READING, GLACIERS, AND LOVE IN THE BOTANICAL EXPLORATION OF CHINA'S BORDERLANDS

May your spirit and your virtue serve the meaning of the earth. . . . Man and Man's earth are still unexhausted and undiscovered. Nietzsche [1]

1.

Making nature, making places, and making persons are ineluctably social and incorrigibly intertangled processes. [2] Making nature, places, and persons in colonial or, better put for the case I will examine here, imperial situations were also, especially in their mutual entanglement, thoroughly textual processes. [3] The nature of European imperial possessions and their peripheries came into being through documents: maps, surveys, censuses, and treatises that filled the imperial archives; botanical, zoological, geological, and ethnographic descriptions that accompanied specimens and photographs into scientific institutions; narratives of travel, conquest, and exploration that circulated in the public realm; and letters to family, friends, patrons, and parishioners that made colonized places vital participants in intimate relationships. We know a good deal about how layered taxonomies of beings, regions, and societies emerged through these documents; we have paid much less attention to the ways nature, place, and person became entangled in the practices of documentary production: in the textual practices of writing, revising, and reading, and in the walking, looking, collecting, cataloging, naming, and photographing (to speak of natural history alone) that accompanied these textual acts.

How might documentary production have become a structuring element of natures, places, and persons in imperial explorations? How might specific practices of writing, revising, and reading have organized perceptions of the earth and its inhabitants; how might these practices have worked their way into the social relations that organize such perceptions; how might they have nurtured or circumscribed specific forms of personhood? Here, I want to delimit these questions by casting them as questions about particular kinds of intimacy. First, an intimacy of eye and earth, occasioned by a particular model of reading, in which the eye follows marks on a surface, linking them up into continuous forms, gaining access through them to larger narratives of time and space. Second, an intimacy of domestic love and obligation conditioned by that same model, in which traces of debt and gratitude are linked together into lifelong narratives that sustain particular forms of social relatedness. Finally, an intimacy of earth and person, in which readings of the earth and readings of lives twine one through the other, shaping and disrupting each other.

Recalling Walter Benjamin's advocacy of a historical materialism that "blasts the epoch out of its reified 'historical continuity,' and thereby the life out of the epoch and the work out of the lifework" to present "a given experience with the past—an experience that is unique," I want to focus my questions on only a few documents. [4] The epoch with which I am concerned is that of the British

imperial cataloging of the world's nonhuman beings, specifically of those of one "last white space on the map," a vast mountain region of southwest China, in particular west and northwest Yunnan, west Sichuan, and southeast Tibet, from which British botanists, between 1904 and 1945, in a final exuberant spasm of the epoch's taxonomical zeal, collected, named, and (in many cases) introduced into British gardens an astounding haul of decorative plants, as well as hundreds of species of mammals, birds, and butterflies. The life is that of Frank Ward (1885-1958), who from 1911 to 1948 made twelve expeditions to this region to collect its plants, first for the seed firm Bees Ltd., later for private syndicates of wealthy gardeners, with the active aid of hundreds of the region's human inhabitants. The lifework is that of Francis Kingdon-Ward (Ward's nom de plume), a name attached to twenty-five books and over 650 articles describing the botany and geography of the region, as well as hundreds of letters, diaries, field notes, sketches of maps, and embryonic drafts of unfinished works. [5] The work is a few letters and drafts of letters between Ward and his wife, Florinda, and daughters, Martha and Pleione.

Benjamin added that all this blasting away "results in the simultaneous preservation and sublation of the lifework *in* the work, of the epoch *in* the lifework, and of the course of history *in* the epoch." [6] At best, in this brief essay history and the epoch will be reinserted in the work (to truncate Benjamin's recursive chain) in fragmentary style, in the suggestion that we learn to read practices of documentary production as technologies of perception with the power to shape many forms of relatedness: the foundational relations between body and world molded by any such technology, the intimate and exclusionary social relations through which persons are produced and perception screened; and, especially, the field in between.

In the late nineteenth and early twentieth centuries, European imperial endeavors demanded of their participants particular ideologies of representation. Writing of the colonization of Egypt, Timothy Mitchell describes these ideologies as drawing the clearest possible distinctions between representations and reality, between observing subject and observed object, and between persons and things. [7] As Webb Keane argues, however, such ideologies were never stable; they were often confounded by the practical economies of representation in which people actually engaged, in which it was rarely easy to maintain such clear-cut distinctions, and in which the ideas of others tended to complicate matters. [8] In addition, ideologies of perception were changing rapidly during the same period. The rigid eighteenth-century idea of perception, modeled upon a camera obscura, in which the exterior world cast itself upon the mind's internal screen through the narrow aperture of the senses, had given way. Popular novelties such as the stereoscope began to provide new models for understanding perception. In particular, ideas about perception began to focus on the perceiving subject and its capacities for hallucination, self deception, and distortion. [9] In the peripheries of empire—places neither firmly established under the rule of European empires nor entirely outside their influence—these competing ideas and demands generated particularly stark instabilities. The mostly British botanical explorers who spent the decades before and after the Great War walking the borderlands between Burma, China, and Tibet in search of new plants for British gardens found themselves struggling to fulfill demands

for the kind of representation on which the empire had come to depend and simultaneously to recast it, to find their own modes of presence to this world and its inhabitants.

In this struggle, practices of textual production were important technologies of perception, shaping the body's interface with the world and fashioning modes of social relatedness. Writing of Frank Ward/Francis Kingdon-Ward elsewhere, I have provisionally sorted out three styles of such practice, which I call writing, revising, and reading (each of which, of course, dialectically involves the others). [10] In his three decades in northwest Yunnan and southeast Tibet, Ward wrote many volumes of diaries intended only for his eyes. He wrote as he walked, struggling to establish a conviction of his presence to the world. The scratch of his cheap steel-nib pen on his notebook paper (he never adopted the innovation of the fountain pen) gave him a frame on which to hang this conviction, narrowing perception down to the single register of eyes carried across a resisting surface, devoid of historical or social sedimentation. Writing allowed Ward to reshape his relations to the many inhabitants of this landscape whose labor of guiding him, carrying his luggage, and cooking for him made his journeys possible—disentangling himself from them morally and affectively, and excluding exchange, dialogue, and sociality to remake the world as a single and purely visible surface.

Ward's many popular books and articles were revisions of these diaries. While writing was an instrument of the walk, performed each night on camp beds or outdoors on rocks, revising required the rooms and courtyards of temples or guest houses, into which Ward and his party settled for extensive stays, arranging around a central desk or table stacks of plant presses and the glass plates, trays of chemicals, and drying racks required for photography. If the action of steel-nib pens provided a concrete model for the sense of presence to the world Ward developed with his writing, photographs—in particular, lantern slides—gave him a model through which to work out a stance toward the world to share with his audience. Lantern slides (which accompanied nearly all Ward's lectures in London) screened the subjectivity of the viewer out of the world: a slide exhibits the world as present to the viewer while naturalizing the viewer's absence from it—world and image coinciding without mediation by a subject. [11] Ward borrowed this model to revise his written experience into prose slide shows, framing the landscape of north Yunnan and southwest Tibet into an extended exhibition, and thus participating in a focused way in the ideology of representation that had become firmly cemented into imperial endeavors during the previous century. [12]

Yet Ward always kept walking, expedition following upon expedition. The solitary scraping of a steel-nib pen and the retrospective ecstasies of the prose slide show were thin sustenance for those endless journeys. The body kept stupidly intruding, with all its other senses, and all its incapacities, illnesses, and fatigue. The earth too kept intruding—the earth which underlay all the floral oceans of his slide shows, and which, in those extraordinary mountains, so massively and exuberantly overwhelmed any frame. [13] And then, there were those who shared his life neither as traveling companions nor as audience, but as intimates, whose alterity was deeply implicated in all his strenuous efforts to

rework his perceptions of this flower-strewn world. In the face of these intrusions, another mode of textual production emerged for him—one less rigidly bound by ideological demands, one that allowed him a fuller sense of being entirely engaged with other beings, both human and inhuman: a systematic practice of reading. At the most conscious level, reading was a scientific endeavor, through which he engaged a compact community of British geologists and plant ecologists. At other levels, reading gave him a way to tie together an intimacy of the earth and his failed intimacy with his tiny domestic circle. The careful exclusions of writing were for his acquaintances of the road; the ecstasies of revision were for his nation—I have described these practices at length in a companion article. [14] Here, I want to describe a science of reading, worked out for those he loved, attempted to love, and failed to love.

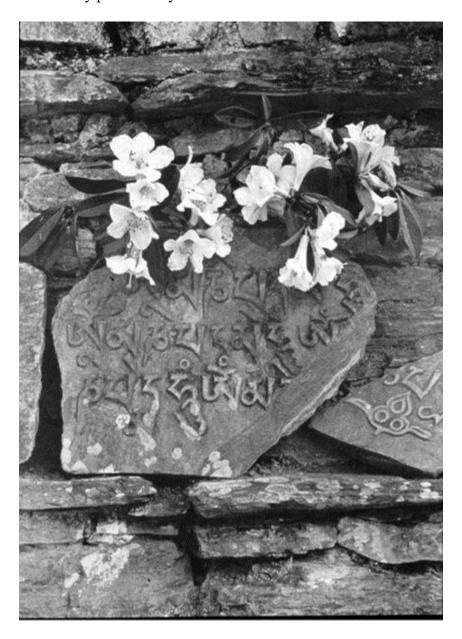
2.

Reading began for Ward when he noticed writing inscribed in the rocks along his routes through southeast Tibet. In 1911, he was employed by the seed firm Bees Ltd. to travel from Shanghai, where he had been teaching children of Europeans at the Shanghai Public School, to northern Yunnan Province in search of hardy, decorative plants that might be marketed to British gardeners. He had accompanied a zoological expedition to western China the year before, but this was the first journey of which he was the leader. He entered Yunnan through Burma, where he employed a personal servant he called Kin; he picked up a plant collector he called Ganton at the French Catholic mission of Tsukou (Cigu) on the Mekong River. In the far northwestern part of the province, inhabited mainly by Tibetans, Ward, Kin, and Ganton, along with a crew of mostly Tibetan muleteers and porters, walked part of a pilgrimage route to the Doker-la, a sacred mountain pass. Ward camped by a spring and swam among inscriptions in the rocks:

... the devout Tibetans, doubtless awed at the wonderful phenomenon of pure water welling out of the solid cliffs in this wilderness, had made obeisance to it by carving the sacred prayer and numerous other inscriptions, some of them of considerable length and beautifully executed, on the surrounding rocks; and amidst these manifestations of piety I bathed.

Once this writing came to the eye, it was everywhere. A few days later, the expedition passed a boundary stone, inscription effaced and unreadable, marking the frontier between Tibet and China. The road was lined with low pyramids of white quartzite, each stone carved with the prayer *om mani padme hum;* in some places the pyramids formed ridges extending for hundreds of yards. "Though the pyramid is never more than a few feet high, hundreds, nay thousands, of shards of stones, painfully carved, go into its formation, and one trembles to think of how many hours of work they represent." Ward could read none of these inscriptions except the short, omnipresent sentence he called the *mani* prayer. If he had been inclined to attempt to comprehend its difficult meaning—and he was not—its endless repetitions would still have emptied it of any content for him. As it was, it did nothing but keep him awake at night as pilgrims camped nearby prayed themselves to sleep. He assumed that the other

inscriptions were also nonsensical—empty, automatic writing, patiently and obsessively produced by hundreds of nameless hands. [15]



⊞ Enlarge this image

Inscriptions on rocks. Photographed by Francis Kingdon-Ward, undated. Courtesy Royal Geographic Society

He had often found, however, that, here beyond the border of empire, to be indecipherable in a referential register did not make writing ineffective—sometimes quite the opposite. The passport he carried on this trip, for example, was written in an illegible scribble of Chinese that no one seemed to be able to read, yet it cleared his way, allowing him to requisition transport animals and porters from the villages he passed even more effectively, perhaps, than if the restrictions it spelled out had been decipherable. [16] Imagining the writing in the

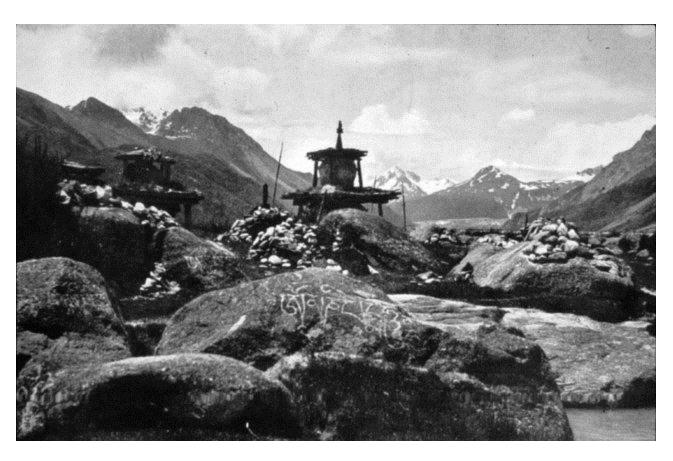
sandstone along his route to be empty of reference gave him a way to read it and the myriad other inscriptions in the stone:

Sills of this rock . . . stood out boldly in many places, forming conspicuous ledges, and being well jointed they often exhibited an incipient hewing into separate blocks. Cliff sections sometimes showed large boulders embedded in the soil, and all doubt to their origins was removed when I saw blocks of stone only recently detached from a sill lying about in all stages of exfoliation from cubes to spherical boulders. The obliteration of Tibetan inscriptions cut on way-side rocks, many of which were recently cut, since the colours in some cases had not had time to be effaced, testified to the softness of the sandstone.

This writing made the exfoliated boulders legible, "testifying" to the possibility of estimating the rate of weathering and thus of imagining the motion and transformation of this landscape through geological time. Reading ledges and cracks between the lines of Tibetan script opened up a new view of the landscape, available neither through cartography nor directly through the eyes. After discovering that the sandstone might be read in the same fashion as Tibetan script, Ward followed it across the region, using his walking body as a reader uses his eyes: "This sandstone forms a very important feature of the scenery in S. E. Tibet, and I traced it right across the gently undulating plateau country which I traversed." He found the region to be unified by a peculiar geological structure: a crumpled sheet of light-colored limestone underlying the darker sandstone deposits:

In this corner of Tibet the plateau seems to have a foundation of limestone bent in to the form of a basin, or perhaps thrown into a series of folds, the hollows having been subsequently filled up with sandstone, though not to a sufficient depth to overlap the limestone along the rim of the plateau, which consequently appears round the eastern edge and in every deep valley. [17]

These discoveries were accompanied by many more accounts of Tibetan writing carved into wayside boulders and stones. Encountering this script led Ward to find writing everywhere in the soft sandstone and then, tracing this stone as one might trace a line of partially obscured writing in a language one cannot read, he finally conceived of the entire region as a gigantic, crumpled limestone sheet, written over with sandstone text.



± Enlarge this image

On the border of empire: "mani" pyramids and their inscriptions, 1911. Reprinted with the permission of Cambridge University Press from The Land of the Blue Poppy. Photograph by Francis Kingdon-Ward

On this first expedition, Ward worked out for the first time his fundamental orientations to the landscape. His later letters and diaries make it clear that the practice of reading discovered on the Doker-la pilgrimage sustained him through the next four decades of expeditions. To see the land as written and to aspire to "trace" that writing was to see it always in movement, always being carved, inscribed, and deposited upon, and always embellished, through evolution and dispersion, with the shifting lines between floral species. His texts were happiest when they were absorbed in this reading practice, as, for instance, his diary entry for April 1, 1924, near Sangang in southeast Tibet:

Glorious day, sunshine throughout, sky cloudless. . . . River has cut through great rubble terraces. There is much static weathering, hence these huge screes, ochre, chrome, honey colored, grey and brown. Lower down the ravine were cliffs and boulders of some crystalline rock curiously weathered by sand blast. There were also curious parallel grooves cut in some rocks by water. [18]

If writing is an attempt to establish a mode of presence to the world, reading proceeds from a mode of presence already delimited. [19] One writes from anywhere, as Ward did, perched on a rock by a path or river, laboring to impose upon the walk rules that might sustain his sense of self in relation to others. The

practice of reading, however, provided a secure framework for contact between the senses and the world—as he ran his eyes along the terraces inscribed by the wind or his fingers through the water-cut grooves in the rock.

Reading does require a residue of reference to adhere to marks, even if it is intermittent, ambiguous, and occluded. In 1912, Ward took a course in Tibetan in London. He became familiar enough with the alphabet to copy out the names of villages and mountains in his diaries. By 1924, he could still decipher very little, but he could at least read the numbers villagers wrote on their whitewashed walls to keep track of rates and prices. In March, 1924, in the initial stages of an expedition to the gorges of the Yarlung Tsangpo River in southeast Tibet, he recorded some of these numbers in his diary:

The rate of transport animals is fixed, stage by stage, for a cow, yak, donkey, or cooly, 9 annas per stage; mule or pony R[upee] 1. Prices are also fixed and written up in every bungalow. Milk A[nna]s 3 per bottle, firewood (when available) R 1.4 per mound; yak dung As. 12 per mound, a sheep R. 4.4, a goat 3.6. Eggs here cost us 9 a dozen. [20]

The other marks on this landscape were also, hypothetically, legible as measures of fixed rates: the rates that rivers cut into the earth's crust, wind blasted away at the boulders, streams trickled through fissures. In fact, the entire problem of representation Ward faced was a problem of measure: of how to measure out the attention of the senses, first in the walk, then in words and sentences, and of how to make these measures correspond in a meaningful way. Reading was a useful tool with which to organize this problem. To trace sandstone deposits across the limestone substrata of the plateau was at once to free vision from the scattered contingencies of the walk and to pace it against the walk's slow, successive, articulated rhythms. Reading unified sensation and coordinated it with the features of the land, and it could be extended indefinitely to give the sensed particulars of the walk a place in vast stretches of time and space.

Later, Ward became happily obsessed with calculating and recalculating the measures of rates inscribed into the landscape. To find marks to be decipherable, even partially or obliquely, he had to settle upon an organizing principle—a language or group of languages—and a coordinating agent for inscription. In 1915, he had noticed abundant evidence of prior glaciation throughout the entire northwest part of Yunnan; [21] in 1922 and 1924, he found similar evidence on both sides of the Yangtze in southwest Sichuan and southeast Tibet. [22] He hypothesized that the entire region had been subject to rapid deglaciation in the recent past. Deglaciation had progressed from east to west, he speculated, and it had been caused not by global climate change but by a sustained local decrease in precipitation. Once this hypothesis was in place, it organized his reading of nearly every mark on the landscape. Valleys, moraines, lakes, and streams could all be deciphered, through imaginative procedures of approximate calculation, as measures of the movement of glacial ice.

Even more important, deglaciation organized evidence about the evolution, distribution, and migration of floral species through this region, especially those

of *Primula* and *Rhododendron*. The movement of ice, he hypothesized, was the cause of the incredible variety of species in these two genuses that he and his competitors were discovering. "So long as some stabilizing key factor remains, the species is fixed," he speculated in his diary, but "as soon as that factor, whatever it is, is removed, it begins to wobble and become unstable. It may then be open to various influences—mutation, variation, change by crossing and so on." [23] Glacial ice was a "key stabilizing factor," and its rapid retreat, leaving large swathes of unoccupied land, destabilized the floral environment. Those rhododendrons with the most effective mechanisms for seed dispersal moved into the vacant areas the quickest, creating many areas of isolation in which a single species predominated. This isolation, he speculated, produced endemism, causing each species to evolve into many closely related species and varieties. [24] He made detailed morphological studies of the seeds of various Rhododendron species hoping to arrive at a method to calculate the different rates at which they might have dispersed into areas left vacant by retreating glaciers. [25] The wings and irregularities on a seed, the local variations in colors of flowers of a Rhododendron species from one ridge to another, the shape of a plateau viewed from a peak: the deglaciation hypothesis made it possible to see marks on vastly different scales as a network of inscriptions united by a master inscriptive agent and to fill in the voids between decipherable marks with the speculative approximations of measures to which reading gave rise.

This reading practice might be understood as belonging to the specifically modern problematic of attention. Jonathan Crary argues that in the late nineteenth century attention became a field in which the truth of perception was organized and new conditions of subjectivity articulated. Attention emerged as a fundamental scientific and social problem as one effect of a sustained epistemological crisis, in which the classical model of consciousness and the stable, enduring structures of perception it posited disintegrated. Attentiveness provided an alternative field around which to organize and stabilize an observer's consciousness—"a bulwark against dissociation, a guarantee of the cohesiveness of consciousness and its relations to the world, a tool of productivity." Yet attentiveness could not guarantee perceptual fixity or certainty of presence; the attentive observer was not an autonomous subject; as a faculty, attention was the sign "not so much of the subject's disappearance as of its precariousness, contingency, and instability." [26] As a form of attentiveness, grounded in the deliberate, linear successiveness of the walk, reading was the dialectical opposite of the timeless frame of the prose slide show. Reading brought time and the body back into the relation between sensation and the world, along with the uncertainties of subjectivity the problem of attention posed. To read was to move into a realm where subjectivity was always at the point of dissolution, and always being reasserted, as one traced one set of fissures in the sandstone, articulating them with the next set, moving on to the next, carefully coordinating vision with inscription, forging intimate unities of region and sensation.

Ward's practices of writing and revising regulated perceptions to accord with fundamental ideologies of perception and representation at the foundation of European imperial projects: ideologies that isolated explorers and administrators from affective and moral engagement with imperial subjects,

isolated observing subjects from observed objects, and framed the world as an extended series of exhibitions. [27] As adaptations to these ideologies, they were Ward's way of engaging the expectations of his popular audience and of shaping his own perception and subjectivity in line with those expectations. Writing and revising rendered the world down into a purely visual image, exhibited, at the end of the process, as a lantern slide—a pure, intense, extended optical field out of which time, sociality, and mediating subjectivity had been abstracted. Reading the same world through the melting glacial ice formed another pole of a dialectic, extending and complicating the senses, drawing them out through displacement and deferral, measuring out attention over great distances in space and time. As a strategy in which scattered traces are brought into the fold of a master agent of inscription through procedures of approximation and speculation, reading offered Ward a method for negotiating the painful intricacies of love, failed love, class difference, and class aspiration that defined his relations with the four people who were most important to him: his wife, Florinda, his daughters, Martha and Pleione, and eventually his second wife, Jean Macklin.

3.

On January 22, 1922, Florinda Norman-Thompson wrote Frank Ward from her parents' home, Huntly, at Castle Hill in Maidenhead, asking him to marry her. It was her second such letter; she feared the first had been lost. Frank was working his way from Lijiang, in Yunnan, to Hkamti Long, in Burma. [28] He had met Florinda just over a year before, on his first trip to England in seven years. She was twenty-three and gorgeous, the only child in a very wealthy landowning family. Frank was thirty-seven and malarial; he was staying with his mother and his sister in a small hotel in Bayswater. Almost immediately after meeting Florinda, he had proposed. He had made at least three precipitous proposals before, none successful. Florinda had turned him down too. It seems that she was still mourning a lover killed in the war, and she could find little reason to love this odd, sickly man. [29]

In her letter of proposal, Florinda begged Frank to understand why she had refused him. It would have been a betrayal to marry out of cowardice or sympathy, but now she understood what a brave thing he was doing. She made no declaration of love. Instead, she ended her letter in a garden:

I planned this letter to you this morning when I was walking in the Thicket. I don't care what the calendar says, it was really the first day of spring. There was a heavy mist in the morning and it broke before the sun as I was walking and I saw that the fields were full of green things beginning life and that the outlines of the buds on the trees were softening. I hoped that your lovely Chinese winter has been kind to you today. [30]

If she was hard put to love Frank, this garden helped—this dream space that staged the world as beautiful and pressed its viewers to notice how they were moved by this beauty and, in so noticing, to bring other affects into being. A muted reflection of China in England, the garden cropped out the complex

distances in space and time that separated these two souls to create a field of feeling they could share.

Frank returned to England in early 1923, and they were married in a register office in April. Nine months later, Frank began his long-planned expedition to the Yarlung Tsangpo River gorges. Thereafter, he returned to England only for brief periods, and long stretches of their relationship were purely epistolary. Gardens rarely entered this correspondence: their simple reassurances of a shared space of feeling were reserved for his daughters. Between Frank and Florinda feeling became tangled up in intricate negotiations over domestic economy and the preferences, aspirations, and fears organized through the system of class.

Certainly, a great gulf of economic circumstance had separated these two in their previous lives. Florinda's parents had owned land in north and south Ireland and maintained houses in Dublin and Maidenhead. Her father had died when she was five, and she had lived with her mother, Isabelle Orpin. She moved in socialite circles in both Ireland and England; when she was seventeen, a Dublin rose breeder named a rose after her, Florinda Norman-Thompson, a yellow-pink blend. [31] Her mother had lost much of her Irish property upon the partition of Ireland in 1912, but a substantial estate near Dublin remained. Frank's father, Henry Marshall Ward, had had a brilliant career as a mycologist and plant pathologist for the empire, serving first as Professor of Botany at the Royal Indian Engineering College at Cooper's Hill, then, beginning in 1895, as Professor of Botany at Cambridge. Frank had been born into a comfortable, middle-class home near the Thames, attended public school at Saint Paul's in London, and entered Christ's College, Cambridge, on a science scholarship. But his college education was cut short after two years when his father died of diabetes, leaving Frank, his mother, Selena, and his sister, Winifred, in difficult economic circumstances. Frank left for Shanghai to teach school and begin his exploring career; Winifred, who never married, became a schoolteacher as well, supporting herself and Selena as best she could on her salary, aided by Frank's small, regular donations.

From the beginning, Frank and Florinda struggled to get by. Shortly after they set up their first household in London, Frank wrote Winifred, "If I make £300 this year I shall be lucky, and the truth to tell if Florinda had not a little money of her own we would not be living even in this tiny flat." [32] Florinda appears to have accepted very little from her mother. "She hated her," Pleione said, eighty years later. "She was a very very Victorian church person who believed God delivered justice not only in heaven and hell but also on earth, and if you were shoeless, then it was your fault. She couldn't stand her mother for that." [33] Before Florinda married, she worked in a shop. Afterwards, she managed the syndicates of wealthy gardening enthusiasts that paid for Frank's journeys. [34] After his 1924 expedition, it became clear to her that she could not maintain a decent household on Frank's income. She created her own businesses, first an advertising agency, then a small limousine company, finally a concern that exported patent medicines to the continent. [35] Though she worked, and despite her alienation from her mother, Florinda nevertheless retained a strong sense of her class heritage. "She was a lady, in fact," Pleione recalled. She insisted that

new acquaintances address her daughters as "Miss Kingdon-Ward." Even when in the most straitened circumstances (as when her export business folded during the Second World War) she found ways to have servants or servant-like relationships. And she had a distinct sense of what it meant to maintain a proper household.

In the first three years of their marriage, the couple moved from their London flat to a house in Clifton Hill, then to another in Maidenhead. When Pleione was born in 1926, they moved to a house called Hatton Gore in Harlington, where Frank built a rock garden in a bend of the Thames. In 1928, Martha arrived, and they moved again, to Cleeve Court in Streetly-upon-Thames, where they had a lake, seven acres, verandas overlooking the river, a walled kitchen garden, and another rock garden, the exclusive kingdom of the little girls. [36] Florinda hired a cook, a butler, and two gardeners. Her lifelong companion, Evelyn Hadfield, served as nursemaid and housekeeper. [37] Florinda did not sell Hatton Gore, and later she bought an apartment in London as well.

Frank found Florinda's expectations difficult to endure. He loathed the house in Cleeve Court as a shoddy, gratuitously expensive summer villa, where he was lodged in a vile, dark bedroom with dust traps. [38] Florinda's class aspirations were foregrounded in a way they never could have been for her parents as she shifted into the ill-defined middle class of entrepreneurs, and they discomposed him. Her style of spending upset his own delicately balanced sense of his class position, worked out through the years of penurious living he had endured since leaving for Shanghai: accepted as the son of a Cambridge professor in the scientific societies that still oversaw the vast knowledge-producing operations of the empire, yet reliant upon his own professional expertise and careful economizing to support himself. Being a bachelor and always abroad had allowed him a measure of escape from the great and confusing revolutions in the class system during and after the war: he could still be accepted among his father's former friends and among the de Rothschilds and Huntleys who formed his syndicates without having to make any naked economic demonstration that he belonged. Florinda's style of maintaining a household drew him back to this shifting ground, and to an unstable position on it that deeply unsettled him.

He accused her, sometimes gently, sometimes shrilly, of living beyond their means. He knew she expected him to pay a portion of the household expenses: "But what are household expenses? Where do they end? Buying houses, moving house, making films, buying tour goods, are these household expenses?" [39] Florinda's extravagance was a failure to track the income and outflow of funds from the household; it amounted to a kind of deficit of character due to her always having the possibility of "a little extra." One reason he hated Cleve Court was that he felt she had purchased it in anticipation of an eventual inheritance from the uncle who controlled her dead father's assets. His circumstances, in contrast, had required him always to keep track, if he was not to fall into unsupportable debt that would destroy his career and his social standing. He never had anything but what he could earn, and this he had to portion out with economy. Money to pay the expenses of his expeditions, to hold dinners for colleagues and potential syndicate members, to send to

Florinda, to provide an allowance to Winifred, to dole out to the girls for school fees and piano lessons.

He always kept track, yet he fell early into debt, and his debt grew for nearly three decades. In 1920, he borrowed money to buy a partnership in a commercial garden in Torquay: the enterprise failed, and he lost his stake. [40] Two years after his marriage, an opportunity arose to make a killing on rubber: he borrowed and lost more. He took Florinda on a journey to Burma and Cairo: the debt grew to about £300. More bad speculations in 1928 increased it further. By 1937 it had reached a sum he named as "something between £600 and £800." [41]

He kept track repeatedly, even obsessively, tracing and retracing the contours of his debts and obligations, but this did not mean he kept regular accounts. That had always been up to her. His attempts to state what he "was worth"—to reckon his income, enumerate the property he owned, and figure the minimum he required to live on and what he could afford to send to her—were always speculative and hypothetical. He could never give his income as an exact number; he could only give an approximate range, since what he earned writing, lecturing, and traveling varied greatly each year. This infuriated Florinda. How could he go off on trip after trip saying only that his earnings were precarious and he did not know what he could send home? "I think you must face the idea that the world, the law, and your family will expect you to adopt some more regular means of earning money," she wrote him in 1938. [42] It angered her that he had turned down one such means, the directorship of the Singapore botanic garden, at £2000 per year. His reply was characteristic, a burst of hypothetical or approximate numbers: Singapore would have paid £1000, not £2000 as she imagined. Life there was twice as expensive as in London; he would have been able to send her £300 or £350 at the most, not the £450 she demanded, and none of the large capital sums he had given her: "the best part of £1000 from America in 1930, several hundred pounds from the sale of Indian securities, my savings in 1932 . . . "[43]

They discussed divorce intermittently for several years, putting it off because the girls were too young. In 1936, Florinda finally filed, giving the legal grounds as his admission of adultery with a young woman named Irene Yarwood. [44] Frank bitterly called it "a connived divorce, not, in law, a collusive divorce, but equally illegal!" [45] They thrashed out its terms in letter after letter. He agreed to pay her an alimony of £450 per annum. Almost immediately, he declared the agreement lapsed when, having his power of attorney, she withdrew money from his account, without consulting him. He paid her smaller sums when he could; she continued to insist on £450; they both involved their solicitors. Two years of haggling led to a second agreement: he was to take the first £250 of his income, she the next £125, and the balance was to be divided, two thirds to him, one third to her. He made the agreement contingent upon her return of his five gold medals; she refused to return them; he did not pay the alimony. For a decade, he sent sums of money for the girls' education to their school, to their music teacher, or to Evelyn Hadfield, never to Florinda. [46]

Throughout, they exchanged letter after letter, filled with approximate sums. Numbers were their language of affect, tracing, through successive approximations, the narratives of love, obligation, and betrayal that bound them together. With Florinda, this language was tortured, sum upon disputed sum, narrative upon narrative. With Martha and Pleione, it was simpler, at least for a few years. A stream of small sums of cash from Frank, a stream of thank-you notes from the girls: five shillings for Martha, spent on cloth and dyes, 7/6d for paint brushes, five shillings for Pleione, two of which she spent on Czech stamps. At thirteen, Pleione begged him for money for piano lessons since, unlike Martha, she did not have enough talent to justify Florinda's bearing the expense. With the exception of school fees, his contributions were all of this nature: little extras. His letters were brief, witty, inquiring: seeds and pressed flowers were often folded in with the cash. The girls' letters were longer, about flowers, stamps, music, science. They tried to grow his plants; Pleione read some of his books. Martha drew him pictures of gardens with cats and sent him regular updates on the rock garden. [47] In her teens, she confused him with long, analytical letters about Beethoven symphonies. [48] Pleione wrote him about such topics as grammar and how if you squash all the protons and electrons the world would be the size of a Jaffa orange. [49]

These exchanges fashioned love as that "little extra": small gestures like placing a handful of seeds in a letter's folds, small enthusiasms like stamp collecting or playing the piano when everyone knows nothing will come of it. He was home so infrequently (and, according to Pleione so silent and grumpy when he was, "sitting with his mustaches over a bowl of bread and milk") that these exchanges were very nearly, in their experience, the sum of his love. In contrast, the robust and deadly serious calculus carried out with Florinda left no space for "little extras"—no gifts, few frivolous words, certainly no extra little sums. Yet the topic of these calculations was also love, both the failure of their mutual love—to which they never referred outside of this calculus—and the substance of his love for the girls.

4.

A parallel of style, then, in these two efforts to sketch the shape of complex historical processes. The first step was to trace and connect scattered inscriptions—scorings, moraines, and valleys left by glaciers; notes, bills, and letters from banks and solicitors. The second step was to correlate these inscriptions with measures of movement that could only be arrived at through guesses or approximations. Guesses at the rate at which *Rhododendron* seeds might travel over the landscape based upon speculations about their varied shapes; guesses at the rate at which incomes had been saved or spent, debt increased or diminished, based upon an intuitive sense of habits of extravagance or asceticism, economy or mismanagement. In neither case was there movement toward a final and accurate accounting, merely toward a more refined sense of the overall shape of a landscape in process—a theory of the movements and evolutionary paths of flora over a region; a moral theory of domestic financial obligations. In both cases, an effort to reach through haze of the ideological framings that mediate subjectivity toward what appears to the actor to be a truer or more intimate engagement with a reality far too complex

to be represented in a direct or exact fashion. Beyond the lucid, timeless, framed image of a world-as-exhibition toward an engagement of the eyes or fingers with the earth in its vast, complex, unseen, and hypothetical movements in time and space. Beyond the anxieties and aspirations set in motion by shifting class positions into an intimate, approximate reckoning transformed into the true substance of love and obligation.

One should not make too much of parallels of style. Yet these reading acts intersected so closely in practice that, at times, each was literally recorded on the flip side of the other—so closely, indeed, that each aspiration for intimacy intertwined with the other into a single field of affect. I want to demonstrate this by examining some artifacts of this intertwining—one of paper, the others of gold.

In May 1938, as he was haggling with Florinda over the terms of alimony, Ward was traveling in Mönyul, a border region of Tibet, in what was called the Balipara Frontier Tract of Assam. He had begun the journey with a team of forty porters in Lokra, on the "inner line" that divided the region of Assam administered by the British from the unadministered region. The party paddled across the Belsiri river and walked up the Assam valley on a trading route that led over the Himalaya toward Lhasa. On May 27 they arrived in the large stone village of Dirang Dzong, the political capital of the Mönyul region. [50] Ward settled into the traveler's rest house, a long, low stone building divided into two rooms, one of which he would occupy for the next six months, while his servants slept, cooked, and ate in the other. [51] His mail, delivered ahead of him, had contained a letter from Florinda, dated May 6. The day after his arrival, sitting in his stone room, he composed a long, bitter reply. [52]



⊞ Enlarge this image
The stone village of Dirang Dzong, 1938. Photograph by Francis Kingdon-Ward. Courtesy of the Royal Geographic Society.

In the field, Ward drafted his letters on the reverse sides of drafts of his manuscripts for gardening magazines and scientific journals. He then prepared two fair copies, one for the recipient on lightweight letter paper, and one for himself on heavier manuscript paper. This allowed him to experiment with sums and tones of voice without showing the scored-through evidence. Of this letter, however, he preserved no fair copy, only the first draft, which he ordinarily would have discarded. The tone is angry and hurt, and the handwriting shows signs of gradual disintegration, probably from drink. It is likely that he did not have the heart to make a second copy for himself. He composed the letter by taking a sheet of paper from the manuscript of a draft article, scoring out the text with a single, diagonal line, and turning the sheet over to write—thus likely allowing his eyes to fall briefly on the draft manuscript before writing. He did this with eight sheets from two draft manuscripts, each with many scorings-through, interlinear additions, and marginal notes. His letter was heavily revised in the same fashion.

These two draft articles struck to the heart of the problem of intimate engagement with a landscape in motion through space and time toward which his reading practice had led him. Both addressed the hypothesis, to which Ward was deeply committed, that the genus Rhododendron had originated in the Sino-Himalayan region and diffused from there. They were both given a sense of urgency by the recent discovery of abundant species of the genus in Malaysia, which rendered the contours of this hypothesis much less clear. The first article speculated upon the causes and rates of diffusion of *Rhododendron* species from the Sino-Himalaya to Malaysia. Since there had been no advancing ice sheet in the Himalaya during the Pleistocene, but only a line of glaciers reaching just to the plain of Bengal, glaciation could only have acted to put pressure on the flora, to canalize it and "telescope" it in upon itself, creating great concentrations of different species in isolated areas. But the cold that accompanied glaciation could have driven the flora south. How long might different species of *Rhododendron* have taken to reach the equator? A comparison of winged and wingless seeds might help answer this question. One passage merits quotation:

Now a shrub Rhododendron takes on average 10 8-12 6-14 years to reach flowering age. Let us take 10 years for the sake of [argument] as an average. Assuming that its seeds travel on average 1/10 of a mile a year—176 yards, which is actually perhaps a good deal more than is justifiable, such a shrub might take 160,000 years to reach the equator. [53]

Ward selects a number on which to found the calculation of a rate of movement, revises it to an approximate range, revises it again to make it yet more approximate, then settles on the original number: a sheer guess rendered into the median of a reasonable approximation. It was typical of his procedures of conjecture and approximation across both realms of his reading practice.

The second article attempted a "natural" classification of Rhododendron on the basis of seed types. Classifications should be more than indexes; they should indicate the lines along which evolution has proceeded. Since the seed is the most stable of the reproductive organs, themselves more stable than vegetative organs, a classification based on seed form might both "throw light on the evolution of the genus and [account] in some measure for its distribution in space." He published his classification nine years later, dividing the genus into three types based upon their flattened, winged, or spindle-shaped seeds, and attempting to correlate presumed relative ages of these types with their distribution in space, in line with the age-and-area hypothesis of Willis, which predicted that the most widely distributed species would be the oldest. [54] In both these texts, Ward placed all his habitual practices of approximation, speculation, and conjecture at the service of an extended and improbable narrative that linked the perceived forms of seeds in his hands and at his feet with a comprehensive history of movement and transformation over vast stretches of time and space.

On the reverse side of these manuscripts, Frank marshaled a wide range of approximate sums to chart the history of his relations with Florinda and the girls. He sought, once again, to account for what he had given Florinda and

what he should owe her. He outlined the history of his debt over the last fifteen years and accused her of adding to it yearly by overdrawing his account each time he was abroad. (Upside down at the end of the first sheet, but on the same side as the letter, was the following in Frank's handwriting. It was not part of the letter or either article. Yet it is probable that in writing, Frank recognized it as a comment on a state of mind—or of the heart:

Something had happened to the air. Some alembic added to it or maybe some terran vapour purged from it. Or the invisible air currents had changed their course. Either there had been an injection of hot air that had absorbed the water vapour into itself as a thirsty dog laps up water, or of dry air which had licked it up in much the same way. Or perhaps nothing had happened except that during the last week all the water vapour had been squeezed out of the air as you squeeze out a sponge leaving it dry and harsh to the touch.)

At the letter's center, he took up the girls' future inheritance. He supposed that Florinda aimed to give each of them one of her houses, Hatton Gore and Cleve Court, and split her London apartment between them. This, he suggested, was unwise. The idea of leaving them so much had already "disrupted a family, aged us both, made everything difficult uncomfortable and insecure." With an income of £150 per year, or a capital sum of about £1500 each, they would be fine—safe from starvation. It would be no great kindness to leave them more; it would merely rob them of the initiative to do something of consequence in the world. "In the coming state, people won't be allowed to leave money to their children—and won't want to." As for himself, he had a plan to leave them an inheritance far more valuable than money:

When I speak of a regard to their future, I mean their education, and holidays, up to the age of 21. I want to take them to Switzerland and tell them about glaciers, the ice age, mountains, fossils, flowers, movements of floras. My gold medals are earmarked for that famous holiday to be.

He had found a way to wrap the "little extra" of love back into the reading practice that had been his central preoccupation all these years. The girls' inheritance would be this entire practice—"glaciers, the ice age, mountains, fossils, flowers, movements of floras"—condensed into a holiday trip funded by the only "little extra" he possessed, those gold medals. [55]

5.

For the rest of their lives, the gold medals were the center around which all the numbers that narrated the history and future of their domestic relations clustered and revolved. By 1938, Frank had been awarded four medals: from the Royal Horticultural Society for contributions to horticulture (in 1932), the Massachusetts Horticultural Society (1934), the Royal Horticultural Society, again, for contributions to geography (1934), and the Scottish Royal Geographic Society (1936). In 1939, he was awarded a fifth, from the Royal Geographic Society. At the time of the divorce, the medals were at Cleve Court. In July that year, he had asked Florinda to give them to his bank to cover for his loan. She refused; the loan was canceled, and he sold his only other assets,

some securities, to pay it off. [56] Shortly before setting off for Mönyul, he wrote out a will, leaving all his property, including specifically the medals, in a trust for the girls' education. [57] Three months later, he wrote his solicitors from Dirang Dzong, asking them to secure the medals' return. [58] Her own solicitors insisted on her keeping them, they replied, until a satisfactory alimony settlement was reached. [59] In December 1940, in London under the bombing, he made a final agreement to pay Florinda alimony, contingent upon return of the medals, "which are as 'battle honours' to me." Florinda did not return them, and his solicitors declined to press her further, consoling him that she was unlikely to sell them, and perhaps he could get them back himself. In 1949, in India, he married Jean Macklin, with whom he immediately embarked upon an expedition to northwest Burma. He revised his will to leave £50 to each of his daughters, £150 to Winifred, and the rest to Jean. Some time before, he had written Florinda asking her to give the three medals awarded for geography to Pleione and Martha. Now, he wrote again, in a bumbling attempt at subtlety:

I have no doubt that Pleione and Martha will be very glad to show [Jean] the geographical medals when we return to England. Luckily, Jean is more of a botanist than a geographer, so I have promised her the two horticultural medals. . . . I should like her to have these right away, and it would be a good plan if you gave them to the manager of her bank to be kept in safe custody. [60]

Florinda had answered all his previous demands for the medals with silence. This time, she reminded him that long ago he had given the medals to her.

You wrote, 'I cannot insure my life for you, darling, but there will be a reserve for you if times get very difficult.' Well, they did get very difficult, but I did not use that reserve. . . . Now you would like to take two back and give them to Jean. My dear, those medals date from a time when Jean was a nice child a year or two older than your children but unknown to you.

He had refused to give up a trusteeship in her estate, costing her, she claimed, £250 a year. As a parting shot, she wrote, "Even as a matter of arithmetic, you must feel that a time when you are costing us so much is not a good one to ask me to part with any asset." [61]

Frank believed that the medals had an approximate monetary value of £200. All of the uses he and Florinda dreamed up for them depended upon this value—they both made it clear that they saw them as a monetary asset. Money was the master organizing agent through which the couple wrote out all the varied narratives of love, failed love, obligation, and failed obligation that tied them together, and the gold medals were the most concrete possible form of this abstraction. Yet their power to condense memories of domestic stability (for Florinda) and dreams of future continuity (for Frank) depended upon their never being converted to cash and spent. They were "inalienable possessions" of the kind Annette Weiner described. Such possessions, Weiner argued, have the capacity to condense and preserve histories, secure permanence and stability in the face of loss and decay, and grant substance and continuity to the selves and social groups to which they belong. They serve as a ground for exchange:

they are the "spirit" of the gift—the desire to gain and keep them from the pressures of give and take is the motivating core of reciprocity. [62]

It helped, of course, that they were gold. The functions of security and insurance Frank had imagined them performing were analogous to the functions the deposits of gold in the vaults of the Bank of England had performed under the gold standard (abandoned for the second and final time in 1931, a few months before Frank was awarded his first medal): a "store of wealth" that stabilized circulating currencies by serving to guarantee their worth. [63] As security for Frank's debts, insurance on his life, or the inheritance for his daughters, they were, like the national gold, the stabilizing substance that guaranteed the value of the currencies of exchange, balancing the relation between present possession and future uncertainty. [64] As an imperial certification of his horticultural and geographical contributions—his practice of reading—they harked back to the freedom of movement through a transparent world the gold standard had once guaranteed British citizens. [65] This transparency had underlain the great archival projects of empire: the gold standard had provided the infrastructure for the worldwide networks through which facts for the imperial archives were gathered. Frank's geographical sense was predicated upon an analogous sense of transparency. Beginning with seeds in one's hands and the fissures at one's feet and aided by a free flow of facts through the archival networks, the eye could trace the movements of flora down the length of Asia, eventually taking in the whole of the global "Rhododendron whirlpool." [66] The gold of Frank's medals centered and stabilized the global freedom of his geographical vision in the imperial archive at the moment in history when the alliance of capitalism, empire, and knowledge upon which the myth of this archive had been founded was falling apart. [67]

Gold and geography were thus gradually transformed into the substance of love. Love had been that "little extra" that it had always been Frank's place to give: a shilling for a stamp collection, a few pounds for music lessons, some flower petals folded in the pages of a letter. The gold medals had begun as a "little extra" of this kind, always kept apart from the calculations that defined Frank's relations with Florinda. If Florinda was to provide for the girls' future worldly needs with houses and bank accounts, Frank would contribute the medals for their education in the same way he had always done. At the same time, the "little extra" became, like a glacier, a "stabilizing key factor": insurance on Frank's life and security for his debts, his only inalienable possession, they were the organizing center of the entire field of approximate calculations of assets, debts, income, and obligation through which love was produced. For Frank, the solution that would manifest his love and discharge his patrimonial obligations was to give the girls the history of his practice of reading, of an intimate engagement that made the landscape visible, legible, and unified, in that holiday on a Swiss mountaintop, or, failing that, by persuading Florinda to hand the geographical medals over to them. The intimacies of the earth and of love were to be unified in this "little extra" transformed into an inalienable possession, reworked into a mode of finding a place for one's eyes and fingers in a vast, hypothetical realm of movement and evolution.

Of course it was not to be. In 1952, at the age of twenty-four, Martha stumbled upon one of Frank's letters to her mother. Another bitter letter: they were working out a new agreement for alimony. As he assigned new numbers to this old quarrel, Frank had apparently narrated Florinda's life as a succession of failures. [68] Martha's reply, in defense of her mother, was withering testimony to Frank's own failure:

... so many people from all walks of life ... love her with a devotion that must (I suppose) be quite astonishing to those for whom love is a closed book. Success isn't always valued materially—there must be a place for love, too. [69]

According to Pleione, Martha refused to speak to her father from about that time until his death in 1958. There would be no vacation in Switzerland for Frank and the girls: Pleione went with her mother, instead, for a social holiday. And forty-four years later, Pleione had no recollection of ever setting her eyes upon any of the medals.

6.

How does one read an archive? How does one read a region, a landscape? Not merely as products, of course, no matter how complex or sedimented. But also as processes of production that organize modes of engagement with the world, natural and social. For Ward, the principles of documentary production, writing, revising, and reading, were technologies with which he learned to see the world of things, to find a mode of presence to it, to establish and broach his distance from it, and in all these ways to make of it the substance of his sense of self in relation to others. Writing and revising were attuned to screening out social engagement with the inhabitants of this landscape, on the one hand, and to framing it as a lantern-slide show for a British popular audience, on the other: they were means of regulating perceptions to accord with the emphatic ideological requirements cemented into European colonizing processes. The practice of reading that I have been examining here was an effort to reach through and behind these ideological framings to a more intimate mode of engagement. Ward's notes about tracing the fissures in rocks or following sandstone deposits across a plateau are evidence that this intimacy offered a deep and happy sense of involvement with the inhuman being of this landscape; his efforts to fold bits of it into letters to his daughters in the form of seeds and petals were attempts to ground his relations with them in this same sense. To read was to insert these modes of engagement into speculative historical narratives: the organizing principles of glaciation and love were the keys that were to make such narratives finally legible. The end effect cannot be described as legibility, however. It was something more interesting: an encounter between realms of intimacy that we usually understand as separate, of the senses and the earth, of love and obligation.

The description of writing, revising, and reading as distinct processes is a heuristic product of my own reading: my aim is (borrowing Benjamin's metaphor again) to blast material practices out of the contexts in which they have become sedimented through documentary production in order to gain glimpses of particular encounters with the world of things—still the most

mysterious of social worlds to us. Tracing this one thin, scattered stratum of the vast documentary archive that is interleaved with the landscape of northern Yunnan and southeast Tibet, I have learned to swap reading practices with my fallible guide. In some ways, I have learned to read his reading as having attained what I seek in mine: ways to link these material particulars—his weathered inscriptions, my steel-nib pens and scraps of paper—into natural and social histories of engagement and affect. [70]

NOTES

- **1.** Quoted as an epigraph to Jean-Luc Nancy, *Being Singular-Plural* (Stanford: Stanford University Press, 2000).
- **2.** One excellent demonstration is Hugh Raffles, *In Amazonia: a Natural History* (Princeton: Princeton University Press, 2002).
- **3.** For a suggestive account of this documentary production of empire, see Thomas Richards, *The Imperial Archive: Knowledge and the Fantasy of Empire* (London: Verso, 1993). On distinguishing imperial from colonial situations, see Engseng Ho, "Empire through Diasporic Eyes: a View from the Other Boat," *Comparative Studies in Society and History*, 46(2) (2004), 210-46.
- **4.** Walter Benjamin, "Eduard Fuchs, Collector and Historian," in *Walter Benjamin: Selected Writings, volume 3, 1935-1938*, ed. Michael Jennings (Cambridge, MA: Harvard University Press, 2002), 262.
- **5.** For an annotated bibliography of Kingdon-Ward's published writing, see Ulrich Schweinfurth and Heidrun Schweinfurth-Marby, *Exploration in the Eastern Himalayas and the River Gorge Country of Southeastern Tibet:* Francis (Frank) Kingdon Ward (1895-1958) (Wiesbaden: Steiner, 1975).
- **6.** Benjamin, 262.
- **7.** Timothy Mitchell, *Colonizing Egypt* (Cambridge, UK: Cambridge University Press, 1998).
- **8.** Webb Keane, *Between Freedom and Fetish: Converting to Christian Modernity* (Berkeley: University of California Press, Forthcoming 2006).
- **9.** Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1990).
- **10.** Erik Mueggler, "The Lapponicum Sea: Matter, Sense, and Affect in the Botanical Exploration of Southwest China," *Comparative Studies in Society and History*, 47(3) (2005), 442-79.
- **11.** See Stanley Cavell, *The World Viewed* (Cambridge, MA: Harvard University Press, 1979), 23.

- **12.** Mitchell; Derek Gregory, *Geographical Imaginations* (Cambridge, MA: Blackwell, 1994).
- 13. Some of Ward's competitors in this region, especially George Forrest (1873-1932) and Joseph Rock (1884-1962) strove to enfold this earthly exuberance within the photographic frame with panoramas and other techniques, but Ward, who had made the lantern slide show such a central structuring feature of his prose, made little recourse to such devices.
- 14. Mueggler, "The Lapponicum Sea."
- **15.** Francis Kingdon-Ward, *The Land of the Blue Poppy* (Cambridge, UK: Cambridge University Press, 1913), 77, 102, 78.
- **16.** Francis Kingdon-Ward, *Blue Poppy*, 103.
- 17. Francis Kingdon-Ward, Blue Poppy, 94, 94, 102.
- **18.** Francis Kingdon-Ward, diary, April 1, 1924. Royal Botanic Garden (henceforth RBG), Kew.
- **19.** On writing as establishing a sense of presence to the world, see Stanley Cavell, *The Senses of Walden* (New York: Viking Press, 1972).
- 20. Francis Kingdon-Ward, diary, March 24, 1924.
- **21.** Francis Kingdon-Ward, "Glacial Phenomena on the Yun-Nan-Tibet Frontier," *Geographical Journal* 48(1) (1916), 55-65.
- **22.** Francis Kingdon-Ward, "The Glaciation of Chinese Tibet," *Geographical Journal* 59(5) (1922), 363-69.
- 23. Francis Kingdon-Ward, diary, June 26, 1924.
- **24.** Francis Kingdon-Ward, diary, June 26, 1924.
- **25.** Francis Kingdon-Ward, "Observations on the Classification of the Genus Rhododendron," *Rhododendron Year Book*, vol 2(London: Royal Horticultural Society, 1947), 99-114.
- **26.** Jonathan Crary, Suspensions of Perception: Attention, Spectacle, and Modern Culture (Cambridge: MIT Press, 2001), 22, 45.
- **27.** See Johannes Fabian, *Out of Our Minds: Reason and Madness in the Exploration of Central Africa* (Berkeley: University of California Press, 2000)and Mitchell, *Colonizing Egypt*.
- **28.** Kingdon-Ward described this trip in *From China to Hkamti Long* (London: Edward Arnold and Co., 1924).

- **29.** Interview with Pleione Kingdon-Ward Tooley, October 31, 2002.
- **30.** Florinda Norman-Thompson to Frank Ward, January 22, 1922, RBG, Kew. This letter was found in a box with Ward's diaries, donated to Kew by Martha Kingdon Ward. He had apparently kept it separate from the other correspondence with Florinda, most of which had to do with their divorce. Most of the letter appears (sometimes misquoted) in Charles Lyte, *Frank Kingdon-Ward, the Last of the Great Plant Hunters* (London: John Murray, 1989). (Martha, given her father's hyphenated name at birth, dropped the hyphen to become Martha Kingdon Ward as her career as a pianist and composer took shape. Pleione kept the hyphen, becoming Pleione Kingdon-Ward Tooley after her marriage.)
- **31.** Interview with Oliver Tooley, October 31, 2002. Oliver Tooley is Pleione Kingdon-Ward Tooley's son.
- **32.** Winifred Kingdon-Ward, "The Flower Chief," unpublished ms., RBG, Kew, 101. (Winifred eventually adopted her brother's affectation and hyphenated her name.)
- **33.** Interview with Pleione Tooley, October 31, 2002, Kew.
- **34.** Winifred Kingdon-Ward, "The Flower Chief," 98.
- **35.** Interview with Pleione Tooley, October 31, 2002; Lyte, *Frank Kingdon-Ward*, 116.
- **36.** Letters, Martha Kingdon Ward to Frank Kingdon-Ward, 1938 [no month or day], June 2, 1940, December 1940 [no day], March 13 [no year], all at RBG, Kew; Interview with Pleione Tooley, October 31, 2002, Kew.
- **37.** Interview with Pleione Tooley, October 31, 2002, Kew; Lyte, *Frank Kingdon-Ward*.
- **38.** Draft letter, Frank Kingdon-Ward to Florinda Kingdon-Ward, undated (circa May 28, 1938), RBG, Kew.
- **39.** Draft letter, Frank Kingdon-Ward to Florinda Kingdon-Ward, undated (circa May 28, 1938), RBG, Kew.
- **40.** Winifred Kingdon-Ward, "The Flower Chief," 78; Frank Kingdon-Ward to Isaac Bailey Balfour, January 6, 1921, RBG, Edinburgh; Draft letter, Frank Kingdon-Ward to Florinda Kingdon-Ward, undated (circa May 28,1938), RBG, Kew.
- **41.** Frank Kingdon-Ward to Francis and Co, November 9, 1938; Draft letter, Frank Kingdon-Ward to Florinda Kingdon-Ward, undated (circa May 28, 1938), both at RBG, Kew.
- **42.** Florinda Kingdon-Ward to Frank Kingdon-Ward, April 7, 1938, RBG, Kew.

- **43.** Draft letter, Frank Kingdon-Ward to Florinda Kingdon-Ward, undated (circa May 28, 1938), RBG, Kew.
- **44.** Divorce petition of Florinda Kingdon-Ward to the High Court of Justice, Probate Divorce and Admiralty Division (Divorce), January 15, 1937, RBG, Kew.
- **45.** Frank Kingdon-Ward to Winifred Kingdon-Ward, February 1937, quoted in Lyte, *Frank Kingdon-Ward*.
- **46.** Florinda Kingdon-Ward to Frank Kingdon-Ward, October 16, 1949, RBG, Kew.
- **47.** Martha Kingdon Ward to Frank Kingdon-Ward, December 1940, RBG, Kew.
- **48.** Frank Kingdon-Ward to Winifred Kingdon-Ward, July 9, 1943; Frank Kingdon-Ward to Martha Kingdon Ward, September 10, 1944, RBG, Kew. Martha became a professional pianist and composer.
- **49.** Letters, Pleione Kingdon-Ward to Frank Kingdon-Ward, undated, RGB, Kew. Pleione became a schoolteacher and poet.
- **50.** Francis Kingdon-Ward, "Botanical and Geographical Exploration in the Assam Himalaya." *Geographical Journal*, 96 (1940), 1-13; Francis Kingdon-Ward, "Exploration in the Eastern Himalaya," *Journal of the Royal Central Asian Society*, 27 (1940), 211-19; Francis Kingdon-Ward, "Through Assam to Mönyul," *Geographical Magazine*, 12 (1941), 168-81.
- **51.** Francis Kingdon-Ward, "Six Months in Mönyul," *Journal of the Royal Horticultural Society (Great Britain)*, 69, 267-72, 305-07; Frank Kingdon-Ward to Winifred Kingdon-Ward, May 1938, RBG, Kew.
- **52.** Florinda's letter of May 6, 1938 has not been preserved. This is unusual: Ward was ordinarily meticulous about his correspondence.
- **53.** Reverse side of draft letter, Frank Kingdon-Ward to Florinda Kingdon-Ward, undated (circa May 28, 1938), RBG, Kew.
- **54.** Francis Kingdon-Ward, "Observations on the Classification of the *Genus Rhododendron*," *Rhododendron Year Book*, vol 2 (1947), 99-114. A.J. Willis,
- **55.** Draft letter, Frank Kingdon-Ward to Florinda Kingdon-Ward, undated (circa May 28, 1938), RBG, Kew.
- 56. Frank Kingdon-Ward to Francis and Co, November 9, 1938, RGB, Kew.
- **57.** Codicil to will of Francis Kingdon-Ward, April, 1938, RBG, Kew.
- **58.** Frank Kingdon-Ward to Francis and Co., July 31, 1938, RBG, Kew.

- **59.** Francis and Co. to Frank Kingdon-Ward, 1938, RBG, Kew.
- **60.** Frank Kingdon-Ward to Florinda Kingdon-Ward, September 23, 1949, RBG, Kew.
- **61.** Florinda Kingdon-Ward to Frank Kingdon-Ward, October 16, 1949, RBG, Kew.
- **62.** Annette Weiner, *Inalienable Possession: the Paradox of Keeping-While-Giving*, (Berkeley: University of California Press, 1992).
- **63.** For a summary of the "gold standard mentality" in Britain and internationally in the 1920s and 1930s, see Barry Eichengreen and Peter Temin, "The Gold Standard and the Great Depression," *Contemporary European History,* I, no. 2 (2002), 183-207. On the international role of the gold standard, see Herbert Feis, *Europe: The World's Banker* (New Haven: Yale University Press, 1930); and Michael Edelstein, *Overseas Investment in the Age of High Imperialism* (New York: Columbia University Press, 1982).
- **64.** See George Constantine Caffentzis, *Clipped Coins*, *Abused Words*, and *Civil Government: John Locke's Philosophy of Money* (New York: Autonomedia, 1989), 89-91.
- **65.** Eichengreen and Temin.
- **66.** The phrase is from Francis Kingdon-Ward, *Rhododendrons for Everyone* (London: The Gardener's Chronicle, Ltd., 1926).
- **67.** See Richards, *The Imperial Archive*, 32.
- 68. Frank Kingdon-Ward to Francis and Co., undated (circa 1952). RBG, Kew.
- **69.** Martha Kingdon Ward to Frank Kingdon-Ward, June 16, 1952, RGB Kew.
- **70.** This formulation is influenced by Raffles, *In Amazonia*.