s head and a bison’s head,” and then she fades out of consciousness imagining the future of her clan fulfilling the terrifying vision of the traveler, with “hordes and hordes of wheat-rearers and animal-tamers invading the huge forestless plain, the entire landmass, growing grains and greens and fruits and lambs and pigs and horses and having endless offspring and living happily ever after” (Subscript 215). In pain (“Every move means pressing on the left leg”), the woman presumably dies alone in the Sacred Cave, ironically able to view what she has longed to see, only on the eve of her death. In this grand hallucination domesticity as well as domestic fiction (“reader, I married him”) are predicted.

Aka’s hallucinatory vision at the end of the novel is only one form in which Brooke-Rose yet again expands her rhetoric of the unreal, giving fictional life to the categories of the nonexistent. The grand narrative of evolution provides her with the opportunity to represent the unreal in different forms (with an eye to potentially different genres, from the fantastic to the detective story to the horror story). Subscript is the archive of the dead, the extinct, the vestigial (forms that continue but have lost their function); the disappeared (forms whose sudden disappearance is experienced as loss but whose fate is unknown); the monstrous (earlier forms preserved in storytelling as horror stories (“They have mouths like crevices between huge rocks and teeth as tall as small fish. Still, that too may be the code indulging in frightening stories, rather than regretful ones, to justify that long journey” [Subscript 34]). Traces haunt the living, in the material archive of anthropology and genetics and in Brooke-Rose’s novel of evolution. As Henri Bergson wrote in Creative Evolution, “The act by which we declare an object unreal therefore posits the existence of the real in general. In other words, to represent an object as unreal cannot consist in depriving it of every kind of existence, since the representation of an object is necessarily that of the object existing.”12 In representing the unreal, Brooke-Rose breathes life into evolutionary theory, representing the unbearable lightness of being on the massive scale of the history of life itself. Suffering and survival, life and death, are part of the same archive. If Xorandor focuses on the unreality of the real in the nuclear politics of the twentieth century, Subscript catalogues the reality of the unreal. In her interview with Lorna Sage, Brooke-Rose says, “I believe experimenters like me are doomed to die and be forgotten, but that something of the technique survives, or seeps through, without later users even knowing it. . . . It’s true that
experimenters often get ignored or forgotten for the mainstream. I’m a duck-billed platypus, and hope my beak will somehow develop in new birds” (Invisible Author 178). The “Invisible Author” of Subscript experiences her own lightness of being and potential extinction, a possible fate her novel is intended to prevent.
<table>
<thead>
<tr>
<th>CH</th>
<th>TITLE</th>
<th>TIME</th>
<th>PERIOD</th>
<th>CREATURE</th>
<th>CONSTRAINT</th>
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<tr>
<td>1</td>
<td>Euka</td>
<td>4,500mya</td>
<td>Precambrian (prebiotic to biotic)</td>
<td>Prokaryote cell to eukaryote to multicellular</td>
<td>No pronouns, even it/its, or impers. it/there</td>
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<td>2</td>
<td>4Kmyl</td>
<td>500mya</td>
<td>Cambrian</td>
<td>Prechordates/Chordates</td>
<td>ditto (+ group/shoal)</td>
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<td>405-370mya</td>
<td>Devonian</td>
<td>Tds Tetrapods, 1st sight land</td>
<td>ditto</td>
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<td>65myl</td>
<td>305-290mya</td>
<td>Carboniferous</td>
<td>Tetrap. reptile</td>
<td>1st it for code or body only, they/them for code-sequences, or “others” (few) + group. No reflexives (ever)</td>
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<td>5</td>
<td>25myl</td>
<td>265-240mya</td>
<td>Permian</td>
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<td>225-220mya</td>
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<td>it/they, 1st time its (pack) impers. it + pack</td>
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<td>75myl</td>
<td>145-65mya</td>
<td>Cretaceous</td>
<td>Presimian (tarsiers)</td>
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<td>8</td>
<td>45myl</td>
<td>20mya</td>
<td>Miocene</td>
<td>Presimian (chimps)</td>
<td>We/us/our + their. Two exceptions to no you/me (eye-recog.) + tribe</td>
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<td>9</td>
<td>13myl</td>
<td>7mya</td>
<td>Miocene</td>
<td>Chimps: Australopithecus</td>
<td>All pros except I/me/my, he/him/his, she/her/hers reflexives</td>
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<td>One myl</td>
<td>6-4mya</td>
<td>late Miocene</td>
<td>Australopithecus</td>
<td>ditto. + tribe</td>
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<td>1.9mya</td>
<td>Quatern/Pleistocene</td>
<td>Homo habilis (early attempt speech)</td>
<td>he/his/him (no she etc.)</td>
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<td>Time</td>
<td>Species</td>
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<tr>
<td>12 900Kyl 1mya (Pleisto.) Lower Paleolithic (Archeulean)</td>
<td>Homo erectus + Other Species (H. ergaster, robustus, etc.) ditto + tribe</td>
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<tr>
<td>13 700Kyl 300Kya Lower Paleo. (Acheul.)</td>
<td>H. erectus (speech) he/him/his but no she/her/hers, I/me/you etc + clan</td>
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<td>14 120Kyl 180Kya Lower Paleo. (Mousterian)</td>
<td>Archaic H. sapiens All except I/you/she and cases, + clan</td>
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<tr>
<td>15 130Kyl 50Kya Mid Paleo. (Moust./Levallois)</td>
<td>Anat. Modern Man All except I/you/she and cases (clan)</td>
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<tr>
<td>16 10Kyl 40Kya Upper Paleo./Early Aurignacian</td>
<td>AMM + Neanderth. 1st she (old woman) &amp; 3p (the guest etc.) for I/you (clan)</td>
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<td>17 10Kyl 30Kya Upper Paleo./Aurignacian</td>
<td>AMM (end of N) all pronouns except no I/me/my for Aka</td>
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<tr>
<td>18 10Kyl 20Kya Upper Paleo./Gravettian</td>
<td>AMM ditto</td>
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<tr>
<td>19 9Kyl 11Kya Upper Paleo./end of Magdalenian</td>
<td>AMM ditto</td>
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myl = million years later  
mya = million years ago  
K = thousand  
+ the collective noun changes, e.g., shoal to group to pack, tribe, clan