

The Dream of Lhasa

The Life of Nikolay Przhevalsky (1839-88)
Explorer of Central Asia

DONALD RAYFIELD

. . . Whose house I have made the wilderness
and the barren land his dwellings.

He scorneth the multitude of the city,
neither regardeth he the crying of the driver.

The range of the mountains is his pasture,
and he searcheth after every green thing.

JOB 39.6-8



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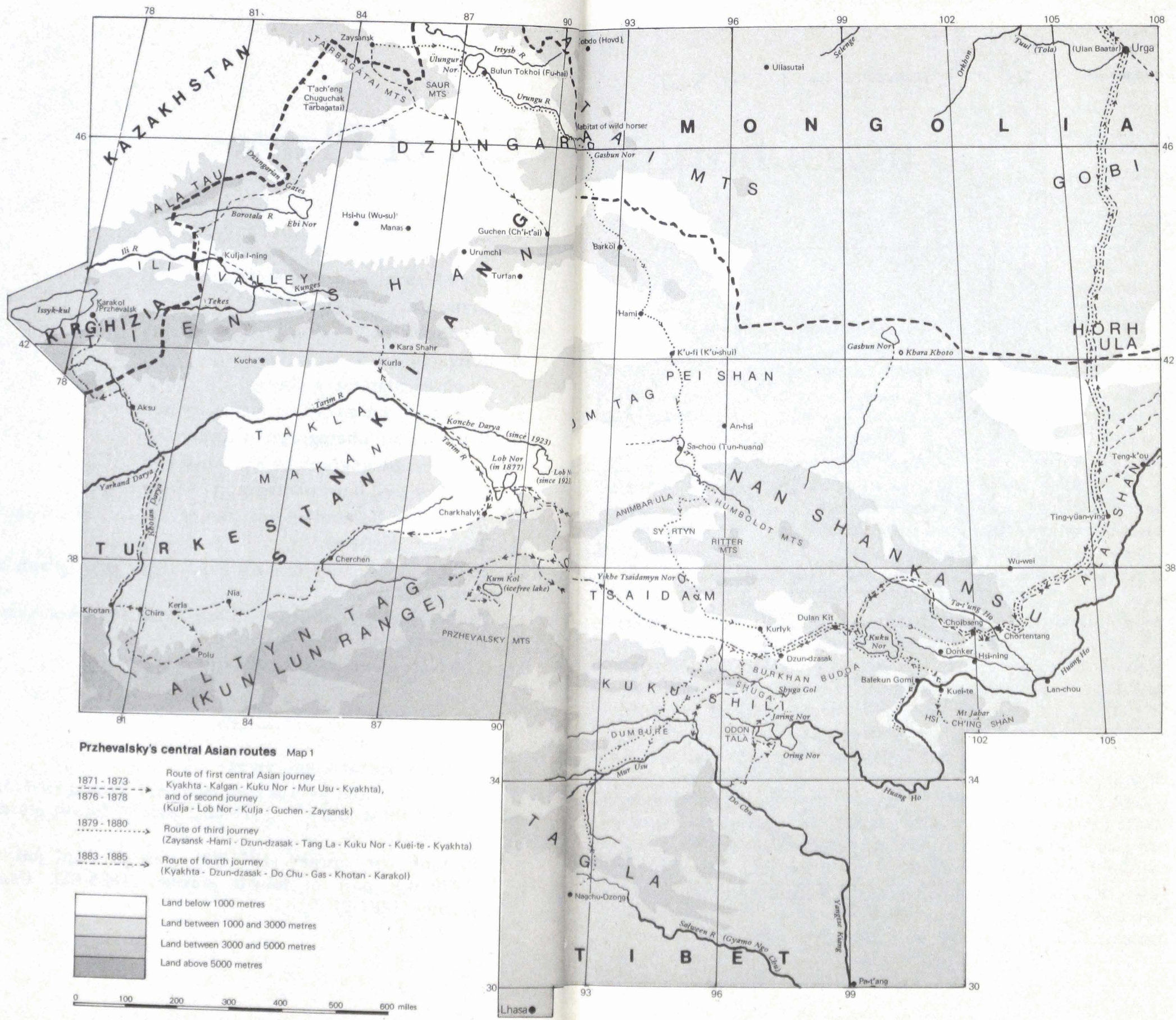
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
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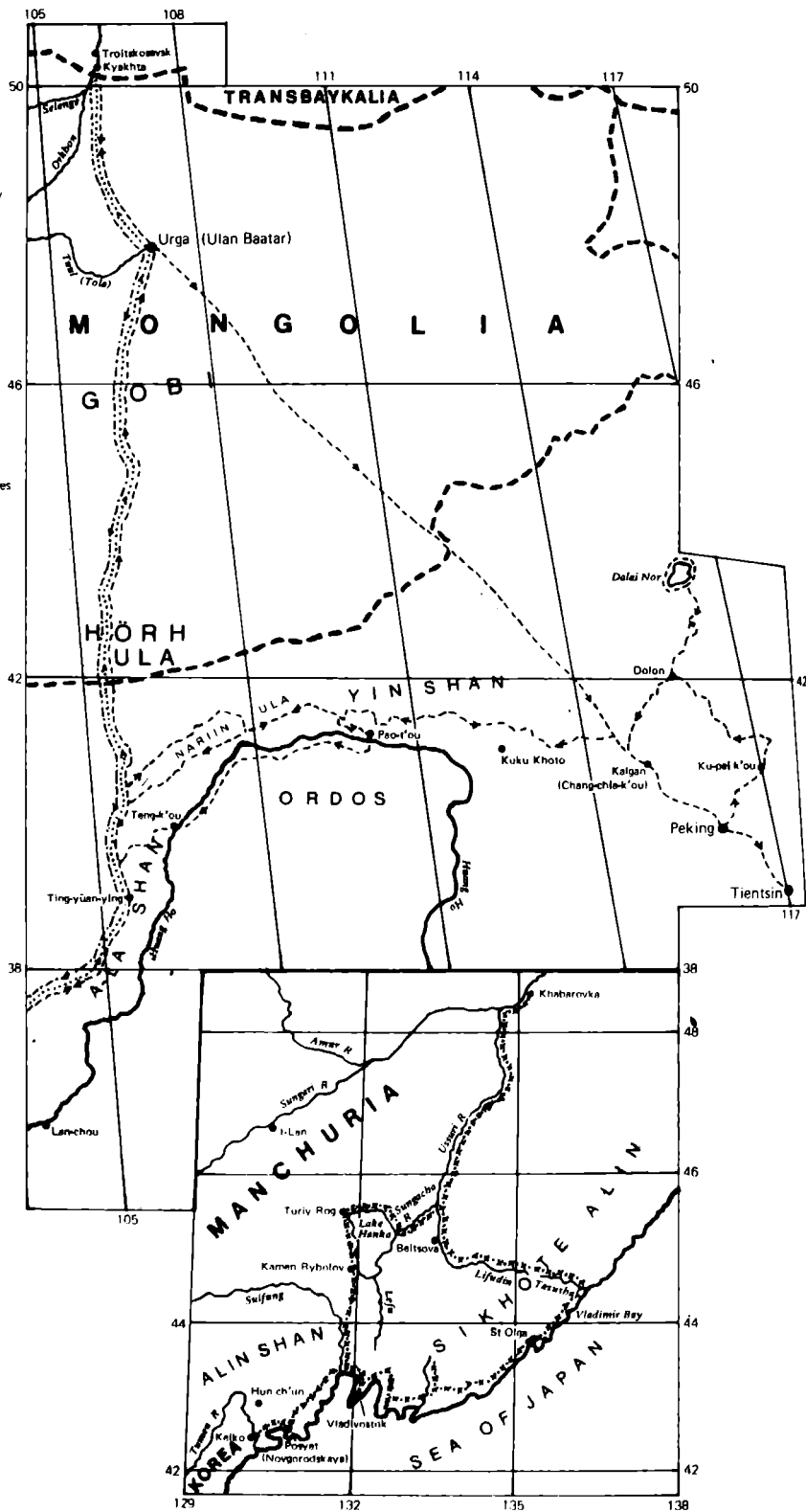
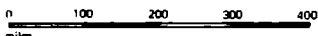
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Przhevalsky's central Asian routes
Map 2

- 1871 - 1873 Route of first central Asian journey
 (Kyakhta - Kalgan - Kuku Nor -
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- 1879 - 1890 Route of third journey
 (Zaysanok - Hemi - Dzun-dzasak -
 Tang La - Kuku Nor - Kuei-te -
 Kyakhta)
- 1883 - 1885 Route of fourth journey
 (Kyakhta - Dzun-dzasak - Do Chu -
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- 1867 - 1868 Route of Ussuri journey


 Land below 1000 metres
 Land between 1000 and 3000 metres



Introduction

He was Captain, Colonel or General Prejevalsky to the English reader of his gripping accounts of travels in Central Asia in the 1870s. He is Przewalski (the Polish form of his name) to the visitor to the London Zoo who looks at the wild horse, *Equus przewalskii*, that he discovered in Dzungaria. But we ought to spell his name in a form more like the Russian — Przhevalsky — and to pronounce it something like *Purr-zhe-val-skee*, the stress coming on *val*, and *zh* sounding like the *s* in *leisure*.

No matter how we spell his name, Nikolay Przhevalsky was one of the most remarkable men born in Russia in the nineteenth century. He was an explorer and adventurer as single-minded as Livingstone. As a zoologist and botanist he was so productive that his collections are still being analysed. As a geographer he mapped an unknown area of western China, Mongolia and Tibet even larger and more hostile than the 'black heart' of Africa. He personified the thrust of Russia's empire in Asia with the vigour of a conquistador. His four expeditions made an indelible contribution not just to our atlases and our knowledge of a vast expanse of Central Asia, but to the rivalries and tensions of the area.

Przhevalsky's image in history and science is heroic, but his personality is enigmatic. A man of ruthless determination and of shy tenderness, an apostle of European superiority who loathed European society, an explorer of China who despised the Chinese, a big-game hunter on an epic scale who mourned the death of his dogs, a major-general who disliked the army, a materialist and a Byronic Romantic, he had the paradoxical temperament and universality of genius. He has intrigued

writers as different as Chekhov and Nabokov. He has had many Russian biographers; I am the first English biographer.

The bibliography at the end of this book will show much of my indebtedness. My research was greatly assisted by a grant of £150 from the Sir Edward Cassel Educational Trust. I also owe a great deal to the Overseas Missionary Fellowship, to the librarians of the Royal Geographical Society in London and the Geograficheskoye Obshchestvo of Leningrad (especially to its archivist Tamara Matveyeva). I ought to express my gratitude to the Leningrad O.V.I.R. for organizing permission to drive to Przhevalsky's estate north of Smolensk; I wish I could say the same of the Mongolian Ministry of Foreign Affairs, without whose help this book had to be written.

No expert will find my system of transliteration entirely satisfactory. Russian names are given in the usual 'British' system; Chinese names are given according to the Giles-Wade system. In many cases the Mongol, Tibetan or Turkic names of towns and places which Przhevalsky used in western China are also given, in the spelling that is most familiar to English readers. Where the Chinese name is merely a rendering of the Turkic or Mongol, I have used the Turkic or Mongol place-name.

During the nineteenth century the Russian calendar lagged twelve days behind the rest of the world; accordingly, except in quotations, both Russian and international dates are placed together, e.g. 1/13 April 1839.

The following short glossary may help readers to cope with Central Asian place-names:

<i>English</i>	<i>Chinese</i>	<i>Mongol</i>	<i>Tibetan</i>	<i>Turkic/ Iranian</i>
lake	hai, hu	nor, nur	tso	kol, kul
mountain(s)	shan	ul(a)	la	tag, tau
river	ho	gol, müren, usu	chu	su, darya
town	k'ou	khoto	dzong	shahr

1

The Making of an Explorer

*The strongest man is he
who stands alone.*

IBSEN

In the latter half of the sixteenth century Karnila Parovalsky, one of the famous Zaporozhye Cossacks, entered the service of the Polish king, changed his surname to a Polish form, Przewalski, and was granted five villages in what is now the Russian province of Smolensk and was then the eastern outposts of the Polish empire. In the Przhevalsky family Cossack blood, with its resilience and roughness, now mingled with the blood of Polish nobility.

At the end of the eighteenth century Poland contracted and Russia expanded. The Przhevalsky estates were now Russian. Przhevalsky's grandfather, Kazimir, switched his national allegiance as a boy. He absconded from the Jesuit school in the town of Polotsk, russified his name to Kuzma Fomich, and was registered among the Russian nobility. His brother Franz became a major in the Russian army.

But the Przhevalsky family, though it had found its roots again, did not prosper. Kuzma had no estates of his own; he was a manager for a landowner near Smolensk. He must have been a disappointed man, for he did not live to see his grandsons; and his son Mikhail, Przhevalsky's father, was an unfortunate figure. He started off as a Junker—an officer cadet—in 1817 and served in the army for fourteen years. While fighting in the campaign of 1831 to crush the Polish

rebellion against Russian rule, Mikhail fell ill. Never strong, he was now triply afflicted: a cataract clouded his eyes; his cough turned into tuberculosis; and in Poland he caught *plica polonica*, a scalp infection which matted his hair and forced him constantly to wear a bonnet.

Weighed down by illness, pensioned off in 1835 at the age of thirty-two, Mikhail went home to stay with his father, Kuzma. He was a sensitive man, he knew that his condition was incurable, and he was destitute. Not far from the estate which Kuzma managed lay the village of Kimborovo. Kimborovo belonged to Aleksey Karetnikov, who had three daughters; the youngest, Yelena, was still unmarried. Mikhail Przhevalsky set his sights on Yelena and did not give up until, three years later, he married her.

The Karetnikovs were everything that the Przhevalskys were not. The Przhevalsky family was in decline, the Karetnikov family was rising. Aleksey Karetnikov was born an ordinary household serf. He went to St Petersburg to serve in the Tsar's suite, and in 1809 he was granted a St Petersburg post as a customs official. By promotion he escaped serfdom and became a member of the landowning gentry, a *dvoryanin*. He was a big, handsome man, affable and much liked. During his career he amassed enough money to buy three houses in St Petersburg. He made a good marriage and had four sons and three daughters. All his sons were educated at commercial schools and his daughters were sent to a *pension*.

But not everything went as Aleksey Karetnikov planned. He himself was very punctual, worked hard and went to bed at eight o'clock every night. His only eccentric indulgence was to keep one room of his house full of nightingales and goldfinches and another full of Barbary apes. But his sons, despite their business education, were getting into bad ways and running up gambling debts. So, in the early 1830s, Aleksey Karetnikov sold two of his three houses and with the money bought an estate of 3,000 acres 25 miles south-east of Smolensk. He was now the owner of a modest gentleman's estate with 160 male serfs and their families to rule over.

The move to the country came too late to save his sons from their reckless and dissolute habits. But his daughters were

doing well. The eldest, Yelizaveta, married Colonel, later General, Zavadovsky; the second, Aleksandra, married a Lieutenant-Captain Potyomkin. He must have had high hopes of a suitable match for Yelena when, to his dismay, Mikhail Przhevalsky presented himself as a suitor.

When it became clear that this gangly, pallid, ugly man, with eyes glazed and head always covered, was interested in Yelena, Aleksey Karetnikov told him he was no longer welcome. But Mikhail persisted, and Yelena must have encouraged him. By now, 1837, she was twenty-one. She was a woman of exceptionally strong will, clever and good-looking. She wanted independence, and Mikhail Przhevalsky was the man to take her away from Aleksey Karetnikov and his menagerie.

In the end Aleksey Karetnikov gave way, and in 1838 Mikhail Przhevalsky married Yelena. But Karetnikov never overcame his dislike of his son-in-law and the newly-married couple had, at first, a rough time. The first year they were hardly better off than peasants. Then, on 31 March/12 April 1839 (as Mikhail himself believed), or on 1/13 April (as the Smolensk Consistory records), a son was born, Nikolay Mikhaylovich Przhevalsky. Aleksey Karetnikov consented to be godfather and was sufficiently reconciled to the marriage of Yelena and Mikhail to give them two villages; they were now provided with a small income, plenty of produce and a cabin in the forest in which to live.

In May 1840 a second son, Vladimir, was born. Then Yelena's sister Yelizaveta died and in her will left Yelena 2,500 roubles. It was enough to build a proper house, called Otradnoye (Joyful), about a mile from Kimborovo and to enable them to settle down. But Nikolay and Vladimir had an odd childhood, free, almost savage. Otradnoye was in unspoilt country; wild boar hunted crabs in the marshes, bears came down to feed on the raspberries and oats. The brothers spent the summer days in the woods, cut off from human contact. Yet it was a strangely matriarchal life. Nikolay Przhevalsky hardly remembered his father: 'I have heard that he was a practical man' was all he could find to say in the autobiographical sketch he dictated in 1881. The family and estate

were run by Yelena, with the help of the boys' nurse, Olga Makaryevna.

Olga Makaryevna was as formidable as Yelena. She had started as a lady's maid, but in this small household her ruthless efficiency had made her the housekeeper, the nurse, almost the co-mistress. She was a short, stout spinster, with a masculine brow, tiny penetrating eyes, and an equine face. She tyrannized the servants and kept the peasant women, when they were not in the fields, working hard weaving poplin. But Olga Makaryevna was passionately fond of Nikolay and Vladimir and, in return, Nikolay Przhevalsky adored her all his life. She read him fairy stories about Ivan the great hunter, she fed him apples, she beat him with birch twigs. Nikolay Przhevalsky never felt a greater attachment to any woman. These two strong-willed women were allies; their formative influence on Przhevalsky—on his attitude to peasants, to morality, to discipline, for instance—was irreversible.

With time, life at Otradnoye became easier. In April 1842 Aleksey Karetnikov died; his will divided the estate between his widow and his surviving children. Yelena, who was a hard-headed woman, acted quickly. She mortgaged Otradnoye and with the money bought up her mother's and her brother Aleksandr Karetnikov's shares of Kimborovo. She could not persuade the other brothers, Gavriil and Pavel to sell, but she was now the owner of a substantial part of the Kimborovo estate.

Gavriil and Pavel did not prosper long. They left their share of the estate in the hands of managers, while they continued to live and spend freely in St Petersburg. In a year or two they were ruined. A neighbouring landowner, Povalo-Shvykovsky—a name which is to recur in Przhevalsky's life—bought the Karetnikov brothers out for virtually nothing, with a covenant to maintain them at his expense until their deaths. Povalo-Shvykovsky did not keep his covenant; Gavriil and Pavel became homeless paupers. Pavel Karetnikov, however, eventually found shelter with the Przhevskys as a tutor to the two boys.

Pavel was as weak as his sister Yelena was strong. He could no longer gamble, but he still drank and he still had pride. He

was an educated man and he knew his field sports. With Yelena's help he taught the Przhevsky boys to read and write. Above all, he taught them to shoot, to love hunting and at the same time to love the animals they were shooting.

Though they drifted apart later, Nikolay and Vladimir were fond of each other. Their boyhood had its stormy moments. One day, Vladimir found his elder brother staring down a well. 'Climb down it,' Nikolay Przhevsky ordered, fixing him with a steely gaze. Vladimir refused, whereupon Nikolay picked him up bodily, flung him over the edge and walked away. A passing peasant rescued Vladimir, miraculously unhurt, and took him home. Yelena thrashed Nikolay for this wilful brutality. But they grew up and were taught together under Pavel Karetnikov's tutelage; both were addicted all their lives to shooting game, everything that moved, from sparrows to bears. It was, as Przhevsky later said, 'the most spartan education'. There were hardly any books in the house—though later Yelena ordered books about travel, for she wanted her sons to be successful. The household had few contacts among the neighbouring gentry; the Przhevsky boys played with the servants' children.

In 1843 the Przhevskys had another son, Yevgeni. All three boys had much of their mother's character in common. They inherited her determination and pedagogical talent. All reached the top of their professions: Nikolay became one of the world's great explorers, Vladimir was one of Moscow's best jurists, and Yevgeni became notorious to every Russian school-boy as the author of a set of five-figure logarithm tables. All three were extraordinarily good at teaching and explaining their expertise to others.

In December 1846, Mikhail, whose hold on life had so long been tenuous, died. Yelena was determined to have her sons educated at cadet college for a safe career in the mighty and still prestigious army. But this needed greater resources and far better standing than she possessed. In the end she had to make do with the *gimnaziya* (grammar school) in Smolensk, at least for Nikolay and Vladimir.

It was not until the middle of November that the Smolensk *gimnaziya* opened for the year 1849. Makaryevna's younger

sister, Anna, was to keep house for them in Smolensk; the serf Ignat, the father of one of their playmates, was given the task of carrying their books to school and keeping them out of mischief.

The two brothers rented rooms on Armyanskaya (now Sobolev) Street, by the River Dnepr near the city walls, for two-and-a-half roubles a month. Every schoolday they would walk three-quarters of a mile up the hill into the centre of Smolensk to school. Smolensk *gimnaziya*, now the intermediate school No. 7, is a stuccoed neo-classical building in a quiet square. Its teachers and its curriculum were less impressive. Przhevalsky found little to be grateful for. The switch from the freedom of Otradnoye and the justice of Makaryevna to the repressive discipline of school dismayed him.

Nikolay and Vladimir had been so well prepared that they passed into the second form. But academically Nikolay was undistinguished. He loathed the teaching by rote, he despised the apathetic, sometimes drunken, teachers. Latin and mathematics both distressed him. Like his brother Vladimir, he discovered he had a phenomenal gift, which saved him from disaster in examinations—a photographic memory. For many years afterwards, Przhevalsky had only to be told a page number to be able to recite by heart entire pages of a textbook that he had read only once.

Inevitably, Przhevalsky's Smolensk days were unhappy. Winter and spring were drudgery, interspersed with thrashings; the only relief was playing ball games by the Dnepr, catching sparrows with other schoolboys, or rare visits from Yelena who brought some delicacies to eat.

Przhevalsky's real life was lived in the summer. In 1851 Yelena gave him his father's shotgun, with the end of the barrel sawn off to make it usable. Vladimir would borrow a flint rifle from one of the servants and they would go off all day in search of game. They had no money for ammunition and would make bullets out of the lead foil in which Russian tea was wrapped and collect spent shot for re-use. That summer Przhevalsky shot his first fox and burst into the house, blood on his shirt, his prey in his hand, to scare the wits out of Yelena.

The happier his holidays, the worse his schooldays. The crisis came when Przhevalsky's entire form rebelled against its teacher and the boys decided to destroy the form register in which all their attendances and absences were recorded. They drew lots and Przhevalsky was chosen to throw the register in the river. The whole class was incarcerated in the basement until the guilty party confessed. After four days and nights on bread and water Przhevalsky owned up. The school then decided to expel him. Yelena came up from Otradnoye to plead with the authorities. She begged them to commute the expulsion to a flogging. Yelena was planning to remarry, and she was trying to get Yevgeni into cadet college; she could not endure the thought of her eldest son being expelled at such a crucial time. The headmaster gave way; Przhevalsky was publicly flogged and had to be carried home on a stretcher.

While Przhevalsky was at school, in February 1854, Yelena married a Smolensk civil servant, Ivan Tolpygo. She was still, after all, in her thirties and a striking woman. Soon she had a new family: in 1855 a daughter, Alexandra, was born, in 1856 a son, Nikolay—who was later to build the Transcaspian railway to Samarkand—and in 1858 another son, Ippolit, who became a doctor. Yevgeni, meanwhile, was accepted for cadet college.

Przhevalsky got on well, if coolly, with his stepfather. But at school he became increasingly restive. Of the few books he read—crude illustrated stories, the fables of Krylov and the like, which the pedlars hawked about the district—one made a special impression: a didactic story called *The Warrior Without Fear*. By now, the Crimean War was raging and the newspaper reports of the siege of Sevastopol inflamed his patriotic imagination. In May 1855 both he and Vladimir left school for good: Vladimir was going to Moscow University; Nikolay was determined to join the army like his father Mikhail. They spent the summer of 1855 shooting, riding and netting perch with the servant boys. In September Yelena gave them her blessing and, wiping their tears, she, Nikolay and Vladimir set off in their own carriage on the two-hundred mile journey to Moscow. Vladimir enrolled in the university; Nikolay joined the infantry and moved south towards the

front.

But the war against the Turks, the English and the French was virtually over. Though the Russian army had fought bravely, it was demoralized. Corruption and maladministration had undermined its pride and the defeat in the Crimea—the first war the Russian army had lost for well over a century—made men and officers despondent. Tsar Nicholas I was dead and everyone expected, with the accession of the liberally educated and well-intentioned Alexander II, an era of change. Officers listlessly waited for the army to be reorganized; the men were more concerned about the coming liberation of the serfs and the prospects of returning to own the land they tilled.

Przhevalsky was rapidly disabused of his hopes from the army. First impressions always counted most. Smolensk had given him a permanent aversion to cities and to schools. His first weeks in the infantry reserve, marching south eighteen miles a day to his post at the little town of Belev for training, living in filth, eating cabbage soup that tasted of slops, obliterated all his visions of military glory. His innate puritanism reacted against the drinking and gambling that relieved the boredom of his fellow trainee officers. Sending his mother some of the famous sweet dough of Kaluga, he wrote in December 1855: 'There are about sixty of us, but most of them are good-for-nothings, drunks, gamblers. When I see myself with such comrades, I can't help remembering the words "I'll be a diamond but in a pile of dung".' The officer cadets were largely ignored by their officers, except to be persuaded to join in the drinking. Przhevalsky was too poor and too horrified by drunkenness to take part. He felt he could not belong. His officers declared that he was 'not one of us, but just among us'.

Przhevalsky went home to his new family—stepfather and half-sister—for the New Year of 1856. On his return to the infantry he was posted to the Belev Regiment, and now that there was a prospect of fighting the British in Finland, he suddenly became enthusiastic. Letters to his mother are full of military topics of all sorts, right down to the design of the new rifles. But peace was finally concluded and instead of action Przhevalsky was condemned to an idle, pointless existence,

stationed in the little town of Kozlov. The only excitement came from the regiment's tradition of foraging. To feed themselves the officers and their servants confiscated grain and killed livestock. Half amused, half shocked, Przhevalsky wrote to his mother that the regiment was 'a band of robbers . . . I bayoneted a turkey which we ate at the next post'. His batman, Ivan Markov, was such an old hand at foraging that officers and horses were fed for nothing.

But the boredom of a long, hot summer in Kozlov, remote from the political excitement in Petersburg and Moscow, drove Przhevalsky to read and daydream. Days spent shooting and reading books about travel, hunting and adventure began to give birth to dreams of becoming an explorer. The more tedious army life became, the more intense became his longing to escape, to escape into the unknown 'black heart' of Africa or Asia.

By 1857 Przhevalsky was commissioned as a lance-corporal in the Polotsk Regiment in the small town of Bely. If anything, conditions there were worse. The Polotsk Regiment was notorious for its officers' misconduct, and the householders of Bely were reluctant to have them billeted. Przhevalsky found himself in rooms sparsely furnished with bedsteads, a bucket of vodka and tumblers in the middle of the floor. The officers' only activity was getting drunk enough to terrify the populace and beat up the police. It was a lonely and unhappy time. Three more years passed, and of these five years from 1855 to 1860 all Przhevalsky could say was that he had undergone 'an enormous change: I well understood and had studied the society I found myself in.'

The enormous change was complete by the time he was transferred to Kremenets, then a little Jewish town set in the northern slopes of the Carpathians. Here, shooting expeditions in the river valley among the mountains released a romantic love of nature, of solitude and of the wilderness. By 1860 Przhevalsky had decided to be an explorer of unknown wildernesses. He formally asked for a transfer to the Amur military district of Siberia, then the least explored part of the Russian empire, conceded that very year by China to Russia. The answer came quickly: three days' arrest in barracks.

Przhevalsky was all the more determined — his typical response to obstacles. Although not a scholar, he decided to take the stiff examination for entry into the Academy of the General Staff in St Petersburg. Long days of hunting gave way to hours — sometimes sixteen a day — spent studying.

Przhevalsky was not quite alone in his intellectual pursuits in Kremenets — he had one close friend, whom we know only as K., and together they devoured travel books, geography and adventure novels. Here perhaps his dreams of travel and exploration grew more intense. A draft of a paper 'On the Essence of Life' survives from this time. Przhevalsky must have read it, probably in January 1860, to a circle of officers. Philosophically inclined debating societies among Russian junior officers were nothing uncommon, especially in times of such intellectual ferment, but it is a surprising side of Przhevalsky's otherwise unrelievedly philistine army days.

The manuscript speech, muddled, naive, bears the full imprint of Przhevalsky's character. It is both materialist and mystical, it is erudite and original, it is diffident and forthright. Its content reflects wider reading than one might suppose available in Kremenets: the names of Humboldt the geographer, Audubon the zoologist and the great Cuvier are mentioned, and many of its ideas reflect the impact of Darwin on Russian intellectuals. In St Petersburg in the early 1860s the idealism of such young, radical luminaries as Pisarev had already incorporated materialism, Darwinian evolution and modern scientific analysis; Przhevalsky's speculations in Kremenets show the same mingling of the modern and the romantic.

Przhevalsky's epigraph in the speech is that 'death is the regeneration of new life', and his main idea is that the death of the individual is an unimportant event in the life of the species or the type. His aim is to move on from scientific observations and 'by means of logical conclusions to decipher and understand what life itself consists of'. Przhevalsky observes that the greatest scientists have baulked at defining life or nature, but this does not deter him. The materialist side of his thought comes out when he says that there is no sharp dividing line between animal and man, or vegetable and animal to allow

for the idea of 'soul'. He believes that the mystery of organic life will be revealed when the phenomena of electricity, galvanism and magnetism have been investigated. But he assumes that Darwinian evolution has stopped and that man and recent animals are the perfection of the forms shown by fossils. Idealistically, he dwells on the fact that all cultures have believed in life beyond the grave and that no human organizations could exist without it. 'People would give in to passions' if their faith in life after death were undermined. Even the educated—who are for Przhevalsky an élite—need this faith. Lastly, Przhevalsky clings to the idea that all animals have a spiritual basis—the 'cause' of life.

This welter of conflicting ideas contains the germs of Przhevalsky's later attitudes and responses. The explorer who loved animals and shot them in droves, the European who looked down on the Asiatic and who at the same time feared the unleashing of terrible passions in European civilization, who dedicated himself to science, yet gave up the modern world for degenerate, this complex and contradictory character could only have stemmed from a man who grasped 'the essence of life' in such a two-handed way.

But cramming, not speculation, was the key to success in the Academy examinations. For a whole year Przhevalsky made up for his lost schooling. Then, in spring 1861, he stopped studying and spent many weeks duck-shooting for relaxation. He describes this period in his first published work, *Memoirs of a Sportsman*, an evocation of the most poetic moments of his youth: 'When before me, like a broad mirror, the valley, flooded a mile wide, opened up, losing itself in the endless distance, then an involuntary quiver passed through my nerves and it was a quiver of uncontrollable delight.'

Returning to his studies, he took a preliminary test and passed. But before he could get to St Petersburg he needed money. In the end he borrowed 170 roubles from a lady who demanded 100 roubles' interest, sinking Przhevalsky deeper into debt, and hardening his misogyny. When he arrived at the Academy, Przhevalsky found he was one of 180 candidates for 90 places, but he passed very near the top.

Photographs of Przhevalsky in later life, with his general-

issimo's figure and his facial resemblance to Joseph Stalin, are very unlike the tall, thin, highly-strung young man of the 1860s, his swarthy face and mass of dark hair set off by a wisp of white forelock. But those two subsequent years in St Petersburg were very different from the years of his later life. Lacking money, he went short of food. He was older and more single-minded than his fellow students; he made few friends. He attended lectures conscientiously and read history and natural sciences avidly. Most of the military courses were of direct interest to a future explorer: geography, surveying, navigation, astronomy were essential to both careers. As for the subjects which were of purely military interest, Przhevalsky relied on his memory to store the stencilled course notes.

Twice he came near to expulsion. The first summer of his course was to be spent surveying in the Borovichi area of western Russia. But Przhevalsky devoted his time to hunting game and had only a filthy, rough survey sheet to hand in. A lucky success in the oral test on geodesy saved him. The second lapse only came to light a century later. While he was at the Academy during the liberal ferment of 1861, a monthly magazine called the *Military Collection* (*Voyenny Sbornik*) was very popular among the officer-students. It was edited by the famous radical—and civilian—critic and novelist, Chernyshevsky, and by Colonel N. N. Obruchev, who was later to be a leading member of the terrorist 'Land and Freedom' movement. But in 1862 reaction set in in Petersburg; students were arrested, magazines were closed down. The editorship of the *Military Collection* was given to a more suitable major-general, who promptly accepted, translated and printed an article by a Prince Sayn-Wittgenstein-Berleburg. The Prince reflected on the uselessness of education for army officers, on the merits of corporal punishment for soldiers and on force as the only quality necessary to a modern army.

The students of the Academy of the General Staff were annoyed. They objected to a German prince pontificating about the needs of the Russian army and 106 signed a protest which attracted attention: it was printed in the popular magazine, the *Northern Bee*, and, unfortunately for the signatories, it was praised by the émigré radical Herzen in *The Bell*. D. A.

Milyutin, the War Minister, demanded from the censor a list of the officers who had signed the document. Some of the many apparently unaccountable obstacles that Przhevalsky was later to encounter in his military career are probably due to his participation in this radical protest.

But there were successes, too, for Przhevalsky at the Academy. His first achievement was to publish *Memoirs of a Sportsman*, which he had written in Kremenets. It is a re-creation of some of the more poignant moments of his youth, especially his departure from the countryside around Otradnoye. Its style is intense, even overblown; but there is a feeling for nature—a sympathy enveloping predator, prey and nature—that we can find in Turgenev's early prose and certain passages of Tolstoy. The *Memoirs* were accepted for publication without fee by a magazine called *Horsebreeding and Field Sports*. More important was his second work, a dissertation for the Academy. Przhevalsky chose as his subject *A Military and Statistical Review of the Amur Region*. It was a compilation of every existing geographical, botanical, military and official account of the area. It was so thorough and topical that it gave its author a reputation outside the Academy in the St Petersburg Geographical Society and in government circles. Unwittingly, Przhevalsky had taken the first decisive step in his career. The Amur region, in particular the vast triangle of unknown territory between the Amur and Ussuri rivers and Pacific Ocean, had been annexed by Russia in 1858 and 1860, despite strong Chinese objections. Russia's Siberian empire was now enriched by a territory that gave it not only untapped natural resources but, for the first time, harbours on the Pacific far enough south to be almost ice-free.

Despite the success of his dissertation, Przhevalsky decided not to finish the Academy course. Much of the syllabus bored him and he could not adapt to St Petersburg. In May 1863 fate intervened. The Polish gentry and intelligentsia had risen in a nationalist rebellion against Russian rule. The Poles, like many Russians, were disappointed that Alexander II's reforms had not borne more fruit—more civil liberties and greater concessions to national feeling. Their language, their culture and their religion were being suppressed. But few Russians

could sympathize with them. The Poles had enjoyed a constitution since 1818 and were in some respects freer than their Russian masters. Przhevalsky probably saw nothing inconsistent in signing a radical protest in 1862 and helping the Russian army crush a radical Polish movement in 1863. In any event, the officers of Przhevalsky's year at the Academy were offered a commission, the chance of leaving in May 1863 (cutting a whole year), and recognition as having graduated if they went on active service in Poland. Przhevalsky accepted with alacrity. By the time he arrived in Poland, however, the rebellion was in its last agonies and he took part only in one punitive expedition. By 1864 the Russians had crushed the revolt and the very name of Poland was obliterated.

Soon Przhevalsky was back with his Polotsk Regiment. The regimental commander, Nilson, took a liking to him and made Lieutenant Przhevalsky the regimental adjutant. At first he enjoyed the post; if the officers were schoolboys and the commander their headmaster, then he was the school captain. He defended the regimental honour with energy. Early in 1864 one officer was caught embezzling; Przhevalsky organized a subscription of 126 roubles from each officer to cover up the losses. He wrote a circular to his brother officers, urging them to make this sacrifice: 'Then each of us with full awareness of the grandeur and nobility of his action can say with pride: "I have saved a comrade".'

But army life in the small Polish town of Piotrków, southwest of Warsaw, soon palled and Przhevalsky became as depressed as he had been in Kozlov and Bely. In 1860 he had been driven to exclaim: 'I asked myself: where then are man's moral perfection, disinterestedness and nobility of action?' It was now that his vein of misanthropy deepened: it led him to remark that 'the breath of mankind is more terrible and more destructive than all the misfortunes of nature'. Much of his time was spent in reading, and in dreaming of being a second David Livingstone. His aspirations were encouraged when the St Petersburg Imperial Geographical Society elected him a member for his Amur dissertation. But he needed to get away by himself. In 1864 he took four months' leave and went to Otradnoye to shoot and to dream for the coming summer and

autumn.

Dreams began to take more practical shape: Przhevalsky began to teach himself botany and zoology. The earliest books that are still to be found in his library date from this period—textbooks on ornithology and flora, for example. It was at this time that Przhevalsky gave up his ideas of following Livingstone. Africa was too remote for any Russian organization to sponsor him and, in any case, Baker and Speke had already solved most of the mysteries of the Nile, while Livingstone had carried out most of his work on the Zambezi. Przhevalsky began to think of exploring Asia, where the interests of the Russian empire, still dominating the emirates of Turkestan towards the Oxus and unknown Tibet, coincided with the enigmas of geography.

The next step was fortuitous. Przhevalsky heard that the military authorities in Warsaw were opening a college for Junker cadets in December 1864. He applied for a post and was appointed teacher of history and geography, and librarian.

The next two years in Warsaw were happy. He made friends with one or two other teachers, such as Iosafat Fateyev, who remained on close terms with him for the rest of his life. Przhevalsky got on well with his students—as he always did with his juniors. He was free to work without restrictions or reprimands from superior officers.

Every day he would rise at four in the morning. Then he would sit at his desk in his underwear, working on a geography course for cadets. (It was eventually published as a textbook.) His classes began at eight and finished at noon. He was a very effective teacher; his lectures were eloquent and interspersed with virtuoso recall of passages from the classic geographers. So enthralling a teacher was Przhevalsky that many of his cadet students later left the army's service to become geographers, agronomists and historians.

After lunch Przhevalsky regularly went either to the Warsaw Museum of Zoology to study and consult with the zoologist Taczanowski, or to Warsaw's famous Botanical Gardens where he learnt a great deal from the director, Aleksandrowicz. At three o'clock he went back to the college, where his

chief preoccupation was administering and building up the library. Here his favourite students—among them Mikhail Pyltsov who was to accompany him into Mongolia—helped him issue books. He never went out in the evenings; with puritanical zeal he hated the theatre as a form of 'self deceit'. At home, in his simple flat of three rooms, he would play cards with his friends. He usually held the bank, and he usually won. The income from card-playing, added to his royalties from the geography textbook and the money that his investments in railway shares were bringing in, made his first expedition to the Ussuri River feasible.

On holidays Przhevalsky entertained his students. There were some of whom he was very fond, though he remained scrupulously impartial as a teacher. He could relax only in the company of his juniors. There was a ritual: students were admitted by Przhevalsky's manservant, Zaikin, and kept hushed until Przhevalsky had finished working and was ready for merriment. Then, in his living room, furnished with plain beech chairs and a table, and containing a few books—geography classics such as Humboldt's *Pictures of Nature* and Karl Ritter's *Asia*, a small selection of Romantic literature consisting of Byron, Lermontov and Victor Hugo—and Przhevalsky's herbaria, collections of the flora of Smolensk, Radom and Warsaw provinces, a feast would begin. Przhevalsky loved sweet things. He consumed apples and pear juice cordials literally by the barrel; he was to eat strawberry jam in the alpine wastes of Tibet, to haul barrels of pumpkin juice on camels across Asia. In Warsaw, his visitors saw him get through a whole tureen of soup, followed by three steaks, washed down alternately with red wine and mineral water. But this Gargantuan appetite did not set the tone for the party. Przhevalsky drank no spirits and little wine. After a few hours' conversation and jokes the visitors dispersed. Przhevalsky liked to be in bed by nine.

But this bachelor's idyll did not give him the 'wildness, breadth and freedom' which he longed for. He had become a teacher not in order to teach, but to learn, to equip himself for the career of explorer. The sheer drudgery of writing a textbook on general geography had given him a thorough ground-

ing; Taczanowski had not only made him a competent zoologist — and an excellent ornithologist — but had also taught him how to prepare skins and stuff carcasses; in the Botanical Gardens Aleksandrowicz had helped Przhevalsky become one of Russia's best botanists. After eighteen months in Warsaw, he was ready for the next step.

Although he counted as a graduate of the Academy of the General Staff, Przhevalsky had still not been appointed to the General Staff. He needed the transfer in order to qualify for official military expeditions and to obtain freedom of movement. His Polish-sounding surname was, in his eyes, the real reason for this delay in promotion. Przhevalsky began to seek help from influential generals. In March 1866 Major-General Chernitsky in Warsaw wrote a letter recommending Przhevalsky: 'This young officer with his vast knowledge of geography, history and statistics will be very useful for a survey of our provinces in Central Asia.' There was no reply, although the Russian army badly needed well-qualified officers to reinforce its presence in what is now Kirghizia, Uzbekistan and Turkmenistan.

Then in summer 1866 another influential figure, Lieutenant-General Minkvits, wrote asking for Przhevalsky to be considered for transfer to Siberia, if not Turkestan (Central Asia). This time there was a response; Przhevalsky was released from his Warsaw duties. But the authorities raised another obstacle: he had never taken his final examination at the Academy and could not be considered properly qualified. Przhevalsky asked General Leontyev, the director of the Academy, for references, and these were at last accepted. At the end of November 1866 he left Warsaw for ever: he was off to the East Siberian military district, the district which had been the field for his dissertation.

But before he started on his 5,000-mile journey eastwards, Przhevalsky chose the first of his young travelling companions. That relationship was one which was to be repeated, with but slight variation, again and again. He had made friends with a young Pole of German origin, Robert Koecher. Koecher was trained in museum work and taxidermy and they agreed, if Przhevalsky should succeed in mounting an expedition to un-

explored territory, to go together and to split the collections of plants and animals between them. All seemed set fair for a congenial working relationship. Two factors, however, threatened the friendship: Przhevalsky was insistent that any expedition should be led unconditionally by himself; Koecher had fallen in love and was engaged to marry a girl called Amalia.

From Warsaw Przhevalsky travelled to Otradnoye for Christmas and the New Year. After a short family reunion, he tore himself away from the wooded hills and the wild marshes of Smolensk and set off by train for Petersburg. He overcame his dislike for the city in order to canvas support from the Imperial Geographical Society for exploration not just of the Ussuri, but of Mongolia and western China. The Przhevalsky who came to the Society and demanded to see the president of the Physical Geography Section was not a man to everyone's liking. He was disconcertingly direct; he was ingenuously confident that he was the right person for vast explorations in Mongolia and western China, he had a military curtness and an occasionally domineering manner.

The man he demanded to see was Pyotr Semyonov. Semyonov had become famous throughout Europe for his exploration of the Tien Shan range, or rather system, of mountains, which stretches north-east from the Pamirs to the Altay in Siberia, dividing Russian Turkestan from Chinese Turkestan. Semyonov had earned himself the sobriquet Semyonov-Tyan-Shansky for his extensive dangerous and fruitful travels in the Tien Shan in 1856 and 1857. But this was only one side of his achievements. It has been said that there are three sorts of geographers: travellers, regional experts and organizers. Semyonov was almost unsurpassed in all three roles. Although he did not become vice-president of the Imperial Geographical Society until 1873, he was already the dynamic force behind the tremendous enterprise and achievements of the Society. He had, as an organizer, the valuable talent of knowing whom to pick for great tasks.

Semyonov liked Przhevalsky. They had much in common; Semyonov, like Przhevalsky, had been born into the poor family of a retired officer and had spent his childhood in untamed countryside. He had a short taste of military service,

which he left for the University of Petersburg. In 1848, at the age of twenty-one, he walked from Petersburg to Moscow, and the following year had joined the newly formed Geographical Society of Petersburg. The development of the two men was from this point inextricably linked. Semyonov became known as a botanist and a geographer. He was in many ways a radical, and was briefly involved in the same revolutionary group as Dostoyevsky, but was lucky enough to escape arrest and trial. In 1852 he went to Germany, where he won the admiration and affection of the two giants in geography, Humboldt and Ritter, whose *Asia* he had translated and updated. Then in 1856 he began his study of the Tien Shan, which turned upside down existing theories, especially that of Humboldt, about the volcanic origin of Central Asia's mountains.

Przhevalsky was one of several explorers to be singled out for fame by Semyonov. (The next was the explorer of New Guinea, Miklukho-Maklay, and there were several more to come.) Semyonov took a calculated risk; he recalled in a speech in 1888, after Przhevalsky's death:

In 1867 I met Nikolay Przhevalsky for the first time. Through me he then applied for the first time for help and patronage from the Russian Geographical Society. . . . Przhevalsky was still a little known quantity in the scientific world and the Society's council hesitated to give a grant for his undertaking, let alone organize under his leadership a whole expedition. But I promised him that if he made any interesting journeys and explorations in the Ussuri at his own expense and proved his capability . . . then he could rely on the Society organizing a more serious expedition to Central Asia under his leadership.

With encouragement and a number of letters introducing him to leading figures in the Siberian sections of the Geographical Society in Omsk and Irkutsk Przhevalsky had to make do. Together with Robert Koecher, he set off on the interminable trek to Irkutsk, before the snow melted and the boggy *taiga* of western Siberia became impassable to wheel or

sledge-runner. In the middle of April he was there.

Irkutsk, like most Siberian towns then, was rough, provincial in culture, corrupt in administration. Przhevalsky thought its officials the dregs of the Russian empire. But he was fortunate in that the Geographical Society's branches in Siberia were so powerful and influential that they were virtually an arm of the civil and military government. Major-General Kukel, to whom Przhevalsky reported, was chief of staff of the East Siberian military district and, at the same time, president of the Geographical Society at Irkutsk. His successor in the Society, Sofyanov, was commander of the artillery. The Irkutsk Geographical Society had no trouble getting all the books, equipment, men, and even arms it needed for its research.

Major-General Kukel was something of a rebel. Some years earlier he had nearly been arrested and imprisoned in the Peter and Paul Fortress for his liberalism. There was evidence that Kukel had connived at the escape of the anarchist Bakunin from Siberia to America. He was a man who often had to fight authority and he appreciated Przhevalsky's courage and character. Others found Przhevalsky cocky: they bided their time and later had their revenge.

During the late Siberian spring Przhevalsky worked in the Irkutsk Geographical Society's library. He brought the catalogues into order and read every book, journal and manuscript he could get on the Ussuri area. He had Fateyev send him from Warsaw a *Zoological Atlas of Birds* by Fritsch, and a Polish dictionary, so that he could read his copy of Tyzenhauz's *Ornithology*. The Polish dictionary was not enough, so Przhevalsky sought out a Polish exile in Irkutsk to give him lessons in the language.

Meanwhile the committee of the Geographical Society was working out a plan for Przhevalsky's expedition that summer which reflected the interests of government as well as geography. Przhevalsky was asked: first, to examine the disposition of the two battalions guarding the newly acquired Ussuri region along the Manchu and Korean borders; secondly, to collect information on the native population, Cossack and Chinese; thirdly, to reconnoitre land and water routes from

the Ussuri and the coast to the Manchu and Korean frontiers; fourthly, to correct maps; and only fifthly, to carry out scientific research and survey and collect specimens of the fauna and flora. All this, in a territory the size of Britain, of virgin forest, mountains and rivers, in a few months!

By June Przhevalsky was ready to go. He wrote to Fateyev, 'Yes, my lot is enviable and my obligation hard: I am to explore places in most of which no civilized European's foot has trod.' But one thing marred his joy — Robert Koecher was not only homesick, but aghast at the terrible conditions and the immense distances to be overcome in the coming months. Przhevalsky was sickened by Koecher's treachery. He explained in a letter to Iosafat Fateyev: 'the German turned out to be quite useless and utterly incapable of enduring any physical hardships. Also he cried every day for his fiancée Amalia and for Warsaw, so in the end I threw him out.'

It was not the last time that a woman unwittingly deprived Przhevalsky of his travelling companion; he never forgave the sex. Quickly he searched for a replacement. He met a sixteen-year-old boy Nikolay Yagunov, son of a widow, a deportee from Russia, who had just left school at Irkutsk and was training to be a topographer. The Yagunovs were desperately poor, and were only too anxious to please Przhevalsky. In a few days Przhevalsky taught Nikolay Yagunov how to dry plant specimens, to skin and cure animals and birds, and on 7/19 June 1867 the first Przhevalsky expedition was underway.

2

Siberian Jungle

Przhevalsky's first expedition was light and fleet. At the last moment he took on a third member, Nikolayev; but his supplies were minimal. He had only gunpowder and shot in abundance (twenty-five pounds of one and fifteen pounds of the other). He took his dog, a pointer, for company, to retrieve game and locate wild animals. But his scientific equipment consisted just of a thermometer, a compass and maps.

Przhevalsky was in a hurry. He crossed Lake Baykal by steamer, and in eight days on post-horses he covered the mountainous and rough 600 miles that lay between Lake Baykal and the River Shilka, the first major tributary of the River Amur. The conifer forests gave way to treeless steppe, where Russian Cossacks and Buryat Mongol nomads struggled to make a living from the desolate and frigid land. It was mid-June, but there were still frosts and the leaves of the trees were not fully open. Ice floes drifted down the rivers. The party reached the River Shilka (or upper Amur) above its navigable course.

Russian navigation on the Shilka and the Amur was uncertain. The Amur was frozen from November until April, and in the short summer season had dangerous shallows and rapids. Przhevalsky caught a steamer in Sretensk; within a day it ran aground and holed its bow. The expedition, with one of the steamer's passengers, had to hire a Cossack rowing boat to carry the party down to the conjunction of the Shilka and the Argun, where the Amur begins. The rowing boat suited Przhevalsky; to the annoyance of his passenger, he would

order it to tie up on the bank for an hour or two, while he shot at the musk deer that emerged from the sepulchral silence of the pine forests, or the storks and fishing eagles at the water's edge. In three days the boat reached the Amur, and followed it eastwards to Albazin, where Przhevalsky found a private steamboat which was leaving for Blagoveshchensk, 300 miles south-east downstream.

Albazin was now a prosperous Cossack station. But its history illustrates Russia's struggle to win the Amur River. The struggle began in the 1630s. It was an epoch of extraordinary expansion: the Russian empire spread over central and eastern Siberia, annexing, on average, territory the size of France *every three years*. By 1639, the Cossacks—soldiers, trappers, traders, settlers and negotiators all at once—had reached the Pacific, at the frigid Sea of Okhotsk. The Amur was the key route connecting the coastal posts with the garrisons of East Siberia, by sledge and troika in winter, by rowing boat and barge in summer. Expeditions set out from Yakutsk to subdue the Tungus tribes and make them tributaries of the Russians. Native chiefs were cajoled, taken hostage, tortured or killed. Eventually the Amur was won. But, in winning it, the Cossacks had desolated their conquests. No corn grew and no cattle were kept; Russian settlers could not make a living; only escaped convicts flourished, killing the natives as they hunted for fur or prospected for gold.

In the 1660s and 1670s, however, a marauding group of Cossacks developed a flourishing agricultural and military settlement around Albazin, a destroyed Tungus village. The Chinese were hostile to the intrusion and the great Manchu Emperor K'ang Hsi demanded that the Russians withdraw. In 1683 war broke out. The Chinese destroyed Albazin, the Russians rebuilt it. The Chinese besieged it; disease turned the siege into a truce. Finally, in Nerchinsk in 1689, a treaty was drawn up and signed. The force of Manchu arms and the diplomatic skill of the Manchu's Jesuit interpreters overcame Russian reluctance. For the first time since the overthrow of the Mongol yoke, Russian expansion eastwards was checked. The Amur was lost, and firm boundaries were drawn. The Russians had to be content with limited trading rights and the

establishment of an embassy and clerical mission (which was scientific rather than evangelical) in Peking. The Russian empire had at last established contact with its mighty neighbour; for the next 160 years the Chinese had a guarded, but generally equable, relationship with the Russians, perhaps calmer and more fruitful than with any other European power.

The Chinese maintained the Amur and Ussuri regions like a native reserve. Even their own Chinese and Manchu subjects were, with few exceptions, forbidden to penetrate these lands. They were, after all, part of the ancient homeland of the Manchu tribes who, although they might have given China its reigning dynasty, had never forgotten their Tungus origins and their ancient reverence for the soil, which they could not allow to be desecrated by Chinese farmers or miners. Only an occasional Mandarin barge sailed the Amur collecting tribute in furs, and a few desperadoes crossed secretly in search of wealth from sables, gold or the ginseng root. Not until the 1850s did the Russians dare to try and recapture this essential and empty highway to the Pacific and to Alaska.

In 1847 eastern Siberia was given its most active governor-general, Count Muravyov; he spoke for Russia's imperial interests: 'With the spread of foreign possessions and English conquests in the Pacific, we can no longer leave the countries and seas adjoining the Amur without delineations, whatever was said in the treaty of Nerchinsk.' He founded Nikolayevsk as a depot near the Amur's mouth and in 1854 he personally led an expedition of a thousand men by gunboat up the Amur to link Nikolayevsk with Siberian territory on the River Shilka. He met with no real resistance. In 1855 there were three more boatloads, this time of colonists, cattle and ploughs; some foundered and died of starvation and cold, but others secured a foothold. Muravyov refused even to negotiate with the remonstrating Chinese officials. Russia's whole empire in the east was at stake, especially during the Crimean War of 1853-6 when English and French frigates menaced the Russians all round the Sea of Okhotsk.

In 1858 the Chinese were being threatened by an Anglo-French alliance; they dared not antagonize Russia as well. At

Aigun they ceded the left bank of the Amur as far as the Ussuri, and from there both banks to the sea. The territory between the Ussuri and the sea was to be a condominium. Muravyov quickly established a town, Blagoveshchensk—'Good Tidings'—on the middle Amur and built up the Cossack population of the new province to 20,000. Political and criminal exiles, retired sailors and, finally, the efficient German Mennonite farmers from the Volga were all induced or forced to settle there.

But by June 1859 the Chinese had checked the Anglo-French menace. They felt strong enough to repudiate the 'unequal' treaty of Aigun; China and Russia threatened each other with war. The advances of the Taiping rebels and a renewed attack by the English and the French on Peking and Shanghai turned the tables once more. In November 1860 Russia forced the disarrayed Chinese to sign a treaty which surrendered the Amur, the right bank of the Ussuri, half of Lake Hanka (Hingku), the enormous territory between the Ussuri and the sea, and the Chinese half of the island of Sakhalin. Russia had now cut Manchuria off from the sea, she had a land border with Korea and, on the island of Sakhalin, with Japan. She had relatively ice-free Pacific harbours, as well as 1,000 miles of navigable river from the sea to the edge of Transbaykalia. Before the building of the Trans-Siberian Railway at the turn of the century, the Amur was the main link between the Russian Far East and the rest of the Empire; even today no proper road connects the two except through China. Russia's Amur possessions virtually encircled Manchuria, giving her a stranglehold on northern China that she could not resist tightening. The Amur was to give eastern Siberia grain and meat, as well as adding to Siberia's wealth of fur and minerals. Muravyov quickly brought in shipping, telegraph lines and colonists, before resigning, when St Petersburg would not give him still looser a rein, and leaving his empire to a lesser breed of officials whose inadequacies were to embitter Przhevalsky.

As Przhevalsky's expedition followed the Amur south-east, the

river broadened to a quarter of a mile wide and, breaking through the mountains that divide Mongolia from Manchuria, Przhevalsky found himself in the odd luxuriance of vegetation that marks the Ussuri region off from both the Siberian taiga and the Manchurian steppes. Cossack posts alternated with the birch-bark huts (*yurts*) of the Orochon (or Udeghe) fishermen. Paeonies and lilies grew in the meadows. At Blagoveshchensk Przhevalsky was lucky to catch another steamer going the whole length of the Amur. By the beginning of July he was in the village of Khabarovka where the Amur becomes wholly Russian, at the confluence of the Ussuri.

Few European explorers had preceded Przhevalsky on the Ussuri. The first had been three Jesuit fathers, Régis, Jartoux and Fridel in 1709, who were mapping the Chinese empire for the Emperor K'ang Hsi. Their maps were available to the Russians through various sources, chiefly the works of Father Iakinf (Bichurin), the greatest scholar of the Russian Clerical Mission in Peking in the first half of the nineteenth century. But one-and-a-half centuries elapsed before Muravyov's expeditions sent Russian explorers up the Ussuri: the most notable being Maksimovich, of St Petersburg's Botanical Gardens, who was to analyse and describe nearly all Przhevalsky's botanical collections.

In Khabarovka Przhevalsky bought a rowing boat, hiring Cossack rowers for each stage from station to station as he went up-river. June frosts had given way to the continuous rains of July. At first he passed through flat country, with scattered swamps and lakes among the rich grasslands, where Siberian iris and white paeonies bloomed. Then, on the right (east) bank, mountains covered with forest loomed closer. The forests were an improbable mixture of almost sub-arctic and almost sub-tropical species. Northern aspens and birch grew with wild apricots and palm-like aralias; cork trees (*phellodendron*) and Manchurian walnuts flourished among the alders. Vines and climbers like *schizandra* and the fruiting *actinidia* wove over willows and pines in an improbable confusion of Himalayan and Siberian flora. Sheltered by the coastal mountains from the cold currents of the Sea of Japan, catching the most northerly of the monsoons, the southern

species not only endured the long thirty-degree frosts of winter, but flourished in an almost impenetrable jungle. And Przhevalsky's excursions into the jungle revealed an animal life just as bizarre: the hunter might stumble on a bear or a tiger, a crane or an ibis, in a world that no more conformed with the norms of geography and zoology than a landscape by Douanier Rousseau.

But the summer rains that made the Ussuri forests so rich and rank were a great drawback for settlers and explorers. The river had risen twelve feet above its normal height, the banks were often flooded for miles, and excursions into the hinterland were almost impossible. Przhevalsky's dream of camping out in the wilderness was often thwarted by the wet and the myriads of gnats and mosquitoes. Even to relieve oneself without first lighting a smoky fire was to invite hours of torture from insect bites.

For most of the twenty-three nights that Przhevalsky spent on the Ussuri bank as he made his way to the last Cossack outpost of Busse, 300 miles upstream from Khabarovka, he was driven to seek shelter in the Cossack stations. There were twenty-seven of these, spaced about ten miles apart, not only to guard the Russian right bank from the Chinese left bank — which was in any case uninhabited — but as focal points for colonization and agriculture. The Cossack stations contrasted miserably with the untouched wilderness. Between 1858 and 1862 some 5,000 Cossacks had been chosen by lot to be removed from their homesteads in Transbaykalia, where they had cattle and corn in plenty, and to be made pioneers. Their cattle were lost on the journey, and the rains that made their corn sprout in May now rotted the grain before it could be harvested. The settlements subsisted on government hand-outs that often failed to arrive. Cossack families starved; imported food and cloth cost up to eight times as much as in Moscow and were often so rotten as to be unusable. Przhevalsky, half-Cossack himself, was upset and indignant at the state to which the Ussuri Cossacks had been reduced in ten years. They could not be bothered with fishing or trapping, they sang no songs, their spirit was gone, and vodka was their only consolation.

Although a report on the state of the Cossack settlers was part of his duties, Przhevalsky was to incur much official displeasure with his findings of 'filth, hunger and paupery'. Part of the trouble was the remoteness of the Ussuri from the centre of administration, which lay in Nikolayevsk, 600 miles to the north-east. True, Muravyov's last act had been to set up a telegraph line which ran from Nikolayevsk to the Ussuri, the Pacific and, eventually, to China. But no proper path had been cleared through the Ussuri forest and it needed only heavy rain or a fallen tree to cut the line. Thus, in 1868, when Chinese bandits overran much of the Ussuri, pillaging and burning the Cossack stations, it took seventeen days before the authorities in Nikolayevsk heard the news.

Despite the rains which made it hard to dry plants or to preserve bird skins, Przhevalsky's collections were already growing heavy. Unlike his later expeditions, the Ussuri journey produced no species of plant or animal totally unknown to science; but it brought to light a number of species hitherto only known much farther south. The waterlilies (*Nymphaea*) of the lower Ussuri gave way, farther upstream, to the first clumps of the giant *Nelumbium* (a spectacular and enormous relative of the lotus and tropical waterlilies) that fill the shallow parts of Lake Hanka. On fine days, Przhevalsky and Yagunov (the third man, Nikolayev, had abandoned the expedition) strolled along the banks, and while the oarsmen struggled against the current, they watched and listened to, and sometimes shot, the grey herons and snipe on the sands, the blue magpies on the islands and the Chinese orioles in the forests. As the sun rose, the butterflies emerged, among them the splendid *Papilio*, the size of a man's hand, that Maack had discovered. But with the butterflies came the gnats, in opaque clouds. The naturalist could work only in the early morning and the evening; the hot, dank days were a test of the traveller's endurance.

Przhevalsky soon reached Lake Hanka, surrounded by impenetrable marsh on three sides and, on the west, by hilly steppes and the Manchurian frontier. Shallow, windy and hardly picturesque, Lake Hanka was, however, one of the most important places visited by Przhevalsky. It was a haven

for migratory birds and the home of hundreds of species which bred almost undisturbed by the handful of Russian fishermen and the occasional Tungus tribesman who lived off the wealth of salmon, carp, burbot and sturgeon in the lake.

The Russians who fished Lake Hanka and farmed around their three villages on the western shore were rather more successful than the Cossacks. They were peasants from southern Russia who were used to tilling the soil. The authorities had brought the first consignment to Lake Hanka in 1860, a year before the emancipation of the serfs made such summary measures impossible. But the new settlements were working well; cattle, even sheep, grazed the lake-shore, and melons from the Volga grew in their sheltered kitchen gardens despite the depredations of the Siberian chipmunks.

But there were no more than 500 peasants and a score of infantry soldiers living off a lake bigger than Hampshire. The fishing was primitive and wasteful; neither the Russians on the west shore of Lake Hanka nor the single Chinaman and the retired soldier who fished the north-east outlet into the Sungacha knew how to preserve their catch. Daurian sturgeons weighing half a ton were not unknown; a hundred-weight of caviare would be extracted, only to be thrown away. The Chinaman would take just the sturgeon's cartilage and set off on foot to sell this delicacy in the Manchurian town of I-lan, 150 miles away.

Przhevalsky spent all August 1867 roaming the shores of Lake Hanka. He worked hard, sleeping only five hours each night. It was a rough life. He wrote to Fateyev in Warsaw from Lake Hanka, 'I've a two-inch beard, my clothes wouldn't be fit for a beggar in Europe.' He collected another 130 species of flowering plants and spent many hours in hides, watching the birds of the marshes, until he could hold out no longer and fired, sending the wild duck and sea-eagles into panic and the turtles scuttling back into the water. But he was too late to observe the spring migration and too early for the autumn migration; in September he left the lake and made for the Pacific coast, about 100 miles south.

A rough carriage road already linked Lake Hanka with the River Suifung, and thus with the sea, over a land depopulated

by battles for empires. In the emptiness Przhevalsky came across a great brick fortress with a granite turtle on a marble plinth—a silent relict of the Manchu Nü-chen empire of the twelfth century. Then, reaching the Suifung, Przhevalsky and Yagunov transferred to a rowing boat and, having negotiated the rocky gorge of the Bear's Cheeks, came safely through to the sea and to the settlement now called Posyet (Novgorodskaya).

Przhevalsky had seen something of the life of the Cossacks and of the peasant settlers from Russia on and around the Ussuri. After leaving Lake Hanka he established contact with the Nanai and Udeghe, two of the Tungus peoples who were, virtually, the aborigines of the area. The Nanai (or Goldi) hunters, fishers and gatherers, who grew tobacco and a few vegetables, impressed him with their gentle and affectionate family life. But lack of a common language made Przhevalsky a disappointing ethnologist; he could only conclude how little the Udeghe's life and reactions differed from those of their dogs.

It was the Ussuri, unfortunately, that gave Przhevalsky his first impressions of the Chinese. The Chinese exiles and outcasts who searched the Ussuri for gold and ginseng, or came to harvest edible seaweed from the coastal rocks, were hardly representative of their nation. Przhevalsky might as well have judged the English by the miners of the Yukon. But, although he admired their industry in tilling the fields and growing every conceivable crop from barley to ginseng, he was horrified by the rough brutality of this all-male society. The Chinese were exiles twice over: banished by the Chinese government and now aliens to the new Russian government. But Przhevalsky took their hostility to be typical of the Chinese, rather than a natural evasive reaction to the appearance of a Russian lieutenant. He condemned them for their exploitation of the countryside: they harvested the seaweed, and chopped down oak forests to grow funguses on the stumps; they refused to deal in Russian paper currency and drained the revenue by exporting silver to China. The Chinese of the Ussuri made an unfortunate first impression on Przhevalsky of self-sufficiency, xenophobia and ruthlessness.

In the last three years a second alien element had crossed over into the Ussuri. Koreans left their overpopulated and infertile countryside to walk over the frozen River Tumanga. They risked being caught and shot by the Korean authorities, but by 1867 there were 1,800 Korean peasants farming within fifty miles of Posyet. Przhevalsky liked the Koreans; they were as industrious as the Chinese, but were eager to be integrated with the Russians. Many were Christians and, as was the custom for non-Russian converts in the Tsarist empire, they took Russian names from the Russian officers who acted as their godparents. Przhevalsky struck up an acquaintance with a Korean who had adopted the name Pyotr Semyonov; he liked him for his cleanliness as well as godliness, and was intrigued by Semyonov's descriptions of Korean life.

So intrigued was Przhevalsky that, armed with carbine and revolver, he went to the frontier river, took a boat and three soldiers from the post and rowed across to the fortress town of Keiko (then Kegeng-P'u). It was a daring act, for the Korean government considered its border with Russia closed. To trade with Russians, even to communicate with them, was punishable by beheading. As Przhevalsky's boat approached the other shore of the Tumanga, Korean police and soldiers rushed down to urge him to leave. They argued that the commandant was sick, that even to give him a message from Przhevalsky would cost them their lives. But Przhevalsky had already taken the stance which he invariably was to adopt in such situations. As he recounts, 'Knowing the character of all Asiatics, in dealing with whom one must be insistent and even insolent to get one's way, I began to demand . . .' A crowd began to gather; the police turned to beat them back and Przhevalsky's party landed in the confusion. Besieged by a curious crowd, undeterred by the soldiers, Przhevalsky forced his way to the house that the Koreans had set aside for Chinese officials. He waved his Siberian warrant for post-horses as if it were a passport.

The commandant of Keiko, Yun-Hab, eventually appeared, borne on a litter in solemn procession. Przhevalsky and the commandant sat down on a tiger skin and, although Przhevalsky refused to smoke a pipe of tobacco that the

Koreans offered him, an amicable and halting discussion followed through an interpreter. Przhevalsky asked if there had been any frontier violations, as a pretext for his visit, and then tried to ask how many people lived in Keiko, how far it was to Seoul, the capital, how many troops Korea had. To each question Yun-Hab answered, 'A lot.' Then Yun-Hab requested Przhevalsky to have all Korean settlers in Russia sent back across the border to be beheaded. Neither side meeting with any satisfaction, they turned to lighter things. Przhevalsky's men wrestled with Korean soldiers and then performed a Russian dance for Yun-Hab's amusement. Przhevalsky rose to leave, but before getting into his boat, he put on a show of his own that he was to repeat on all his future expeditions. He had a board erected at 100 paces, aimed his carbine at it, and heard the crowd of Koreans cry out in astonishment as the bullet smashed the board and ricocheted over the fields around Keiko.

Przhevalsky had by now fulfilled his mission; but instead of returning directly to the Ussuri, he decided to walk 300 miles along the coast following difficult and sometimes undetectable forest trails, and then to cross the coastal range, the Sikhote Alin, down to the Ussuri basin. The first snow was falling and the rivers were soon to freeze when, in late October 1867, Przhevalsky sent a soldier across the border to the Manchurian town of Hun-ch'un to buy six pack-horses, scoured the Russian settlements for harness, rope and supplies, and prepared his party for an unprecedented trek through fog, gales, fire, marsh, ice and snow. He took on two soldiers to drive the horses, carry game and make tea. Two hundredweight of specimens had been sent off to Sretensk in Transbaykalia, but the pack-horses were heavily laden. The loads included, besides, plants and skins, barley for the horses, groats and dry biscuits for the soldiers, while one horse carried nothing but gunpowder, shot, lead and hunting guns.

Przhevalsky usually walked well ahead of Yagunov, the soldiers and the pack-horses. He would shoot goats and pheasants, leaving the main party to pick up the carcasses. Often he would abandon the trail (marking the route for the others with scraps of paper) to make excursions into the

coastal mountains in pursuit of game, arriving at the night's bivouac late, tired and laden with carcasses. The party was so well supplied with meat that they had to leave goat and deer for the crows and the Ussuri tigers, while they fed on soup made of pheasant's innards. Przhevalsky's energy was phenomenal. Yagunov would suggest camping at a suitable spot, such as a forest clearing beside fresh water, only to be forced to carry on into the evening by a relentless leader. Pressing on, they managed about ten miles a day through tall grass and dense forests, having only a compass to help them decide which trails to follow. By now Przhevalsky had acquired enough Chinese to ask the way of the occasional Chinaman they met, but not enough to understand the answer. Walking well ahead of his companions, armed with rifle, revolver and dagger, accompanied by his pointer, he must have been intimidating to the Chinese settler in his isolated wattle house.

The days were clear and often relatively warm; the path from Posyet to Vladivostok had been cleared in places, with bridges across many of the streams. In ten days Przhevalsky's party had reached Vladivostok. They arrived only just in time, for that night a blizzard began, a reminder that, though rhododendrons might flower in autumn so far south, this was still an extension of Siberia. Przhevalsky stayed ten days in Vladivostok to rest the horses—he was a novice at loading pack-horses and the animals had injured their spines carrying badly balanced loads over rough paths.

Vladivostok was not then the busy port and city of today. Its total population was about 500, and although it had ship-building timber, was sheltered from gales, and was close to the centre of the Ussuri region, its future was still uncertain. At Posyet the sea was frozen for only two months, the soil was fertile and, above all, the port was much easier to fortify against invasion than the vulnerable peninsula on which Vladivostok stood. Przhevalsky carried out a survey and a census of Vladivostok, and concluded that Posyet was the better port. Then, in mid-November, he left.

Soon after the expedition crossed the mouth of the Mai-Ho, Przhevalsky made a strange discovery. He had lost the path in thick reeds, and, as was the custom in the Ussuri region, the

party sheltered and foraged in a deserted wattle house. But there was a mystery: a bowl of gruel, congealed and frozen, lay on the table; the cats and dogs had vanished, but hay still stood in the racks for the captive deer. The only explanation for this terrestrial *Mary Celeste* was that the owner had gone out hunting and had been devoured by a tiger. The Ussuri tiger is a subspecies of the Indian tiger and once roamed everywhere in the monsoonal belt, from Pakistan to eastern Siberia. In summer it is like any other tiger, but in the fierce Ussuri winter it grows a thick shaggy coat and a leonine mane that make its bulk and power even more awesome. In those days the Ussuri tiger was not the rarity it is today. An influx of settlers with their dogs and cattle had at first made the tigers bolder and more numerous, before traps and shotguns began to drive them to near extinction. The Chinese house with its paper windows, or the lonely telegraph station manned by one Russian soldier, was a frightening place to stay in, even though tigers were more interested in a dog or a calf than in human flesh.

Soon Przhevalsky was to see his first tiger. With every day the track became wilder and wildlife more abundant. So fabulous was the sport that Przhevalsky stayed for a few days in one of the two Russian villages that had been built three years earlier in the Suchan valley. One morning a peasant woke him with the news that a tiger had been prowling round the village all night. Footprints showed it had tried to break into the yard where Przhevalsky's horses were stabled. Przhevalsky seized his carbine and took one of the soldiers, armed with a pike, to hunt it down. There were traces where the tiger had seized a dog and, farther off, in the reeds, had devoured it. Eventually, in the hills, they came across the tiger, which fled before Przhevalsky could press the trigger. The same day another of Przhevalsky's horses died and the carcass was left out to lure the tiger into an ambush — but in vain.

From Suchan Przhevalsky headed north to St Olga's bay, a rocky 160-mile journey along an almost uninhabited coast with no fodder in the coniferous forests. From the cliffs Przhevalsky could see whales spouting and hear the ocean roar. He began to daydream: 'You would sit down on the top

of a cliff, stare at the blue edge of the sea and what a lot of thoughts would swarm in your head. Your imagination would picture distant countries with different people and different nature, countries where eternal spring reigns and where the waves of the same ocean wash shores fringed with palm forests . . .' But here fine drizzle soaked the rocks and then froze over. The horses kept slipping; they were half-starved and exhausted, eating only a few pounds of barley and patches of dried grass. Yet Przhevalsky was never easily depressed by ice and snow. At night he would cut branches to sit on while he melted the ink over the fire, wrote up his diary and mapped the mountains, the coastline and his route. After two hours' work he would be ready for dinner — pheasant, venison or goat, in soup and then as a roast, followed by the brick tea of Mongolia and Manchuria. It was hard to sleep; everyone constantly turned from side to side to be warmed by the fire; the horses' bells jingled while they searched for grass. Before long, two hours before dawn, the soldiers would rise to catch and load the horses and make tea. The day's trek was not merely a matter of walking, leading horses and shooting game; regular meteorological records had to be kept, bearings taken, contours mapped, and specimens prepared. Leaves, stems, flowers and roots had to be carefully dried, pressed and packed. Yagunov and Przhevalsky would skin the birds, retain and clean out the skull and then dress the skin with salt and arsenic before wrapping the specimen up. Sometimes they macerated the carcass of a bird or mammal to get the skeleton. A large mammal, such as a bear, would take a whole evening to skin and preserve.

At St Olga (nowadays just Olga), an anchorage and a village with twelve houses, a church and two state stores, Przhevalsky rested. His party was frozen, dressed in rags and very tired; the horses' backs were all but broken. He spent a week here, finding new horses, carrying out a census, watching the pelagian sea-eagles, before setting off on the most difficult stage of his journey. From St Olga he went another fifty miles along the coast before turning inland up the Tazusha valley to the mountains. On the Tazusha he bought, as an investment, several hundred sable skins from a Chinese trader. Fully

laden, the party set off for the pass. At this point the Sikhote Alin is less than 1,000 feet high, but on the top the climate changed for the worse. At the summit of the pass stood a small Chinese shrine; Przhevalsky did not make any of the usual propitiatory offerings. He had to camp that night in the open air on two feet of snow, in twenty-five degrees of frost. The icicles on his beard thawed, only to drip down his shirt and freeze again. The forests of fir and cedar were enveloped in snow and silence, for all but a few birds had fled. Two more nights like this had to be endured before the party descended far enough into the Ussuri basin to find a Chinese or Udeghe house. Przhevalsky spent Russian New Year's Eve in a Chinese hovel, thinking of his family.

The next day he reached Beltsova. He had completed a great circle, 600 miles of it on foot, bringing him back to the Ussuri valley, which was now unrecognizable. The vines were like great white ropes, the trees bowed down with snow, and the impenetrable grass was reduced to just a few tufts sticking through a flat white expanse. In birdless silence the expedition made its way over the snow-covered river to the first Cossack post at Busse.

The expedition was, officially, at an end. Przhevalsky had gathered enough material for a controversial report on the population and for a definitive account of the flora, fauna and physical geography of the region. But the thought of returning to staff officer's duties upset him. His letters to his brothers Vladimir and Yevgeni at one moment boast of success, 'my material will be the best enhancement of the Siberian section of the Geographical Society's coming *Notes*', and the next moment complain, 'I've got to do all the work myself, because although I have an assistant, he is a youth of sixteen who can only dry plants and skin birds'.

Przhevalsky asked the authorities to extend his expedition by another few months so that he could observe the spring migration at Lake Hanka and then travel up the Sungari River to its source in the mountains of Manchuria. He asked for an interpreter, a thermometer, an aneroid barometer to measure altitude, the new map by Schwartz of Manchuria, silver (for the Chinese did not take Russian paper currency), and three

reams of blotting paper for drying plant specimens.

General Tikhmenev in Nikolayevsk granted the extension, but no supplies arrived. Nevertheless, Przhevalsky set off in February 1868 and arrived at Lake Hanka just before the thaw to observe the migration that began in the first days of March and did not finish until the end of May. These were the happiest of his Ussuri days. Stationed on the north-east shore, at the never-frozen source of the Sungacha, Przhevalsky was overwhelmed by the variety and numbers of birds: over 120 species gathered here, from the white owl of the Arctic which came for the winter, to the red-legged ibis from Japan which came for the warmer months. He wrote to his brothers, 'You can compare the flocks of geese and ducks of all possible varieties only to clouds of locusts, but that would be a weak comparison.'

Waterbirds came with the thawing of the ice, to be followed by the cranes which performed their elaborate courtship dances before nesting. But Przhevalsky belonged to a generation of naturalists for whom the gun, not the camera, was the means of recording such sights. When he succeeded in shooting a crane, he 'was as joyful as a child and started to run with all my strength to the precious quarry'. The red-legged ibis arrived at the end of March, when the temperature still dropped at night to fifteen degrees below zero; he could only establish the fact for science by shooting the bird. But the ibis were canny, and kept to the shore, mingling with the white and grey herons for protection, and only with luck and the wide spread of a shotgun did Przhevalsky, Yagunov and the two Cossacks with them finally kill five of the twenty or thirty rare ibis that had reached the lake to breed.

All that spring Przhevalsky and his three companions lived on duck and goose. They could be shot from the window of the Cossack post which was Przhevalsky's base. He would get up before dawn to shoot them from a hide on the lake-shore; almost abashed, Przhevalsky wrote: 'Of course, there was no real need for such night-time shooting, as you could shoot as many duck as you wanted in daytime, but here a sportsman's greed was at work so that often I didn't even know what to do with a whole heap of dead birds.' Laden with shotgun, carbine

and rifle, Przhevalsky would spend the mornings on the lake. Several different species landed and took off in great flocks, and because of their unfamiliarity with human beings, the birds were usually too easy a prey. The only problem was that the crows, the sea-eagles and the kites would raid Przhevalsky's bag unless he buried the birds he had shot deep in the snow or hung them high up a tree.

By mid-April the Arctic birds had flown north, leaving the lake to the breeding pairs from the south. Now the marshes were thawing out and by the end of the month the ice on Lake Hanka began to break up. The party moved to the reedbeds by the Sungacha to watch and shoot the new arrivals, the smaller birds, thrushes and doves. With spring came the insects. Przhevalsky was tortured by the mosquitoes, while his pointer grew thin and ill from hundreds of ticks that dropped from the undergrowth onto every warm-blooded creature. But still he persisted; he watched the herds of wild goat picking their way along the sandy ridges that led them across the marshes north of Lake Hanka to new pastures. When the western half of Lake Hanka was free of ice he rowed over its waters, watching the herons that nested on the islands. At the end of May all the ice had gone and the sturgeon began to move in from the River Sungacha; finally, the voice of the Chinese oriole which had come from Indo-China, the last species to nest, was heard, and the spring migration was over.

Przhevalsky's next plan was to explore the River Sungari disguised as a merchant (to avoid arousing Manchu hostility). But in the summer of 1868 Chinese insurgents burned down two of the villages south of Lake Hanka and roused many of the Chinese gold-diggers and trappers to destroy Russian posts in the Ussuri. Przhevalsky was telegraphed orders to go to the Suchan valley where he had passed the previous December and to take command of Russian detachments fighting the Chinese *hunghutze* (bandits). The Suchan had a comparatively dense Chinese population. Under Przhevalsky's command the bandits, who had only matchlock rifles, slow to load and uncertain to fire, were soon destroyed. He said very little of this campaign, except to comment that it was 'very like the fighting at the time of the 1863 Polish rebellion.' It brought him official

commendation, and signalled the end of the Chinese presence in the Russian Ussuri region. He was finally accepted as a full General Staff officer by the governor-general of East Siberia, General Korsakov.

Przhevalsky was now transferred to Nikolayevsk to be senior adjutant, at least for the winter. He loathed the job and carried out the minimum of his administrative duties. His main task was clear: to write an account of his Ussuri expedition, even though it would have to be published at his own expense. He sent to Warsaw for money. In 1867 the first edition of his geography textbook had been published and Fateyev was preparing a second, expanded edition; this brought in useful royalties. But to finance his future book on the Ussuri Przhevalsky needed still more money. He sent the sables he had bought on the Tazusha to his brother Yevgeni for sale in Moscow. Naively he entrusted them to the ordinary post, and the notoriously corrupt customs officials at Irkutsk opened the consignment, took out the good skins and replaced them with low-grade substitutes. Przhevalsky received only 1,000 roubles for them, little more than he had paid.

Przhevalsky had one infallible means of raising money — he played cards, but not with his brother officers. He struck up an acquaintance with two Nikolayevsk traders and two naval officers. He would go to their homes with only 500 roubles in his pocket, staking up to 200 on a card, and stop playing when he had won 1,000. Then he banked his winnings with a non-playing friend. In the winter months of 1868 he won 12,000 roubles and the nickname of 'golden pheasant' for his luck.

The money Przhevalsky made in Nikolayevsk paid not only for his first major publication, it supplemented the rather meagre grants for his first Central Asian expedition through Mongolia and China. Money was the only salvation for Przhevalsky in the mental and spiritual morass of Nikolayevsk; he wrote, 'Now I can call myself a man of substance and can dispose of myself independently of the service . . . I play cards to win myself independence and I have actually attained my end.'

He found no pleasure or companionship in Nikolayevsk. To Yevgeni he complained, 'Life in Nikolayevsk is so foul . . .

vodka and cards, cards and vodka. There is about as much intellectual life here as among the Papuans of New Guinea. Here [in East Siberia's administration] we have crooks, compared with whom any of the convicts in Russia is of high moral fibre . . . ' He characterized the Amur as 'one slop-pit (of course I mean people, not nature) where everything low and disgusting is poured off from the whole of Russia'. He told Fateyev, "Abandon hope all ye who enter here", any official coming to serve here can write in his diary.'

Although he abstained from drinking vodka, he could not forgo company entirely. Nikolayevsk offered few distractions. The officer's club, it is said, was closed down because of the frequent quarrels that broke out among the members. The population of about 5,000 were provided with only a few taverns, a small library and the Amur Company's store for public meeting-places. Przhevalsky had his regular card games; and as adjutant he had to dine with General Baranov at least once a week, and with brother officers, among them a certain Doctor Plaksin, to whom he lent his Academy dissertation on the Amur region; little did he suspect the consequences. One of Nikolayevsk's prominent citizens, Babkin, struck up an acquaintance with Przhevalsky and presumed to ask him to tutor his adopted daughter, a girl of twelve. Przhevalsky was horrified at the suggestion; he consented only to give her a copy of his *Notes on General Geography*, and in it he wrote, '*Dolbi, poka ne vydolbish*' , which, loosely translated, means, 'Get this into your thick head.' The girl must have had a forgiving nature; in later life she qualified as a doctor and presented Przhevalsky with a copy of her dissertation.

The worst feature of Nikolayevsk was its remoteness: news of his brother Vladimir's marriage, of his mother's harvest ruined by hail, came six months late. Books from Warsaw arrived looking like papier-mâché after their soaking in the bilge of a Siberian river-boat. Przhevalsky sent his collection of plants to Maksimovich at the St Petersburg Botanical Gardens, fearful lest it be ruined on the long haul across Asia and Europe.

He sought refuge in work. Every morning he gave Nikolay

Yagunov lessons in geography and history, and every evening, before dinner, he would test him. Long before his book on the Ussuri was ready he had written reports and articles that were soon to stir Irkutsk and St Petersburg into action. The first response to Przhevalsky's report on the condition of the Cossacks on the Ussuri came from his commanding officer; it was a curt 'I didn't need you to tell me that things are rotten there.' This did not deter Przhevalsky. He submitted a seventeen-page report on the non-Slav population of the Ussuri for publication in the May issue of the 1869 *Notes of the Imperial Geographical Society*; then he wrote, for a non-official, prestigious and liberal magazine—*Vestnik Yevropy (European Herald)*—a description of the Ussuri that criticized the military administration at Nikolayevsk and Irkutsk.

Before the storm burst, Przhevalsky was away. He obtained permission to spend spring 1869 once more at Lake Hanka with Yagunov and two Cossacks, and once more hunted and watched the migrating birds. All the previous winter he had dreamed of the lake; he reminisced in his letters to his uncle and brothers about the water lilies, the black-tipped cranes, and the cartloads of duck. Later that spring he made a full survey of the southern and western shores of Lake Hanka. During the summer he was given the job of conducting Adjutant-General Skolkov on a tour of inspection through the Ussuri area. At last his rewards came: he was promoted to staff captain by the army and given a lesser silver medal by the Geographical Society. (It was always a source of bitterness to Przhevalsky that his Ussuri expedition, which he organized single-handed, providing many of his own funds, and which was so fruitful, brought him only the small silver medal, whereas his assistants on later expeditions who had had no say in the planning and were completely subordinate, were awarded large silver medals.)

At last his tour of duty was over; he had leave to go back to Europe, home and, above all, to St Petersburg where he now had the right to demand support for an expedition to Central Asia. Autumn 1869 was spent in Irkutsk. Przhevalsky gave four public lectures: one culminated in a series of bird imitations so effective that a later traveller on the Ussuri recognized

the oriole's call just from Przhevalsky's whistling.

After travelling some 5,000 miles across the snows of Siberia, Przhevalsky arrived in St Petersburg for the new year. The city gave him headaches, a cough and even fainting fits. But he had a lot of petitioning to do. Semyonov-Tyan-Shansky had already promised the Geographical Society's support for an expedition on Chinese territory. But the situation was now complicated by the Tungan rebellion, which was devastating the west and threatening large areas of northern China. The Russian Ministries of Foreign Affairs and of War had to be consulted, for Przhevalsky's expedition might seem a provocation to the Chinese or be itself threatened by the disorders. The Tungans were, however, of great interest to the Russian authorities. Originally brought to China by the Mongols, probably from Persia and Arab lands, they had been settled in the provinces of Kansu and Shensi. Over the centuries they had become completely Chinese in dress and in language, but they remained Moslems. Under the Manchu Ch'ien Lung, who conquered the remnants of the Mongol khanates in Kashgaria and Dzungaria, the Tungans were settled in many of the oases in the west. Eventually they formed a Chinese-speaking Moslem wedge between the Buddhist Mongols to the north and the Buddhist Tibetans to the south; they were represented, too, in enclaves of Islam in Inner Mongolia and Manchuria. Not until the 1850s, when the decrepit Chinese administration in Shensi began to oppress the Moslems, were they a threat, rather than a prop, to Chinese government over Türki, Mongol and Tibetan peoples. By 1864 there flared up a Tungan rebellion which spread from the borders of the Russian empire in the Tien Shan to within a few miles of Peking. They were supported by many of the Moslem Uighur Turks. Because these rebellious people of eastern Turkestan were co-religionists and also close relatives of the Uzbeks and Kirghiz in Russian Turkestan, they attracted intense Russian interest. (An independent Moslem state, Jetti Shahr — 'Seven Cities' — was set up in eastern Turkestan under Yakub Bey.)

The Geographical Society had been the first in 1867 to draw attention to the Tungan rebellion. After the devastations of the Taiping rebels, the damage done by the Tungans, who

slaughtered Chinese and Mongol non-Moslems, irreversibly destroyed the irrigation systems that made the oases habitable, depopulated whole provinces, and broke for a long time China's lines of communication with its western borders, finally rendered China, in the eyes of many Russian ministers, fit only for partition and conquest.

Przhevalsky once more arrived in St Petersburg at a crucial moment. Four ministers determined his future: Baron Osten-Saken, who was both a member of the Academy of Sciences and an important figure in the Ministry of Foreign Affairs; General Count Litke, who was then vice-president of the Imperial Geographical Society; Aleksandr Vlangali, ambassador to Peking who was now in Petersburg for consultations; and D. A. Milyutin, Minister of War, the most capable and aggressive of the Russian ministers. While the Ministry of Foreign Affairs under Gorchakov was anxious not to antagonize enemies and friends in Europe by any unnecessary expansion of the Russian empire, Milyutin was determined to match the British conquests in Burma and French incursions into Indo-China with similar conquests in Central Asia and the periphery of China. Milyutin had his way; furthermore, he had kept an eye on Przhevalsky over the previous eight years and knew that he was an officer with iron resolve. In the end, Aleksandr Vlangali was persuaded that Przhevalsky had tact as well as strength of mind and could pass through troubled regions of Inner Mongolia without either rousing the authorities to anti-Russian measures or getting himself into serious trouble. Permission, against the better judgement of the Minister of Foreign Affairs, was given for an expedition to show the Russian flag and explore the desolate Ordos Plateau and the still unknown 'Blue Lake', Kuku Nor, where Chinese, Mongol and Tangut (nomadic Tibetan) populations met. The Geographical Society was to contribute 1,000 roubles a year, the War Ministry another 1,000; Przhevalsky was to find 1,000 a year from his own pocket, while the Botanical Gardens contributed 300. The Russian Embassy in Peking, better equipped with information and negotiators than any other Western embassy, began to lobby the Chinese authorities for the necessary passports.

Przhevalsky's preparations were simple. He decided to send Yagunov away to complete his education at the Junker college in Warsaw, under the tutelage of Przhevalsky's faithful friend, Fateyev. Here Yagunov immediately showed the effectiveness of his tutor's lessons in geography and history — 'the energetic youth', as Przhevalsky described him in the foreword to his *Travels in the Ussuri Region*, was top of his class. But now Przhevalsky needed a new companion. He explained to Milyutin that 'a companion is also indispensable should I personally be doomed not to return' — to safeguard, as well as to help gather, the specimens of plants and animals and the scientific information. The idea of an equal or a civilian specialist as a companion was intolerable. He wrote, 'It would be desirable for the youth to come out of enthusiasm and not for money . . . no special literary or gentlemanly breeding is needed.' A Cossack N.C.O. was more to his liking than another officer. He explained frankly to Fateyev: 'Anyone who wants to set off with me must know that he will only be a man who carries out what he is asked to; no personal desires or gathering of collections for himself or someone else is allowed. Such despotism is, in my opinion, essential to the success of the undertaking.'

Finally, Fateyev recruited Mikhail Pyltsov, once Przhevalsky's favourite pupil, now a sub-lieutenant.

Przhevalsky had thrown his playing cards into the Amur as he left Nikolayevsk, declaiming, 'Goodbye to the Amur and goodbye to Amur habits', but the money was useful. He ordered a Lancaster rifle, made to his specifications, from London. He wrote from St Petersburg asking his mother to secure an option on two setters, the better of which he would take to China. Then he raised more money by selling his railway shares. Everything was staked on the coming expedition. He told his mother, 'It's very bad, very bad about the shares, but I'm not too worried now as the journey to Mongolia is for me the best thing and a good piece of luck. On this expedition, of course, my entire future depends. In St Petersburg it's unbearably foul: dust, heat, stench.' But he stayed on through the Petersburg summer until *Travels in the Ussuri Region*, which he dedicated 'to my beloved mother', was ready for the

printers. It was published in August 1870 when, at last, Przhevalsky managed to escape to Otradnoye and the Smolensk countryside.

His mother had been told to order lemonade for the expedition. Przhevalsky's manservant, Ivan Makarov, was set to work making boots, greasing nets with fish fat, and rebuilding the firing range at Otradnoye. Here Przhevalsky practised shooting: ever since his demonstration in the Korean town of Keiko he had given overriding priority to target practice in the preparations for his expeditions. Deadly accuracy with revolver and rifle was to him more of a protection than any passport or official backing. Eventually Pyltsov arrived and, from St Petersburg, the promised money began to come, in paltry dribs and drabs.

In September 1870 Przhevalsky left his tearful mother. The trek across Siberia was bedevilled by knee-deep mud all the way from Tyumen to Irkutsk. At Irkutsk Przhevalsky was issued some of the money promised to him; but at the same time he found himself the centre of a row. Baron Kukel, his protector, was dead. The authorities had read Przhevalsky's article in the *European Herald*; they used the journal of the Irkutsk Geographical Society to call Przhevalsky a liar, a slanderer of the administration. They particularly disliked the criticisms in his article (the book had not yet reached Irkutsk) which implied that settlement should be removed from the control of the military authorities and given to the civil administration, so that peasants, not discharged soldiers and Cossacks, could till the soil. He not only accused the military of cruelty, he blamed them for the starvation, the epidemics of intermittent fever and the demoralization of the population. Przhevalsky wrote a letter of refutation to the Irkutsk Geographical Society, who refused to print it. He resigned from the Society and sent his letter to the *St Petersburg Gazette*. Suddenly, Przhevalsky won support from his chief in Nikolayevsk, General Tikhmenev, who wrote to the same newspaper, confirming that Przhevalsky had written only the truth, and also to the governor-general, Korsakov, to protect Przhevalsky from the consequences of writing to the newspapers, excusing his rashness and his wrath.

Immediately, this row was followed by another. Przhevalsky opened the December 1869 issue of the *Voyenny Sbornik* (*Military Collection*) to find an article by Doctor Plaksin of Nikolayevsk on the Ussuri and Amur. Certainly, Plaksin had been sent to the Ussuri for the winter for 1867-8, but most of the content of his article was plagiarized from Przhevalsky's dissertation. Przhevalsky wrote to Plaksin demanding that he hand over the seventy-two-rouble fee he had been paid. Plaksin eventually agreed, but complained to everyone in Irkutsk of Przhevalsky's grasping nature. Przhevalsky gave the money to a charity for poor Cossacks, but his stay in Irkutsk was unpleasant. He left for Kyakhta, on the Mongolian border, with a heavy heart. Only General Tikhmenev could be relied on to defend him against intrigues: Tikhmenev wrote, 'If they take advantage of your three years' absence . . . and think of writing anything against you, then they'll have me to deal with. I've promised myself that if they so much as open their mouths again, I'll squeeze them till the pips squeak.'

Hating the petty intrigues of army life and officialdom, Przhevalsky, Mikhail Pyltsov and a Cossack from a rich Buryat family, not to mention the setter Faust, left the church spires of Kyakhta for the wooded hills of northern Mongolia and the empty Gobi beyond.

3

Two Mongolian Winters

Late autumn is the kindest season in Mongolia. The relentless north-west gales and terrible cold of winter, the treacherous arid spring and the summer heat that bakes the gravel, clay and sand of the Gobi all give way to the still, clear, chilly days of November. Przhevalsky's expedition covered the 1,000 miles from Kyakhta to Peking over the official trade route which the Russians had been using throughout the nineteenth century and which had been, since the Tientsin agreement of 1860, organized as a proper post-route, with stations run by the Mongols every twenty miles where horses and camels could be changed. The Russians had the right to a certain number of freight caravans which made the journey in anything from twenty-five to forty days; an express courier, once he had notified the Chinese War Ministry, could ride across in nine days. Most of Russia's tea was carried over this route. Chinese traders brought it to Kalgan — 'the gateway' — (Chang-chia-k'ou) on the edge of the Mongolian plateau 140 miles north-west of Peking; Russian merchants then organized caravans of freight camels to Siberia. To keep this line open the Russian authorities put a heavy tax on tea from China that arrived by sea at Odessa, so that the slow and expensive land route remained profitable.

At first Przhevalsky saw little of Mongolia. The first 200 miles to Urga (now Ulan Baatar) was covered in a Chinese two-wheeled cart, carrying a wooden box in which the passengers were jolted along, shut off from the outside world. At Urga, however, Przhevalsky found a Mongol caravan leaving for

Kalgan and the leisurely pace of the loaded camels left Przhevalsky and his companions free to walk ahead shooting at the gazelles and the buzzards.

Mongolia, when Przhevalsky saw it, was a geographical and ethnological term, not a political entity. Today the Mongols are divided among three states: the million or so Khalkha Mongols form the Mongolian People's Republic; several million Mongols of the Chakhar and other southern groups live in Inner Mongolia (four provinces, from Jehol to Ningsia Hui, of China), every year more integrated with their Chinese neighbours; various groups live in the Soviet Union—the Buryats in Siberia, the Kalmyks near the mouth of the Volga. The dynamic Mongol state built up by the Genghis Khan had disintegrated by the sixteenth century into a plethora of petty khanates who were gradually brought peaceably or violently under Chinese suzerainty. There was more than one reason to account for the Mongols' reversion to a peaceful nomadic life. The importation of Yellow Sect Buddhism from Tibet and the foundation of the monastery Erdeni-Dzuu on the site of the ruined capital of Karakorum; the effectiveness of the Ming and Manchu dynasties' political and administrative methods—methods borrowed from the Mongols themselves—in subduing whole peoples by subverting their rulers; the syphilis, plague and typhus which the Mongols brought home from their conquests and which ravaged every single Mongol family: which is cause and which effect is hard to say. In the 1870s Przhevalsky found the Mongols feckless, talkative, hospitable, inquisitive, but without serious interests beyond those of the nomads.

Urga was really a Chinese military garrison built around a religious community, *Bogdo* (Holy) or *Da* (Great) *Küren* (Monastic Town). Przhevalsky had the advantage of spending four days there in the company of the Russian consul, Yakov Shishmaryov, who knew a good deal about the Mongols and travelled in the west of Mongolia. But the lamaseries of Urga, where the Kutukhtu, the third living divinity in the Buddhist world after the Dalai Lama and Panchen Lama of Tibet, resided, made little impression on him. He knew nothing of the works of scholarship—translations of the Buddhist scrip-

tures and of the Tibetan encyclopaedias, thirty-volume dictionaries of the Tibetan, Manchu and Mongolian languages—which the mindless discipline, the untidiness and the filth of the lamas' community belied. Buddhism to Przhevalsky was a pretext for idleness, a religion that sapped vitality and hindered progress.

There was much in the Mongols that Przhevalsky liked. They had something in common with the Cossacks (many of the Transbaykal Cossacks were of Buryat Mongol blood): they despised peasant labour and the plough, loving cattle and, above all, horses; they liked to travel, to sing and to make love; despite their subservience to Chinese officials and their feudal princes they had a natural equality in their bearing with superiors. Like the Cossacks, they were hospitable and easy in their domestic life. Mongol women and girls, though they had to do all the work of the community, had the spirit and the freedom of Cossack womenfolk. But the Mongol's personal habits horrified Przhevalsky. Like many nomads in arid countries he had a morbid fear of water: he never washed, he would use dry dung not just as fuel but as a plate for meat, and he would drink tea out of a dish from which he had just eaten raw sheep fat. Nevertheless the Mongols never drank unboiled water—always brewing tea—and each kept to his own personal wooden bowl, so that there was some system of hygiene. The Mongol diet centred on mutton and milk products—fresh, sour or alcoholic; even Przhevalsky's appetite was dwarfed by that of his Mongol guides, one of whom devoured ten pounds of mutton at a sitting. Przhevalsky was shocked by the Mongols' gluttony, but his own eating habits repelled them; once his Mongol guide ran off to vomit when he saw Przhevalsky eating a wild duck he had shot.

To demand the tolerance and objectivity of the twentieth-century anthropologist from the nineteenth-century explorer would be futile. What drove the Livingstones or Przhevalskys into darkest Africa or Asia was not the need to prove an academic hypothesis, but, in part, a reaction against European society. Men like Przhevalsky continued to see the worst in all cultures more clearly than the best. Hypercritical or romantic, the dreamer's observations of alien societies are not

less valuable for being one-sided. And in Przhevalsky's case, a bias against stagnant cultures was inseparable from his own dynamism and his single-minded pursuit of the wild.

The Khalkha Mongols and their country had already been the subject of several Russian studies. Bunge had surveyed the route across the Gobi to Peking in the 1830s, when it began to replace the dangerous, if more direct, route across Kirghizia and Dzungaria from southern Siberia. But the Mongols of the south, on the middle reaches of the Huang Ho (the Yellow River) on the Ordos Plateau, or farther west in the A-la Shan (Lola Mountains) and around Kuku Nor, were virtually unknown. Scholarly accounts all drew on Chinese sources, often outdated and inaccurate. Since the days of Marco Polo, an occasional European had penetrated from Peking to the west. Przhevalsky had read their accounts, but not one was a professional geographer. Odoric de Pordenone had been in Lhasa in the 1300s; a handful of Jesuits had penetrated Tibet in the seventeenth century, and thirteen Capucin monks had spent some years in Lhasa in the eighteenth century. The French missionary travellers Abbés Huc and Gabet had crossed through Hsi-ning to Tibet, but their account (of the 1840s) was too full of sensation and inaccuracy to be useful scientifically. Przhevalsky was entering a region of which less was known than of darkest Africa, so fragmentary and derivative was information on its peoples, flora, fauna, natural features and climate.

The journey from Urga was a pleasure trip compared with the months to come. After the hilly steppes of Urga the landscape became 'gobi'—semi-desert of clay and gravel with sparse clumps of grass, occasional shrubs and even dwarf trees. Przhevalsky and Pyltsov walked ahead, often diverted from the track by the *dzeren*, the Mongolian gazelle. The caravan would be held up for an hour or two until Przhevalsky returned with the gift of a carcass to placate the impatient Mongol camel-driver. In the air and beneath the ground nature was alive. The ground squirrels gathered hay in stacks to last through the terrible, though snowless, Mongolian winter. They would scurry from hole to hole, while high above buzzards and eagles circled, ready to pounce. Carrion crows

followed the caravan, ripping the sacks of supplies, even tearing open the camels' humps. These carrion crows horrified Przhevalsky in Urga, where, together with the vultures and the half-wild dogs, they tore at the flesh of the dead who, according to Mongol custom, were dragged out to be devoured by the animals.

With each day the temperature dropped and the Gobi became more and more a sandy desert; the north-westerly wind that made the thirty-degree frosts almost unbearable grew stronger. But by the end of December the worst was over: Przhevalsky was passing into the gentler and more fertile zone of Inner Mongolia among the Chakhar Mongols. Then, after almost alpine mountains, the plains of China, warm, bustling, well-watered, opened out several thousand feet below the Mongolian plateau. All the traffic from Mongolia filtered through Kalgan, a town of 70,000 Chinese with a handful of Russian traders and two Protestant missionaries. Here Przhevalsky hired two horses and some pack-mules for the descent to Peking.

The journey and Peking itself, despite the warm air, the rich arable fields and the groves of cypresses and juniper, aroused in Przhevalsky a deep aversion to everything Chinese. His pride as a European was stung by the Chinese scorn for the 'foreign devils' who had humiliated them in two wars. His European fastidiousness was shocked by the villagers' unconcealed defecation and their careful husbandry of all animal or human dung for the fields or the fireplace. He loathed the delicacies of Chinese cuisine: Przhevalsky would say he 'never tired of mutton' and no amount of shark's fin could tempt him to overcome his prejudice against food cooked in oil.

Peking was still closed to European traders; Europeans were to be found only among the five embassies—British, French, German, American and Russian—the Russian Clerical Mission and the missionaries. Although the Russian Embassy, by far the best equipped, boasted of such members as Dr Emil Bretschneider, the world-famous systematic botanist, and the Russian Clerical Mission still upheld its scholarly reputation, Przhevalsky was disgusted by his compatriots. It was just like Nikolayevsk on the Amur, except that they swilled champagne

instead of vodka. From his very first day in Peking, his letters to his mother ('on the lack of moral fibre of the Chinese') and to General Tikhmenev are almost incoherent with revulsion:

The first impressions are enough to say unmistakably that it is unimaginable foulness. The same clay and wattle houses as on the Ussuri. Unimaginable filth and stench, people squatting relieving themselves right and left in the street . . . The Chinese here are ten times worse than our Amur ones. On the Amur at least they're kept in fear and trembling, while here they call all Europeans to their faces or behind their backs nothing but devils . . . Crookery and fraud are developed to extremes. The Chinaman here is a Jew plus a Muscovite pickpocket, both squared. But the lamentable thing is to see Europeans being polite to this rabble . . .

He complained to his mother that January of 1871: 'You can't walk here if you don't carry a *nagayka* whip . . . this Russian weapon is the only way of putting sense into the exceedingly persistent impudent fellows, especially the beggars who walk all the streets here quite naked.'

In a week his mind was irrevocably made up, in a conquistador mould which was to soften little in his future journeys. He wrote to an officer friend: 'In my opinion only rifles and cannons of the Europeans can do any good here. Missionary preaching, on which Europe puts its hopes, is the voice of one crying in the wilderness . . .' China, ruined by a succession of inadequate emperors, a corrupt administration, the greed of the Europeans and the savagery of the rebels, was finished in Przhevalsky's eyes. Already his journey was taking on political overtones. Przhevalsky was the first Russian to voice the idea of fomenting a rebellion of Buddhists as well as Moslems and of uniting the Buddhist Tibetans and Khalkha Mongols with the Buddhist Buryats as well as the Moslem Uighurs with the Moslem Uzbeks and Kirghiz—under Russian sovereignty. He began to look at Mongolia and China from the point of view of a military strategist. Above all, his dream of seeing Lhasa and the Dalai Lama, of penetrating to the spiritual centre of the

empty lands he was exploring, was now not just a personal, but a national dream.

It is strange and sad that Przhevalsky saw only China's degradation — *une ruine effroyable* as Huc and Gabet put it. He had time neither for the grandeur of the past nor for the hopeful augurs of the future. He was openly contemptuous of Russian sinologists and their books on the great dynasties and philosophers of China. Even such figures as the Emperor K'ang Hsi, who created a state of such exemplary efficiency that even the British Embassy headed by Lord Macartney was lost for words, seemed to evoke no sympathy in Przhevalsky. In the 1870s, under the Dowager-Empress Tz'u-hsi and such clear-sighted statesmen as Li Hung-ch'ang, there were real signs that the Chinese were coming to terms with the modern world; but Przhevalsky chose to ignore such signs. One thing only in Peking pleased him: the university was using his *Notes on General Geography* as a set text.

Przhevalsky found the funds allocated for his expedition pitifully small. Luckily, Aleksandr Vlangali put him up at the Embassy and very soon this former mining engineer became one of Przhevalsky's strongest supporters. He lent the explorer money against the funds due from St Petersburg, he even wrote to the War Ministry asking them to double their grant. He was confident that Przhevalsky would break through the hostile and turbulent provinces that lay between Peking and Kuku Nor. He wrote to Litke at the Geographical Society: 'As far as insurgents are concerned, the name of a Russian and the absence of anything that can arouse a robber band's greed will deflect any attempted attack.' After some months Vlangali succeeded in getting Przhevalsky a passport from the Chinese that would let him travel only as far as Kansu province; as yet the half-wild Tanguts (nomadic Tibetans) around Kuku Nor made Kansu impenetrable in the view of the authorities.

Przhevalsky still had not been given the two Cossacks promised by the War Ministry. He decided to take the Buryat Cossack who had joined him in Kyakhta, to borrow a Cossack from the Peking Embassy and to survey the country that lay between Kalgan and Dalai Nor (the Great Lake) 200 miles north-east. As well as an exploration of an unknown corner of

south-east Mongolia, it was a trial, a foretaste of the expedition westwards. He bought two horses for himself and Pyltsov and seven camels to carry the Cossacks, and about a ton of supplies. Other preparations were harder. No amount of money would induce any Chinaman or Mongol to come as a guide. Even money itself was problematical. The Chinese dealt in silver, the unit being a liang (or tael) of about 37 grams ($1\frac{1}{2}$ ounces) which had to be hacked off an ingot. There were cash coins, but the rate of conversion for these varied from town to town, from 1,500 to 6,000 coins per liang. Every transaction needed the speed of a calculating machine and the skill of a silversmith. Chinese villagers often refused to sell food or provide accommodation at any price. After a gruelling journey at the beginning of April the party reached the shores of the lake, horribly illuminated in the night by a grass fire which raged all round its banks.

Like Lake Hanka, Dalai Nor was a birdwatchers' paradise. The migratory species battling northwards against the freezing gales stopped here, but only to rest. Siberia was far more friendly for the geese and cranes in search of a nesting place than this shelterless desolate salt lake. But once again Przhevalsky could shoot to his heart's delight and rest from the rigours of the journey.

Apart from the cold and the wind that raised clouds of salt or sand which blotted out the sun and settled in every pore of the skin, Przhevalsky had to cope with the hostility of the population. One of his chief tasks was to map his routes in China on a scale of six miles to the inch. He would persuade the local villagers or Mongol nomads that his Schmalkalder surveying compass was just another sort of binoculars. He discarded the tripod, lagged behind the main party, taking bearings as unobtrusively as possible. At night, Pyltsov would engage visitors in conversation through the Buryat interpreter while Przhevalsky shut himself in his tent to set the bearings out on paper. While he did not have to go to the lengths of the pandits sent out by the India Office to survey southern Tibet, disguised as Ladakh merchants or pilgrims with their theodolites and compasses built into prayer wheels, Przhevalsky was still forced constantly to employ ruses to carry out his work.

He began to see the magnitude of his task. The Mongolian horses were wonderfully adapted to expeditions: they needed little rest and no special food. He watched the great herds which belonged to the Emperor thriving almost untended on the sparse semi-desert around the lake. But the two-humped Bactrian camels were more complicated animals. Przhevalsky learnt to admire their physical endurance but they needed special handling. Starved for three days before any expedition, watered as little as twice a week, picking up the dry scrubby vegetation of the semi-desert, they could carry four hundred-weight twenty-five miles a day for a month. But the Mongols gave their camels special consideration which Przhevalsky, anxious to press on, would not concede. Camels required ten days' rest each month; they were used to six months—the summer—on leave each year with the herd. They could not endure the damp mountain air that they were to find in Kansu, nor could they recover easily from the high altitudes of Tibet. Above all, they needed skilled loading to prevent ulcers and sprains. The Mongols had all sorts of techniques: they used human urine to heal the sores; they stitched patches of leather with an awl on to the camels' heels; they dosed them with rhubarb; they had a custom by which any exhausted camel could be left in the care of the nearest *ger*. (A *ger*, or *yurt*, is a circular house, about twelve feet in diameter, made of felt stretched over a lattice frame; the Mongol nomads dismantle and re-erect their *gers* as they move with their herds.) Przhevalsky's Cossacks were little used to camels and many animals were to die during the expedition. The camels were willing; they would eat leather, straw, even dried meat—the bird carcasses Pyltsov was preparing. But Przhevalsky found their sensitivity sheer cowardice. When a camel saw a pile of bones in the desert it would bolt in fright.

Przhevalsky's time was often taken up sharing the dirty work with the Cossacks. Loading the camels, staking them out for the night, each attached by a rope to its wooded *burunduk* (a stick through the nostrils) on a common line, and gathering *argal* (dried dung) for a fire all took time which could have been spent on more valuable scientific work. The barometer had broken on the journey across Siberia and Przhevalsky had

to measure altitude by comparing the temperatures at which water boiled. Temperature and humidity were recorded four times daily; everything visible was mapped, as well as the more plausible information from the local Mongols. This forced the party to move always during the daytime, whatever the conditions, and the camels and men suffered accordingly.

Spring came, after a fashion. In May, the brackish lake water still froze an inch deep at night; the grass was blackened with fire—the gales brought dust and salt, but not rain. Yet the camels began to moult and by the time Przhevalsky reached the outskirts of Kalgan he managed to find thirty species of plant in bloom. In Kalgan the new Cossacks, one Buryat and one Russian, were waiting. They were to do as much of the manual work as possible and the Buryat was to be an interpreter, at least with the Mongols. But neither proved satisfactory. The Russian was homesick and the Buryat could not understand very much of the dialect of the southern Mongols. The next few months were to be among the toughest that Przhevalsky ever underwent.

In Przhevalsky's eyes the real expedition was now beginning. On 3/15 May 1871, the last letters were posted in Kalgan and, with an extra camel, the party set off on the track that led west to the ancient Mongol town of Kuku Khoto (Hu-ho-hao-t'e) and the Yellow River, which Przhevalsky intended to cross at Pao-t'ou to reach the Ordos Plateau. Soon they met up with a Belgian missionary and with him went a little way south to a village. Here they met Sanda Jembu, who had guided Huc and Gabet to Tibet in 1844. He was now old and refused to accompany Przhevalsky as a guide. But the missionaries found another Christian Mongol who agreed to act as guide and as a Chinese-Mongol interpreter. The very first night the 'guide' ran off, taking with him a revolver and a knife. For two weeks Przhevalsky was neurotically suspicious of the population: everyone in the party had to take two hours' guard duty each night, until they left the Kuku Khoto road for wilder country to the north and felt safer. Here, in the foothills of the Yin Shan, Przhevalsky could relax and hunt the wild mountain sheep. The local Mongols were unarmed, and the wild sheep were unafraid of man and so curious that, even

when Przhevalsky fired, they stopped to see what had happened. But so thick-skinned and thick-boned were they, that it took some time before Przhevalsky could kill two elderly females. Here, in June, at the same latitude as Naples, there were still morning frosts and even two blizzards; few birds sang.

Moving ever westwards, Przhevalsky passed into the country of the Öröd Mongols. At night he was forced to pitch his tent among their *gers*, for they marked the only watering places. The water was horrible; he wrote to Fateyev, 'Take a glass of pure water, put in a teaspoonful of mud, a pinch of salt, lime for colour and goose droppings for smell . . .' The Mongols were less hostile than the Chinese, but just as curious. Przhevalsky had decided to pretend he was a trader; he had brought needles and soap with him which he sold at anything from five to eighteen times what he had paid for them. But he could not satisfy the demand for bronze idols or bear fat and, despite the skills of his Buryat Cossack, his disguise was so unconvincing that he had to abandon it. It was easier to claim that he was an official on a tour of inspection and discuss cattle, medicine and religion with the Öröd. Przhevalsky's herbarium persuaded the Mongols that he was a doctor, a reputation he spread far and wide by curing several visitors with doses of quinine. The Mongols' religious preoccupations convinced many of them that Przhevalsky's equipment and bearing were those of a magician. For a while his path westwards was smoothed by fame of superhuman faculties.

But reaching the Yellow River, Przhevalsky was among hostile Chinese again. He then moved off into the Yin Shan, which at this point approaches the river. The gullies of the mountains, which the Mongols called the Muni Ula, were sparsely covered with pines and alders, and even wild apricot. The rains on the north side produced streams which dived underground, leaving shrubs to mark their dry beds. Higher up were alpine meadows from which Przhevalsky could see the Huang Ho and the Ordos plain beyond. The meadows were broken by rocky crags and chasms, over which Przhevalsky and Pyltsov clambered, risking their lives as they shot at the gazelles and deer. Often the bodies of the wounded and dead

animals fell into impenetrable abysses. But the solitude of the Muni Ula soothed Przhevalsky's soul; July brought with it a spurt of growth and the meadows were dotted with flowers.

After a time the local Mongols reconciled themselves to the fact that Przhevalsky would stay; they sold him milk and butter. Soon relations were so friendly that Przhevalsky managed to hire a Chinese-speaking guide, Jüljig, to take the party down to the Yellow River again, to the ferry and westwards over the Ordos.

Przhevalsky crossed the Muni Ula, stopped at the town of Pao-t'ou for rice and groats and, after several interviews with the Chinese general in command and the gift of a watch, was billeted in a merchant's house. The raucous clamour of Chinese markets contrasted with the silence of the Muni Ula. Instead of fragrant apricot blossom, Przhevalsky breathed the odours of cooking oil, charcoal, mud, sweat and dung. Pao-t'ou was full of soldiers, some of them armed with European rifles, others with bamboo pikes, part of the army that had driven most of the Tungans out of the middle Huang Ho; to Przhevalsky they seemed nothing but a rabble of opium addicts. Eventually, after reciprocal gifts, Przhevalsky retrieved his passport and the expedition was embarked on the rope ferry.

Przhevalsky was preceded in the Ordos, a plateau surrounded by the Huang Ho on the west, north and east, and cut off by the Great Wall in the south, by no less an explorer than Père Armand David on the latter's first botanical journey of 1867. Huc and Gabet had also crossed the Ordos. Przhevalsky preferred to keep near the river bank, rather than cut across diagonally, on his way west to Teng-k'ou. Secretly, he measured the flow of the river and mapped his route. There were no towns or villages for miles. The natural aridity and the massacres by the Tungans had reduced the populations to small groups of Mongols who lived off the liquorice roots they dug up, or of Chinese, who farmed plots of opium poppies concealed in the reeds by the river. Przhevalsky tried a pipe of opium but felt no effect. Feral cattle, which had survived the death of their herdsmen, grazed the desert shrubs warily. Przhevalsky shot four wild bulls and the party had at least

meat in plenty.

A few days west of the ferry the baking-hot ground gave way to a lake, Tsaidamyn Nor, teeming with duck, and fed by a stream beside which the camels could graze. Here they stopped for ten days before passing on into the belt of sand that covered much of the northern Ordos and the land northwest of the river. In the sand he rediscovered a plant of the *Cruciferae* family, *Pugionum cornutum*, previously known to science only by a twig in London and a twig in Stuttgart. He discovered two species of carp in the river which was also inhabited by turtles, sacred to the Mongols for the hieroglyphic-like markings on their shells. The Cossacks were so terrified of them that they refused to bathe.

It rained frequently on the Ordos, but the heat evaporated the water and the only outcome was a plague of mosquitoes and gnats which tormented the camels. Because of the insects, Przhevalsky let Jüljig share the expedition's tent at night. Jüljig turned out to be covered with syphilitic sores; six weeks' proximity to him was a horrible trial to Przhevalsky. To avoid the heat and the insects, the party rose before dawn, but even so, sweat and thirst soon silenced the normally songful Cossacks and depressed even the ever-cheerful Faust. The party would rest at the first well they encountered in the afternoon, before working on the results of the day and setting up camp. The camels had to be watered, dung gathered for a fire, a sheep had to be bought or hare and grouse shot for the evening's soup. They ate with their fingers out of wooden bowls. The Cossacks and Jüljig took turns to graze the livestock.

As they neared the ferry point for Teng-k'ou on the west bank of the Huang Ho, Jüljig disgraced himself. He fell asleep under a bush, while Mikhail Pyltsov's horse grazed on the bank. The bank caved in and the horse drowned. Pyltsov had to ride on one of the camels, and Jüljig was told to leave the party at Teng-k'ou.

Chinese soldiers in Teng-k'ou spotted the expedition on the opposite bank. They rowed across and took back Jüljig with Przhevalsky's passport for the commander to inspect. Jüljig spoke good Chinese and presently the soldiers returned to pick up Przhevalsky, who had changed into more formal clothes,

and who took with him his Buryat Cossack, his dog Faust and his double-barrelled Lancaster. Only a few civilian inhabitants and one clay wall were left in Teng-k'ou after the rebellion. Przhevalsky was made to wait in a house hung with bunches of garlic. Then he had to submit to a bullying interrogation by the commander of Teng-k'ou who became friendly only when he demonstrated his marksmanship in competition with the commander and his ancient English gun. In the confusion, however, Faust was lost and it was with great relief that on returning to his camp on the other bank of the Huang Ho Przhevalsky saw that Faust had swum back on his own. After many demands from the commander, who tried to appropriate as many as he could of Przhevalsky's weapons, the soldiers agreed to ferry the entire expedition over to Teng-k'ou, dragging the camels by ropes across the quarter-mile-wide river.

Fortunately for Przhevalsky, a Mongol official befriended him. The Mongol gave him a Moslem who proved an efficient guide across the A-la Shan desert that lay ahead; he also interceded with the Teng-k'ou commander. In the end, Przhevalsky retrieved all but a few trifles from the mandarin's 'customs inspection' and even managed to sell two pistols, a revolver and a dagger for fifty liang. But it was a near thing; the commander had threatened to behead him should he leave without express permission.

As Przhevalsky set off across the burning sands of A-la Shan on the 120-mile journey to Ting-yüan-ying, he swore he would skirt round Chinese towns in future. He was lucky in his guide; the wind-blown sands of the A-la Shan had obliterated the tracks. Only every twenty or thirty miles was there a well, with a cluster of *gers* belonging to the Öród Mongols and functioning as a rudimentary postal station. The only food was the *sulakhir* (*Agriophyllum gobicum*), a grass that gave fodder to the camels and whose seeds the Öród Mongols gathered and ground into a nutritious flour which they stirred into their tea. There was little life: an occasional *khara-sulta*, or black-tailed gazelle, darted across the route; gerbils squeaked an alarm from their holes, while desert jays flew about in search of lizards. One of the lizards, on which the A-la Shan predators

depended, turned out to be a new species—*Eremias przewalskii*. But the sands were hostile; exhausted ducks and starving thrushes lay dying, drop-outs from the migratory flocks already heading south from Mongolia.

Three officials intercepted the party north of Ting-yüan-ying. They asked if the party was composed of missionaries and, when the reply was in the negative, welcomed them to the town. Everything outside the clay fortifications of Ting-yüan-ying had burnt down, but within the walls of the capital of the 5,000 Mongols of A-la Shan the prince's palace and park survived intact. Here Przhevalsky was shown unwonted friendliness. The prince, a feudal vassal and a relative by marriage of the emperor, was withdrawn; his name, as was the custom of Mongol princes, was secret, he was a widower and had taken to opium. But the two younger of his three sons and his prime minister, the lama Baldyn Sorji, were more forthcoming. The second son was, in principle, an abbot lama and a reincarnation of a minor godhead. But he much preferred hunting to other rituals and was the master of a two-hundred-strong fox-hunt of mounted lamas. He had even organized a small band of lama-warriors to repel Tungan attacks. He bought a gun from Przhevalsky and together they went shooting, the abbot driving away his worshippers who were disturbing the pheasants. Przhevalsky equally liked Siya, the third son, who was still in his teens, but just as keen a sportsman. The A-la Shan prince billeted the expedition on a Chinese hotel-keeper; crowds of visitors tore holes in the paper windows to gaze at the subjects of the 'white Khan', as the Russian tsar was known to the Mongols. The lama Sorji had actually been in Kyakhta once and was predisposed towards Russians; thanks to him, the prince sent daily gifts of melons, apples and pears to the fruit-starved Przhevalsky and Pyltsov. Przhevalsky returned their hospitality by giving the prince the barometer that had broken in Siberia, and binoculars and hunting accoutrements to his sons. Then Przhevalsky sold off some of the goods he had bought in Peking, making a seven-fold profit and conceiving ideas for Russian trade (which were to materialize in years to come) with the Mongols of China.

Sorji gave Przhevalsky a fund of information on the pil-

grimage routes from Urga through A-la Shan to Tibet that had been in use until the Tungans cut the tracks and poisoned the wells. He talked of the twelfth Dalai Lama, Prinlai, who was born, or rather reborn, in the Ili Valley on the Russian border (and who was to be poisoned by the lamas, perhaps at Chinese instigation, in 1875 at the age of nineteen). Sorji told Przhevalsky of the Tibetan's dream of Shambalyn, a land of milk and honey to the north to which they would migrate in 450 years' time. Every detail encouraged Przhevalsky's dream of Lhasa. Lhasa was the Buddhists' Rome, the Dalai Lama its Pope. Closed to all except Tibetans, Mongols and other Buddhist peoples, the capital of the last completely unexplored land in Asia, to a man of Przhevalsky's temperament it had the magnetism of Mecca and the poetry of Eldorado. It was as much an irrational symbol of the unattainable, as a political or geographical goal.

After a proper interval, the prince received Przhevalsky formally. He asked if Przhevalsky could bring him a camera and then if it were true that the camera worked with a fluid extracted from children's eyeballs. (Twenty-three Europeans had been murdered in Tientsin in July 1870 on suspicion of killing children for their eyeballs.) The prince gave Przhevalsky permission to hunt in his reserve, the A-la Shan mountains that separated the Huang Ho from the deserts; he arranged for Sorji to look after Przhevalsky's camels and one of the Cossacks who was immobile with homesickness.

The first snow was falling in September in the A-la Shan mountains. Isolated by desert, a narrow ridge of schists, limestone and gneiss, only seventeen miles wide, the mountains gave Przhevalsky all the solitude he craved. Here he could shoot the *kuku-yamaan* (the blue goat or bharal), and the deer reserved for the prince. It rained frequently, but the mountains were too narrow to hold the water in a stream or in pools; consequently there were few species of flora and fauna to collect. But the *kuku-yamaan* were plentiful on the inaccessible crags. Once Przhevalsky spotted a herd of twelve on a cornice which left them no escape; later, he wrote in a letter:

I couldn't hold back with emotion at seeing two big animals flying somersaulting into the terrible depths. But a hunter's passion overcame the force of impression. I loaded my carbine again and put another two bullets into the *kuku-yamaans*, who didn't know what to do with fear. So I fired seven times from one place, until at last the animals decided to do something desperate: they descended the ridge of the rock and leapt about eighty feet down from the cliff.

But after these two happy weeks, Przhevalsky returned to Ting-yüan-ying where he realized that having only fifty liang—the price of one good camel—he could now go no farther. He had to return to Peking for more money and supplies. In any case he was ill-equipped for the approaching winter and his passport would take him only as far as Kansu. There were other factors: the Tungans were still ravaging Kansu, 100 miles to the south, and in many areas Chinese hostility to Russians had been inflamed by the events of 1871—Russia had announced that it was taking 'temporary' possession of the Ili Valley in southern Dzungaria to restore order. The Ili Valley (or Kulja region) included the two passes which the Chinese army would need to hold if it was ever to crush the Moslems, the Tungan and Uighur rebels of Dzungaria and Sinkiang.

Selling two rifles to get some new camels and a little silver, Przhevalsky took leave of the abbot, Siya and Sorji, who gave him a Mongol guide. It was now late October and Przhevalsky was in a hurry to be back before winter overtook him. He chose to avoid the settled areas of the Yellow River and to take the mountain route to the north. Misfortunes beset him almost at once. Mikhail Pyltsov fell ill with typhoid. At the spring of Khara Morite, where the track east forked from the Urga caravan route, they halted. For nine days Przhevalsky watched helplessly, until Pyltsov was over the worst and could be propped up, half-conscious, in the saddle again. The party took the northern, Gobi side of the Khara Nariin mountains. Now the first blizzards forced them to stay in their tent. Two camels and a horse were so ill that they were abandoned. After

travelling 100 miles Przhevalsky crossed the mountains back to the warmer Huang Ho side. Here there were Chinese villages and encampments of Mongols, who had fled from the Tungan parties and soldier marauders in the Khara Nariin. The landscape was as desolate as the Ordos across the river, but in the grasslands that followed the old channels of the Huang-Ho, Przhevalsky could use Faust to sniff out countless quail and pheasants.

Another 100 miles brought Przhevalsky to his old route from Kalgan. From here he could dispense with surveying and taking bearings. But he had to suppress his irritation with his Cossacks and the Mongol, who delayed departure each morning by their endless tea-drinking. Now they were climbing away from the river again, on to the Mongolian plateau; as the scarlet sun set, an ominous grey-blue belt spread from the east. The cold was deadly. On this deserted route they had to buy camel dung or cut up saddles for fuel. The air froze the fat from the meat they ate into a solid coat on their hands, and the candle burnt so deep that the flame was buried in tallow. In vain they insulated the tent with baggage and Pyltsov snuggled up with Faust under his felt blanket. Everyone slept naked and, having to get up every night to shoot the wild dogs that raided the tent and the wolves that scared the horses, they shivered. One day Pyltsov's horse bolted and threw him, knocking him unconscious. Some fifty miles north of Kuku Khoto disaster struck near the temple of Shirete Dzuu, where the caravan route to Uliasutai in western Mongolia passed. Przhevalsky's camels wandered off in search of pasture and vanished, either stolen or swept away by another caravan; no one would help, and for days the Cossacks searched. One sick camel and two lame horses were left. One of the horses froze to death; the camel collapsed a day later, blocking the door of the tent with its carcass. Finally, Przhevalsky exchanged the carcass for hay for the remaining horse and persuaded a Mongol to sell him a stronger animal, on which one Cossack and the Mongol rode off to Kuku Khoto. While Przhevalsky waited, he watched the Chinese searching the Gobi for the carcasses of gazelles, stricken by pestilence. He could do nothing; there was not even fuel for a fire to melt ink and write. After

seventeen days the Cossack and Mongol returned; they had spent Przhevalsky's last liangs on some half-lame camels which brought the expedition to the comparative warmth of Kalgan just in time for the Russian New Year of 1872.

Przhevalsky had lost twelve camels and eleven horses — dead, abandoned, lost or traded in. But he was eager to set off again. From Kalgan he wrote letters full of undiminished energy. 'Yes,' he asserted to Fateyev, 'only here can one appraise the mighty moral force of the European compared with the decrepit nature of the Asiatic.' He described how he would thrash a Chinese who had misdirected him, or praised the A-la Shan prince's sons, 'one is very handsome — almost a European'. From Kalgan he sent off his collected specimens, including some fine sheep and antelope skins. Then he went straight to Peking on his own to talk to Vlangali. Vlangali persuaded Przhevalsky's backers to pay him and Pyltsov twice as much and gave them an advance. He also pressed the Chinese Ministry into granting Przhevalsky a passport giving him the right to go to Tibet at his own risk and with two native guides. While Vlangali negotiated, Przhevalsky went on to the European treaty port of Tientsin, where he bought 600 roubles' worth of bric-a-bac to sell at a profit in A-la Shan, and acquired an entire arsenal for the expedition: one Berdan carbine for himself, two Schneider carbines, a seventeen-shot Henry Martini for one Cossack, thirteen revolvers and nearly a quarter of a ton of ammunition, as well as a new aneroid barometer for measuring altitude.

4

Invitation to Lhasa

On his return to Kalgan, Przhevalsky replaced his Cossacks with two new Cossacks from the Russian garrison at Urga. One was Russian, Panfil Chebayev; the other, a Buryat, Dondok Irinchinov, was to accompany him on all his Central Asian travels. He quickly grew to love them. Przhevalsky joined them in daily target practice with the new weapons, until they could put on a demonstration of rapid and accurate fire that compelled the Chinese of Kalgan to gasp with admiration. Despite Faust's opposition, the expedition took on one more member: Karza, a Mongol dog, who was to take over sentry duty at night. Then, on 5/17 March 1872, with nearly one-and-a-half tons of provisions loaded on nine camels, they set off along their old route on the 600-mile journey straight for A-la Shan.

By early June Przhevalsky was once more in Ting-yüang-ying, wearing full staff officer's uniform, with gifts of a revolver, rugs, pistols and picture postcards. It was here that he had an unexpected stroke of luck. A caravan of Tanguts, a nomadic, Tibetan-speaking people inhabiting the wetter areas on the upper Huang Ho and in the Kansu mountains, the Ta-t'ung Shan, were on their way to Kuku Nor, the Blue Lake, which was the one still unexplored region in Przhevalsky's original programme. The Tanguts were partly traders, partly pilgrims to the lamaseries in the Ta-t'ung Shan and, at first, they seemed overjoyed at the prospect of having Przhevalsky's armed party to protect them from Tungan attacks. But the A-la Shan prince tried to deter Przhevalsky with threats, promises and deceitful prevarication—in all probability he

was answerable to Peking for Przhevalsky's safety, though Przhevalsky suspected he was waiting for a message from the Chinese authorities in Ning-hsia (Yin-ch'uan) to the south authorizing or forbidding the expedition to go on into an area of military operations.

Nevertheless, after selling his Tientsin goods and exchanging a carbine for six more camels and 100 liang, Przhevalsky set off with the Tangut caravan. He hung back in the rear so that his observations might pass unnoticed. He dared not take proper bearings, and in any case the Tanguts preferred to rise at midnight and travel in the coolness and the dark. The desert that stretched between Ting-yüan-ying and the mountains of Kansu was horrible. Worst were the Tengri sands, where only dung and skeletons—human and animal—marked the route. Once, after drinking tea, Przhevalsky glanced into the well from which the water had been drawn to see a human corpse rotting at the bottom. The Tungans, of which he had heard so much ever since leaving Urga, when they were threatening central Mongolia, were now a reality. Ruined lamaseries were strewn with decomposing bodies.

There were more pleasant moments. Przhevalsky had now acquired an almost divine reputation. He collected herbs—he must be a great physician; his guns were supernaturally accurate; his aneroid barometer prophesied rain. People were friendly, sometimes reverent. One of the Tanguts, Randzamba, rode off with Przhevalsky shooting gazelles. He was a wild shot, but he could spot an animal which Przhevalsky could not discern even with binoculars. As the mountains appeared, the caravan passed through the Great Wall into China proper again. At Ta-tsin there were Manchu soldiers who had served on the Amur and spoke Russian; they had even taught the town baker to bake white buns in European style.

Fortunately, the Tanguts were as anxious as Przhevalsky to avoid the Chinese towns; they feared the soldiers as much as the Tungans, who were even now being ruthlessly hounded out of the capital of Kansu, Hsi-ning, by the Chinese army. The caravan climbed the first of the three ranges that barred Kuku Nor from the Mongolian deserts. Immediately, the moist cool Kansu air supplanted the arid heat of A-la Shan. Now

Przhevalsky was in a new world: Kansu was the farthest point north of that remarkable belt of cool, monsoonal mountains between Tibet and China where so many intrepid collectors have discovered so many extraordinary plants—paeonies, rhododendrons, magnolias—to enrich the gardens of Europe and America. Almost all Przhevalsky's plant discoveries—the mecanopsis and honeysuckle species, *Geranium pylzowii*, the Tangut daphne—were found in his several periods in Kansu.

But now was not the time to halt for long; Tungs were active, and Przhevalsky wanted to press on as far as he could into Tibet before winter once again upset his plans. He decided to return for the following spring and summer. Meanwhile, he needed his wits about him. There were human bones everywhere, and the Tanguts were too nervous to light fires. Once they captured a Chinese and, suspecting him to be a Tungan, dragged him along, tied to a camel's tail. That evening they sharpened a sabre and debated whether or not to execute him. The victim calmly drank tea; Przhevalsky was too sickened to stay, and rode off to hunt feral horses. He returned to find the Chinese pardoned. Later, the caravan saw another camp fire and, when Przhevalsky and seven Tanguts rode out to investigate, they were fired on. It turned out that each party had mistaken the other for Tungs.

The rains came every day; plants would not dry, gun barrels rusted. When the caravan reached the lamasery of Chörtentang in the mountains above the Ta-t'ung Ho, Przhevalsky decided to shelter. Chörtentang, a safe refuge from Tungan attack, was a traditional resting place where camels were changed for mules, more suitable for the slippery mountain paths. The abbot of the lamasery spoke no Mongol, being a Tangut, but through two interpreters he talked with Przhevalsky and grew to like him; the abbot was an artist and painted a portrait of Przhevalsky that was still hanging in the lamasery when Przhevalsky's protégé, the explorer Kozlov, visited Chörtentang in 1900. During these five days, parted from the Tangut caravan who were grateful for his protection, Przhevalsky enjoyed the freedom from constraint.

He hired mules and donkeys to cross the Ta-t'ung and explore the main range of mountains to the west. Here, in the

To-lai Shan, fifty miles from Chörtentang, Przhevalsky found the lamasery of Choibseng to be equally helpful. The lamas let him live in their storehouse, where they kept bronze Buddhas, and here Przhevalsky was able to leave his collections to lighten his load on the journey to Tibet. Choibseng was well fortified and housed 1,000 militiamen, Tangut, Chinese and Manchu, who were supposed to protect the Ta-t'ung against Tungans. The militia were cowardly and frankly welcomed Przhevalsky's arrival as a sure talisman against attack. There were now no difficulties in hiring Tangut-speaking guides or buying supplies. But, cast in the role of defender, Przhevalsky could feel only contempt for this 'dishonourable flock of sheep'. He was to write to General Tikhmenev and to Yakov Shishmaryov, consul at Urga, when he returned to Kansu the following year:

Here you can penetrate anywhere, only not with the Gospels under your arm, but with money in your pocket, a carbine in one hand and a whip in the other. Europeans must use these to come here and bear away in the name of civilization all these dregs of the human race. A thousand of our soldiers would be enough to subdue all Asia from Lake Baykal to the Himalayas . . . Here the exploits of Cortez can still be repeated.

These were the terms of Przhevalsky's reports to the General Staff, reports which contributed much to the bullying ruthlessness of some Russian ministers' attitude to Peking in the years to follow.

Using Choibseng as a base, Przhevalsky roamed the mountains. Choibseng had a species of red birch previously unknown; the forests that covered the mountains up to the 10,000-foot line were rich in moisture-loving shrubs and song-birds. Beyond the tree-line the predators soared; king of them all was the snow vulture with its ten-foot wing span. In a few weeks Przhevalsky and Pyltsov collected 324 species of flowering plant and 124 species of birds. It was too early for seeds to have ripened. Przhevalsky took back only dead specimens: dried and pressed leaves, stems and flowers. The birds, shot or

poisoned, were preserved merely as 'gloves' of skin and plumage, with the skull and sometimes the skeleton to help the taxidermist reconstruct them. There were fewer species of mammals and, thanks to the low temperatures, almost no insects for Pyltsov's own collection. The rain forced Przhevalsky to buy bellows from a Tangut to light the camp fire; the carbine would misfire and even the Viennese matches he had bought in Ting-yüan-ying would not strike. Przhevalsky spent a whole day climbing the highest peak, Sodisoruksum, only to find that he could not light a fire to boil water and calculate its height. But the exhaustion and the solitude pleased him; he returned the next day and found the peak to be 13,600 feet.

Though he shunned the native population, Przhevalsky made laborious enquiries about the Tanguts and even compiled a small vocabulary of their Tibetan dialect. Enquiries were slow thanks to 'the mental limitations of Dondok Irinchinov, the stupidity of the Mongol and the suspicions of the Tangut'; nevertheless, Przhevalsky brought back the first general study of the Tangut people. They generally refused to recognize Chinese sovereignty, considering themselves self-governing subjects of the Dalai Lama. Most were nomadic yak-herds and Yellow Hat Sect Buddhists, living on the produce of the yak and gathering potentilla (*p. anserina*) roots and medicinal rhubarb (*r. palmatum*). They loved the west mountains of Kansu and the marshes of Tsaidam and abhorred the arid plains of the Mongols, with whom they were often in conflict. They lived simply; often naked under their yak-skin gowns, with right arm and shoulder bared to all weathers. Their lamas shared their life in their black yak-hair tents. When they could not afford tea, they drank a brew of allium heads, together with the Mongol's *dzamba* (roast barley meal) and curds. Many of the nomadic Tibetans—the Ngolok and Yograï with whom Przhevalsky was later to skirmish—were half-savage bandits, preying on caravans; but the Tanguts of Kansu were relatively gentle people.

In mid-August there was a minor earthquake, and the rain began to turn to snow. Przhevalsky decided to move on. He returned to Chörtentang to collect his camels. They were all in-

fectured with coughs and scabs from the wet, but Przhevalsky had no alternative pack animals. He led them across the narrow bridge over the Ta-t'ung Ho, labourers dragging the baggage across separately, and over the dangerous rocks and mud to Choibsen. The lamas at Choibsen were expecting a Tungan attack and the entire population had crowded into the lamasery grounds. There was no room for the camels, so Przhevalsky organized his own defensive 'square' outside the walls using the camels and baggage for cover. For six days everyone waited, but the Tungans had melted away. By now Przhevalsky was regarded as both clairvoyant and bulletproof; a party of Mongols who had brought sheep to sell in Choibsen and who were anxious to get back to their pastures in the upper Ta-t'ung were only too pleased to guide Przhevalsky there on his way to Kuku Nor.

This was not the direct route to Kuku Nor, but the shortest route went straight through the towns that the Chinese army was clearing. Ten thousand Tungans, it was reported, had been thrown over a precipice after the capture of Hsi-ning. The Chinese army was now preparing to move on to attack Su-chou (or Chiu-ch'üan), north-west of Kuku Nor, and crush the Tungans completely. Przhevalsky, like the Tanguts, was anxious not to get embroiled. The Mongols wanted to travel by night; Przhevalsky had to pretend to augur before the Mongols agreed to use daylight, which would enable him to map the route. Then, after a few days in which Przhevalsky moved all his surplus equipment and collections to the comparative safety of Chörtentang, the expedition moved on.

Not far out of Choibsen the party was charged by Chinese cavalry; they wheeled away at the last moment when they saw that Przhevalsky was about to open fire. They then had to cross two of the Tungan routes to the town of Ta-t'ung; near the second path 100 mounted Tungans blocked their exit from a gorge. The Mongol and Tangut travellers wanted to desert; Przhevalsky threatened to shoot them if they turned back. Faced with a heavily-armed and apparently fearless party, the Tungans dispersed at 1,000 yards. The next night had to be spent on an exposed mountain pass without a fire. But soon Przhevalsky was safely in the Mongol lands of Mur-zasak,

where the local chieftain had a private truce with the rebels. Here his letter of introduction from Choibsen gave him guides to the next Tangut camp, where he was received with gifts of a sheep, butter, and more guides to take him past the sacred peak of Konker, down the gentle slopes to the shores of Kuku Nor. On 12/24 September 1872, at over 10,000 feet Przhevalsky pitched camp.

'The dream of my life was realized,' he wrote in his diary. 'What had recently been only a dream was now an accomplished fact . . . all the misfortunes undergone were forgotten and my companion and I stood in complete delight on the shore of the great lake, admiring its wondrous, dark-blue waves.'

Kuku Nor was a romantic setting. Its shallow, salty waters were whipped up by the storm winds into waves which contrasted with the stillness of the snow-capped mountains that surrounded it on three sides; the autumn weather was generally still and clear. Przhevalsky found a new species of carp, *Schizopygopsis przewalskii*. He hunted over the river, Bukhain Gol, that flowed into the north-west part of the lake; the first Tibetan species were appearing: the kiang, the Tibetan race of the wild ass (onager or kulan), grazed warily on the sparse vegetation.

Only now did Przhevalsky realize that his path to Tibet was open. He had visited a Mongol encampment to exchange eleven of his sickly camels. Here he found, to his astonishment, that the Tibetan ambassador from Lhasa to Peking was staying. The ambassador, Kambe Nantu, had left Lhasa in 1862 and was now on his way back, waiting only for the Tungan rebellion to die down. He came to Przhevalsky's tent and promised him that the Dalai Lama would be glad to see the Russians. Never again was Przhevalsky to be invited to Lhasa; at no other time in his life, with the Chinese embroiled in rebellions and the Tibetans at their least xenophobic, was such an opportunity to recur. Przhevalsky accepted Kambe Nantu's proposition. But he knew he dared not go farther than half the 1,000 miles to Lhasa; he had less than 100 liang, the price of a couple of camels, in his pocket, and the Tibetan winter was coming. To go to Lhasa would invite disaster and

jeopardize all that the expedition had achieved.

Kambe Nantu's visit raised Przhevalsky's prestige throughout Kuku Nor. (Kuku Nor was a Mongol feudal principedom including most of the modern province of Chinghai.) Two guides were found for him: one was a lama from the monastery of Kumbum, near Hsi-ning, where the Tibetan Yellow Sect of Tsong Khapa had originated and where the sacred lilac with hieroglyphic markings on its leaves still grew. From this lama Przhevalsky learnt enough of Tibetan herbal medicine for even his scepticism to be quelled. With his guides he moved westwards from Kuku Nor and crossed the mountains on his way to the Mongols' 'capital', Dulan Kit.

Dulan Kit was safe from Tangut raids and here the Chinghai Wang, or ruler of Kuku Nor, had moved his headquarters. But before Przhevalsky reached Dulan Kit, near the salt lake of Dalai Dabasu he met the future Wang and his regent mother, who welcomed the expedition to their dominions. At Dulan the Wang's uncle gave Przhevalsky a *ger*, eleven-foot wide and nine-foot high, without which they might never have survived their months in Tibet; the Wang's uncle, an abbot, even stopped the inhabitants of Dulan Kit from pestering the great *khubilgan* (saint) as Przhevalsky was now called. Two hundred people knelt as the expedition entered Dulan Kit: Przhevalsky felt obliged to bless the sick and predict the future. He was asked to locate missing cattle, to cure a princess of barrenness, and to stop the Khara Tangut from robbing the Mongols. He was credited with a hundred invisible warriors whom he could conjure up to his aid.

Protected by this aura, Przhevalsky moved on south-east over a pass that led to the vast salty marsh, the depression of Tsaidam. He descended the Baltagyn Gol into an expanse of saline clay, that, according to the Mongols whom Przhevalsky was one day to prove wrong, stretched unbroken to the almost legendary Lob Nor. Tsaidam was terrible terrain. The salty ground ruined his camels' hooves; Faust and Karza could barely walk on their bleeding paws. There were few animals and no plants. Only the *kharmyk* shrub (*Nitraria schoberi*) gave anything to man or beast. The camels ate its desiccated branches while the wolves, foxes and birds came down from

the mountains to feed on its salty-sweet berries. The Tsaidam Mongols, who fled to the mountains to escape the summer insects, returned in autumn to gather *kharmyk* berries and pickle them for winter. They were poor people, for cattle did not thrive in Tsaidam and the Tungan rebellion had cut them off from China, forcing them against their custom to till the soil and grow a few cereals.

Przhevalsky found nothing in Tsaidam except a new race of pheasant, which he was to name *Phasianus vlangalii* in gratitude to the ambassador in Peking, but he heard reports of the animals he was to discover in later expeditions. In the west of Tsaidam wild camels were hunted: caravan camels had been known to desert to the wild herds. There were rumours of a wild horse around Lob Nor, too canny to hunt.

It was now mid-November and the thermometer would not climb above zero for many months. But the sky was clear and no snow had fallen when Przhevalsky reached the *kherem* (clay fort) of Dzun-dzasak on the other side of eastern Tsaidam. Here he left some supplies and the bulk of his equipment before climbing up 6,000 feet on to the plateau of northern Tibet. The Dzun-dzasak chieftain was glad to be helpful. To him Przhevalsky's sacks of barley meal were a talisman that protected his people; when the expedition came back, he gave Przhevalsky two sheep as thanks. As lightly laden as he dared be, early in December Przhevalsky left Dzun-dzasak with an old Mongol, Chutungdzamba, who had been to Lhasa nine times, as guide. He hoped at least to reach the valley of the Mur Usu, the headwaters of the Yangtse Kiang.

They climbed into the rarefied air of the Burkhan Buddha, the eastern extremity of the great Kun Lun system that blocks off northern Tibet from the lowlands of Lob Nor and the plains of Tsaidam. Snowbound, absolutely bare of life, swept by howling gales, the Burkhan Buddha was a foretaste of a Tibetan winter. Przhevalsky shed more equipment, burying ammunition to await his return. As they crossed the pass and came down a few hundred feet to the Nomokhun Gol, a camel dropped dead of oxygen starvation. Dizziness, nausea and headaches afflicted everyone. The abbé Huc, like the Chinese, attributed the symptoms to 'carbon gases' emitted by

the unfriendly rocks. Przhevalsky realized that on a plateau which never dropped far below 14,000 feet, the rarefied air was going to make movement difficult and even sleep uncomfortable. The plateau, in fact, was known to the Mongols as *guresu gadzyr*, the country of wild animals. Despite its desolation it was well-watered in summer and kulans and yaks searched for patches of grass, while wolves and foxes pursued the herbivores in search of carrion.

Between Tsaidam and the Tang La range 500 miles to the south there was no human settlement or even encampment. Clumps of grass grew around natural springs; elsewhere this was a region of rock, saline clay and sand which the incessant north-westerly gales whipped up into terrible dust storms. Every day the cold became worse; Przhevalsky and his men suffered from nausea and weakness. Their hands trembled, and taking bearings was all but impossible. At night the lack of oxygen gave them nightmares, from which they awoke struggling with asthma. There was not enough oxygen to make camel dung burn; when they did manage to light a fire, because of the altitude the water boiled at such a low temperature (85°C) that tea would not brew or meat cook. Pilgrim caravans never travelled here except during autumn, a brief interlude that separated the incessant summer rains and the sub-zero winter. During these two months, when the rivers became fordable and the gales died down, caravans tried to cover the 1,000 miles from Donker (Tangar), near Hsining, to Lhasa. If they moved on yaks instead of camels the journey took four months, but at least they had the advantage of surer-footed and hardier beasts. In winter, on camels, Przhevalsky had the worst of it. Even had he aimed for Lhasa, the camels would have had to be exchanged for yaks twelve days north of the city, for want of grazing and suitable tracks. The journey was considered hazardous even for the experienced. The last Tibetan caravan from Lhasa to Peking had left in February 1870 and had lost all but three of its 1,000 camels, while fifty of the 300 travellers had perished in the deep snow.

Leaving the Nomokhun Gol, Przhevalsky climbed the gentle slopes of the Shuga range. Now he was in Tibet, the first

Russian to penetrate so far into Central Asia. Though sick and cold, he felt extraordinarily happy: the country of wild beasts was a game-hunter's dream. Herds of yak and kulan, wild sheep and bharals, orongo gazelles and ada antelopes roamed the plateau, unused to, and hardly afraid of, man. The orongo stags were herding the hinds: in their rut they paid little attention to the hunter. Przhevalsky shocked Chutungdzamba by eating their meat, for the orongo was sacred and its horns were used to mark the graves of lamas. The wild yak, however, gave Przhevalsky his greatest excitement. He would crawl on all fours from his *ger*, holding the tripod of his gun above his head to deceive the myopic yak into mistaking him for another animal. At 100 yards Przhevalsky would take aim, loading his carbine with bullets he carried in his cap. Often the yak would then charge, and, although it invariably turned away at the last moment, it was difficult to kill and dangerous to wound. Often Przhevalsky emptied all his bullets into a yak only to find the animal still alive. He would return to the *ger* to fetch Pyltsov, a Cossack and more ammunition. It sometimes took a whole salvo to put the animal out of its misery. In two months Przhevalsky slaughtered thirty-two yak (only three were cows, which had the sense to mass together for protection) and if only there had been fuel and oxygen enough to cook the meat properly, the expedition might have eaten well. Altogether the expedition butchered fourteen tons of meat, most of which they abandoned to the wolves. They would break up ice with an axe and heat it with the frozen meat in an iron cauldron over a smoky fire of dung. The humid air had rusted the cauldron; they patched its holes with barley dough or raw skin and in the end, soldered them with spent copper cartridges.

Life became increasingly tougher. The *ger* from Dulan Kit took an hour to erect, with its wooden lattice frame and felt cladding. Even so, with all the men crowded in and a fire smouldering on an iron grate in the middle, the temperature stayed well below freezing. In vain did Przhevalsky line the walls with yak and antelope skins or packing cases. Their warm clothing was in tatters, their boots had collapsed and they had to stitch patches of raw yak hide onto the remains of

the uppers. The horses were too exhausted to carry a man; Przhevalsky and Pyltsov dismounted, carrying twenty pounds each on their backs. There were days when the gales lifted so much salt and dust that the expedition was holed up in its *ger*. The ten hours of darkness were only another form of nightmare in which the sleepers fought for breath. A diet of meat simmered in half-boiled water or of 'Siberian soup'—barley flour fried in yak butter and stirred into 'brick' tea (the compressed tea of Central Asia)—did nothing to strengthen them physically or morally.

The Tibetan wolves who followed the expedition over the plateau were a more comic nuisance. Every night a few of these whitish-yellow beasts raided the camp. They would devour whole gazelle carcasses the instant a hunter turned his back and went to fetch a camel to carry the game back home. One wolf dragged off a rifle and some cartridges. Przhevalsky eventually found the rifle discharged and the cartridges eaten out. The wolves dug up the supplies which Przhevalsky buried against his return journey: a whole pack of butter wrapped in linen was stolen from the Shuga valley. The wolves were too cunning to ambush and Przhevalsky had no snares with which to trap them.

Each day was worse. Przhevalsky recorded the Russian New Year (13 January 1873) in his diary: 'Never in my life have I had to spend the New Year in such an absolute desert as we now find ourselves in . . . We have absolutely no supplies left, except the accursed *dzamba* and a small quantity of flour. The privation is terrible but must be borne in the name of the expedition's great goal.'

Outside, the wind never relented; their eyes were full of tears, and even hunting became impossible: dust clogged up the Berdan; cartridges would not come out of the breech. Pyltsov was so badly frozen on one excursion that he lay immobile for a week. In December and January there was a dust storm every other day, blotting out the sun, blinding the eyes, making the air unbreathable and leaving the atmosphere tinged grey and yellow for the next day. But finally, on the 10/22 January 1873, the expedition reached the mouth of the Napchitai Ulan River and found itself on the Mur Usu or

upper Yangtse Kiang. Twenty-seven more days might have brought them to Lhasa, but three of Przhevalsky's camels were dead, others were dying and he had just five liang—about eight ounces of silver, the price of a sheep—to pay his way. Chutungdzamba went on up the frozen Mur Usu; Przhevalsky, wisely and sadly, gave up his dream of reaching Lhasa and turned back to retrace his steps to Tsaidam, Kuku Nor and Kansu.

By mid-February he was back in the relative shelter of Tsaidam. The first harbingers of spring, red-necked thrushes, widgeon and geese, were already heading north. Przhevalsky retrieved his supplies and hurried on: he liked to spend his springs on lake-shores, to observe the birds' migration. Another month's travelling brought him to Kuku Nor, 2,000 feet higher than Tsaidam and still completely frozen. But there was grass for the horses and tamarisk to fatten the camels, in spite of the kulan and gazelle who had trampled the yellow pastures. The atmosphere was dry, and the lake was one snowless mirror of ice. The Bukhain Gol, however, was not frozen and Przhevalsky fished. Unwisely, Pyltsov and Przhevalsky ate the poisonous roe of the *Schizopygopsis*; both lay prostrate for some days. Their more cautious Mongol guide nursed them with poultices and stomach drops.

Early in April a storm struck Kuku Nor and broke up the now thawing ice. But the temperature stayed low and only thirty-nine species of bird had appeared by the middle of the month. Przhevalsky guessed that the migrant route must divert eastwards to the Huang Ho valley and avoid the mountain barriers of the Nan Shan and Ta-t'ung around Kuku Nor. He decided to move on to the rich, wet, hunting grounds of Kansu.

The direct route to Kansu through the town of Donker had been cleared. But Przhevalsky preferred to avoid populated centres and follow his old route, dispensing with guides, surveying the mountains without fear of being discovered. On the way he exchanged his *ger* for new camel saddles and, for want of money, exchanged some revolvers with the Tangut for new camels and a little silver. He arrived at Choibsend to find the ground sodden and the countryside lifeless. April was as wet as

October here; he went on to the friendly lamasery of Chörtentang.

At Chörtentang every afternoon brought rain or snow. But the flowers of the alpine zone flourished in the soaking cold. Unknown species of iris, gentian and primula lured the collector over the mountain pastures; in early June spring brought out paeonies, wild strawberries and the fragrant blossoms of *Daphne altaica*. It was not just the novelty of the Kansu flora, but the mixture of Altai, Himalayan, Mongolian and Manchurian species that made Kansu botanically the most rewarding of Przhevalsky's fields of exploration for Russian scientists. By the middle of June, Przhevalsky had found seventy-six species of flower, including several honey-suckles, Himalayan poppies and rhododendrons new to science.

Kansu was poorer in bird-life; Przhevalsky collected only a few eggs. After many days' stalking, he shot a specimen of the rare eared pheasant, *Crossoptilon auritum*, a bird all the more elusive for being silent and shot-resistant. High up, from a camp at 12,000 feet, Przhevalsky watched the snow vulture and Himalayan vulture drop like bombs on a carcass that must have been a mere speck on the ground beneath them. He baited them with carrion and with great difficulty added a few to his collection. But the most curious animal of Kansu eluded him. The Tanguts told him of a beast called *hung-guresu*, the man-beast, quite distinct from a bear. Przhevalsky offered a reward for information that would lead him to it, dead or alive. He was soon taken to a temple ten miles north of Chörtentang. There stood a *hung-guresu*, which turned out to be not a Yeti—the abominable snowman, a humanoid ape allegedly sighted in the Himalayas and in the Gobi—but an ordinary, badly stuffed Himalayan bear. There was nothing now to keep Przhevalsky in Kansu, where even in June there could be six inches of snow and five degrees of frost.

In a few days Przhevalsky had descended 6,000 feet into the burning sands of the A-la Shan desert. He had only a few notes on the route, taken surreptitiously when he had crossed the sands with the Tangut caravan. Not surprisingly, he lost his way in the almost trackless dunes. After a day's march, with

only five gallons of water left for four men and the pack animals, and these gallons evaporating fast through the porous water-barrels, Przhevalsky set out his bearings and found they had wandered too far east. The horses were in distress. The next morning Przhevalsky piled up and mounted his packing cases. Luckily he located a group of mountains in the distance, for which they headed. Six miles farther they found an *obo*—a stone shrine—and they knew they had found the track. A few hours later they had water.

Near Ting-yüan-ying Przhevalsky met a group of Mongols from Urga. They were part of an immense caravan that had set out to fetch the new incarnation of the living Buddha, the Kutukhtu, from Lhasa, the first caravan to dare attempt the journey since 1862. They had left in echelons by different routes, for the wells between Urga and A-la Shan were silted up or poisoned by the Tungans, and a large convoy would have died of thirst; they were to meet up at Kuku Nor. They warned Przhevalsky of the devastation that lay between him and his goal, the Russian consulate at Urga: he had to choose a new, less-frequented route hoping for water and fodder.

The prince of A-la Shan had left Ting-yüan-ying with his sons for Peking, but the expedition was received well; letters and newspapers from Vlangali were waiting for them, as well as 1,000 liang. The papers brought Przhevalsky up to date with the news of 1872. They confirmed not only that the Russians had taken over the Ili Valley 'to restore order', but that they had begun to treat with Yakub Bey. Yakub Bey had come from the khanate of Kokand, to become the Emir of eastern Turkestan. Now, as ruler of the breakaway state of Jetti Shahr (Seven Cities) or Kashgaria, he was the focus of rebellion against the Chinese. Many Tungans had taken refuge in an uneasy alliance with their fellow Moslems, the Uighur Turks of Kashgaria. If the Russians recognized Yakub Bey as the ruler of an independent state, Chinese hostility against the Russians would be kindled. Przhevalsky must have been astounded, as were the Russian newspapers, at the successes of the Chinese army under General Tso Tung-t'ang. General Tso had turned a rabble into an army more efficient and no less murderous than the ill-led Tungans. There was

every prospect that General Tso might restore order in Dzungaria and the Tien Shan and that China would then demand the return of the Ili Valley. The situation was becoming tense, and it was to affect, even determine, the nature of Przhevalsky's future expeditions.

But before hurrying home to present his reports and display his collections, Przhevalsky wanted to rest. He took Pyltsov and just two horses into the A-la Shan mountains for three weeks' hunting. They stayed high up, fetching water on horse-back from the valleys. But there were few animals or plants. The sparse forests were composed only of spiraea and potentilla, and a few dianthus grew at the edge of the alpine zone. Rain rushed down the steep stream beds to evaporate in the desert or vanish in the Huang Ho, without moistening the soil. Once Przhevalsky and Pyltsov nearly lost everything, even their lives. A storm brought a torrent of water carrying up-rooted trees and boulders along the gorge where they were encamped. Luck saved them: at the last moment, inches from the tent, the rocks and tree trunks piled up, damming the water long enough for them to climb out of danger.

At the end of July, with his camels—some restored to health, the rest newly purchased—and two guides to take him as far as the country of the Öród Mongols, Przhevalsky set off north. The temperature was often forty-five degrees centigrade in the shade, the ground too hot to touch. Forty-four such days had to be endured. Even at night the tent could not keep out the super-heated air. There was no dew. Rain clouds came but the water turned to steam long before it reached the ground. They tried to start in the cool of first light, but the Cossacks and Mongols took so long to finish their tea that they still had to ride mostly in the heat. After crossing the low hills of the Khang Ula, where the track to the east forked off the Urga route, the Mongol guide missed a well. Sure that a second well was within reach, the expedition went on. But the guide seemed rather vague. In the afternoon, with only ten pints left, everyone was in agony. The dogs could go no farther. Faust was lifted up on to a camel. Water, the guide assured Przhevalsky, was only three miles off. But Faust was in convulsions. Przhevalsky laid him down under a tuft of grass

on a saddle blanket; the dog came to, then howled and, after two yawns, died. Przhevalsky picked up the setter's body and rode on. There was less than a pint of water left and he was almost fainting. He handed a Cossack a kettle and ordered him and the Mongol to gallop ahead to the well. If there was no well, or the Mongol tried to run for it, the Cossack was to shoot him dead. Fortunately for all, the guide was right, the Cossack galloped back in half an hour and after twenty-two miles—nine hours—men and beasts could slake their thirst. But Przhevalsky and Pyltsov were too miserable to eat or sleep. In the morning, crying like children, they buried Faust.

Crossing a corner of Öröd country and taking on two new guides, they passed through the bare clay Galbyn Gobi into the Khalkha Mongols' lands. They crossed the post-route that once linked Kuku Khoto and Pao-t'ou with the oases of Hami and Dzungaria; it was still deserted, its wells destroyed by the Tungans. Then the Hörh mountains, the south-east extremity of the Mongolian Altai, broke the desert. A few twisted shrubs and an occasional partridge struggled to live in the dry gorges. Bharals on the crags tempted the hunter. But Przhevalsky's homemade yak-hide boots were useless on the rocks, and he had to call off the hunt. Another 200 miles brought the expedition to the parallel tracks that connected Peking with western Mongolia; they were now in use again, military convoys taking supplies by a circuitous route to reinforce the Chinese army fighting in Dzungaria. The previous winter, unknown to Przhevalsky, the English explorer Ney Elias, alone but for a Chinese servant, had made the journey through rebel-held areas from Peking to the Siberian town of Biysk along this very route.

Each day the heat was intolerable, but the earth became slightly less barren. The lifeless pebbles of the Hörh Ula imperceptibly gave way to semi-desert and to steppe. Rainfall had left pools of water, but the nomads had brought their cattle to the water and it was so saturated with dung as to be undrinkable. Desperate birds flocked to the pools, so tired that Przhevalsky and Pyltsov caught them in their hands. Hardly less tired themselves, they redoubled their efforts as they approached Urga. At last they were in the Russian consulate, too

weak to stand. The relief is obvious in Przhevalsky's diary: 'To us, who had become utterly unused to European life, everything seemed strange at first—fork, plate, furniture and mirrors and so on. But by the next day we felt we had been living among them for a week. The expedition we had been on and all its deprivations now seemed a strange dream. The mass of new impressions was so great and had such a strong effect that we ate very little that day and hardly slept that night . . .'

In a few days their appetites returned. Przhevalsky began to evaluate his achievement. He wrote to Fátseyev to boast that, for a mere 18,000 roubles, with the loss of twenty-four horses and fifty-five camels, he had penetrated areas which other explorers, the American Pompelly and the German Baron Richthofen, had tried and failed to approach; he had surveyed some 3,000 miles of route and collected several tons of specimens of fauna and flora. The climate, orography and hydrography of an area the size of Western Europe were no longer mysteries. Politically and scientifically, Przhevalsky had achieved more than any previous explorer in Central Asia. He arrived at Kyakhta a hero. By October 1873 he was in Irkutsk, writing reports on China and the Tungans for the General Staff, lecturing weekly to the public and planning the first volume of his next book, to be based on his diary and his copious field notes. He had left Russia an exceptionally promising young officer; he returned a conquistador.

5

Lob Nor Rediscovered

Desperate passions, aching hours

L. PIGOT JOHNSON

Przhevalsky spent Christmas 1873 at Otradnoye with his mother, his stepfather and their children. But there was little respite for him or for Pyltsov, who was now almost one of the family. Early in 1874 they were summoned to Petersburg. The newspapers poured out eulogies on the explorer, monthly magazines competed for an account of the journey, and Przhevalsky was showered with invitations to dine and to lecture. Even he, who shunned crowds and ceremonies, was overwhelmed. The military-topographical section of the General Staff set out Przhevalsky's zoological collection for Tsar Alexander II and for the visiting Emperor of Austria, Franz Joseph, to inspect. Many government ministers, among them the most influential Milyutin, Minister of War, also came to look. Milyutin noted in his diary (9/21 January 1874): 'By the way, Captain Przhevalsky, just back from a bold journey to Tibet, was there in person . . . Przhevalsky has amassed an enormous zoological collection: the whole hall was filled with countless stuffed birds and animals. The Emperor Franz Josef, as a passionate sportsman, looked over all this collection with great attention.'

A month later, Milyutin heard Przhevalsky lecture and was greatly impressed. His diary records: '. . . Przhevalsky, more than anyone else, can attract listeners and even more, lady

listeners; you can see in his whole figure and in his every word an energetic nature. After the lecture I invited him home for a cup of tea and to introduce him to my family.'

The threads of Przhevalsky's career and of Milyutin's strategies were about to interweave. Yakub Bey had sent a roving ambassador, Sa'id Yakub, to establish closer relations with the Russian government. Przhevalsky's next expedition in Kashgaria was an embassy to Yakub Bey as well as a service to geography in the frontier lands of Tibet.

With Milyutin's help Przhevalsky became a lieutenant-colonel on the permanent General Staff. He was given a pension of 600 roubles a year; Pyltsov became a lieutenant with a pension of 200. 'My funds are growing from day to day,' Przhevalsky wrote to Fateyev. The Minister of Finance gave 10,000 roubles to the Academy of Sciences so that it could buy Przhevalsky's zoological collection. The Imperial Geographical Society provided another 10,000 roubles for the publication of Przhevalsky's next book. This was to be a three-volume account, *Mongolia and the Country of the Tanguts*, the second volume to be devoted primarily to the ornithological specimens, the third to the botanical results. The new lieutenant-colonel had indefinite leave to write his book; the gentle, self-effacing Pyltsov, to whom Przhevalsky gave a fifth of the proceeds to date, was given eleven months' leave to be with him.

By the time Przhevalsky left, Tibet was becoming a fashionable topic in Petersburg. Buryats such as Jamsaran Badmayev began practising Tibetan medicine in society. Curiosity about Tibet and the Dalai Lama was to develop over the next two decades into an obsession. But Przhevalsky's scientific results, naturally, took longer to permeate. In one particular Przhevalsky was unfortunate: Petersburg had no nurserymen comparable with Hillier of Winchester or Vilmorin of Paris who might propagate and introduce his botanical discoveries into horticulture. Regel, the nurseryman of Petersburg, was interested primarily in plants of economic value; neither the Russian climate nor Russian country life inclined the public to experiment with the flora of China in their gardens. The sad outcome is that while the discoveries of Père Armand David or

of Fortune and Wilson fill the parks and gardens of Paris and London, the equally beautiful shrubs and perennials that Przhevalsky discovered in Kansu are, with few exceptions, known only to botanists.

Trusted in high places, widely adulated, Przhevalsky soon wearied of banquets and speeches: the old psychosomatic symptoms appeared. Early in May he fled to Otradnoye and was immediately at peace; he wrote to his Warsaw friend, Beltsov: 'Nature's becoming splendidly beautiful . . . the forest is in bud, everything is starting to blossom, a mass of nightingales are singing . . . The coughs and headaches of Petersburg are, as it were, lifted by a hand . . .'

Not long after arriving at Otradnoye, Mikhail Pyltsov proposed to Aleksandra Tolpygo and was accepted. Przhevalsky took it with better grace than one might expect: he had gained a brother-in-law, but he had lost a fellow explorer whom he had brought safely across the wilderness, through typhoid, concussion and frostbite. There is something sardonic in Przhevalsky's reported remark: 'Just like in a novel — shouldn't I add it in detail to the description of my journey?'

He spent the summer happily fishing and shooting. Like many explorers of distant lands, he found more beauty and variety in his native countryside: it was the danger and the solitude of Asia that attracted him, rather than its exotica. But Otradnoye provided such pleasant pursuits that Przhevalsky made no headway with his book. In September 1874 he forced himself to return to Petersburg. Living unobtrusively, working ten hours a day, he had the first volume of his book ready for the printers by November. The General Staff had printed the maps and all he had to do was to work through his collection of birds for volume two. He was now famous abroad. Correspondence was opened with geographers in London and Ney Elias in Calcutta; he was elected to the Berlin Geographical Society and invited to read a paper in Paris. The Imperial Geographical Society gave him its Konstantin Medal for 1875; Pyltsov and the Cossacks received medals too.

The next expedition could not, however, begin before volume two was completed; the work dragged on through 1875. Przhevalsky gave himself little relief. He spent Shrove

Tuesday in Moscow with his brothers Vladimir (now a defence lawyer) and Yevgeni (an army officer teaching in cadet college). Vladimir was already a family man; now Przhevalsky's relatives and friends began to annoy him with advice to marry. He spent Easter 1875 in Otradnoye, where he had the chance of testing out a present from his brother staff officers, a double-barrelled Lancaster Express carbine, ordered through the military attaché in London. It cost over £100 and the only other man in Russia to own one was the Tsarevich. It became an inseparable part of Przhevalsky: the gun soon had a pet name, 'Lyan', and was fired and polished almost to the day he died.

Back in Petersburg, Przhevalsky started to plan the details of the next journey: to break through to Tibet from the north-west, from the Russian-held Ili Valley, across the centre of Kashgaria, the terrible Takla Makan desert, via Lob Nor, if it could be found, and into unknown mountains. But Pyltsov was happily married and irretrievably lost to science, and Przhevalsky wanted to take not just Nikolay Yagunov, whom he had sent from the Ussuri to Warsaw to study, but a second assistant. While working in the museum of the Academy of Sciences he got to know an eighteen-year-old boy, Fyodor Eklon, who showed the qualities of unspoilt brightness and submissive resilience which Przhevalsky sought from his companions. In vain did qualified geologists from Vienna or botanists from Warsaw apply to join him. By July he was convinced that Fyodor Eklon, though a mere museum technician, had the makings of an explorer. He took Eklon that summer to Otradnoye, to teach him to shoot, to ride and to prepare specimens.

A terrible shock awaited Przhevalsky. Fateyev had sent news to Otradnoye that early in June Nikolay Yagunov had drowned while swimming in the Vistula. Przhevalsky was badly shaken; the death of Yagunov and the sultry summer of 1875 slowed down all his preparations. Yagunov, although only twenty-two, had proved to be one of the most brilliant young officers in Warsaw; he had taught himself to draw in order to be still more useful in the coming expedition to Tibet. Przhevalsky wrote to Fateyev (14/26 July 1875): 'I still cannot

get used to the thought that Yagunov no longer exists. I keep thinking he will come and see us in the country any day . . .’ All he could do was to send some money and the drawings that Yagunov had shown him to his widowed mother in Irkutsk. From Siberia Przhevalsky received a telegram from Dondok Irinchinov and Panfil Chebayev: they were ‘ready to go through fire and water’ with him. All that remained was to make a short trip to Warsaw and persuade Taczanowski, the ornithologist, to take over a little of the work, then in September to take Eklon to Petersburg and ensure the financial and official support needed for the coming journey.

Meanwhile, Fyodor Eklon was put down for the Samogit Regiment and sent to Fateyev in Warsaw to be prepared for the entrance examinations which, thanks to Przhevalsky’s tuition that summer, he passed with flying colours. Przhevalsky had now to find a replacement for Nikolay Yagunov. He decided to invite Yevgraf Povalov-Shvykovsky, the son of the very Povalov-Shvykovskys who had cheated Przhevalsky’s uncles out of their estate and had thus become his neighbours. But Przhevalsky’s talent for quarrelling was surpassed only by his talent for befriending. Yevgraf’s enthusiasm for Przhevalsky and the fact that he was a cadet officer in a famous regiment were all that he had to recommend him. He was overwhelmed with delight at being chosen. Przhevalsky explained to Eklon: ‘I know you’ll be great friends, *but then you will be thrashed together*. Of course that won’t happen often, but all the same it will occur — nobody’s perfect.’

Winter and spring 1876 were spent in preparations in Petersburg. From here Przhevalsky kept an affectionate, avuncular eye on Eklon’s progress in Brest, where the Samogit Regiment was stationed. ‘Have a whole dozen pictures taken if they’re good. Spend five roubles; after 2 February I’ll send you some money . . . Generally you can spend about twenty roubles a month freely, and don’t go without sweets. The weather in Petersburg is foul, though fairly warm; but in Brest spring will come quite soon; *on good days go for walks*, look at nature waking up after winter . . . ,’ ran one of his letters. He bought Eklon a lightweight suit and a travelling rug, and gave him a rifle. In March he sent for Eklon and Yevgraf; they were

to learn photography at the studio of Monsieur Dosse in Petersburg. Przhevalsky hated cameras for their bulk and vulnerability, but his explorations demanded some visual record and he now agreed to haul the equipment along.

The plans were grandiose. Przhevalsky set before the Imperial Geographical Society a scheme for a three-year journey starting from Kulja in the Ili Valley, moving from the Tien Shan to Lob Nor and Lhasa, descending the Brahmaputra into India, before returning to Lhasa and Mongolia and, in 1878, going back to Tibet to take the Irrawaddy or Salween rivers down to tropical Burma — all at a cost of 36,000 roubles. The scheme was cut down to a two-year version which made no mention of penetrating British India; the Society's council then approved it. In February 1876 Milyutin gave his support. All agreed that in Przhevalsky they had a unique combination of scientist and troubleshooter, a man who could not only fill in the blanks in geographical knowledge but, as the Society's council put it, 'teach the Chinese authorities and population to have relations with foreigners and thus open up the path for trade and industrial ventures'. To this the more cautious Ministers of Finance and Foreign Affairs gave their assent. Without waiting for the promised 24,740 roubles to materialize, Przhevalsky began to give his orders. He had boxes, kitbags, clothes, boots, copper dishes and ammunition belts made for himself and his companions. Mikhail Pyltsov was asked to look out for a setter to replace Faust and to make bullets (from molten lead poured into a mould). Yakov Shishmaryov in Urga was to find an interpreter; General Kaufmann in the Semirechiye was to pick five more Cossacks; Eklon's commanding officer, Akimov, was to see Eklon through his junior officer's examinations; Przhevalsky felt he had 'one foot already in Tibet'.

But he was besieged with other cares. Proof-reading meteorological tables and further ornithological research left him hopelessly tired. He was put on a committee for the colonization of the Amur, which sat from nine in the evening until midnight, well past his bedtime. He even sat on a committee for the Jewish question. He was buying more fruit trees for the orchard at Otradnoye and sending regular presents of con-

fectionery to his relatives. He had to find more money: fortunately he heard in the War Ministry that the Odessa railway was about to become a separate company and that the shares would then double their value — he invested 7,000 roubles.

By now he had accumulated three tons of baggage. The photographic equipment alone weighed over half a ton and, as neither Eklon nor Yevgraf were making much progress in photography, Przhevalsky decided to abandon the cameras and plates. Grand Duke Nikolay Nikolayevich junior gave Przhevalsky a gun dog and on 7/19 May 1876 he left with his two companions to spend a fortnight at Otradnoye. They ate, slept, hunted and fired revolvers and Berdan carbines on Przhevalsky's firing range. Then the party left for Moscow and Asia. Pyltsov saw them off as far as Nizhni Novgorod (Gorky).

From the very start of his second Central Asian expedition Przhevalsky was bedevilled by bad luck. Spring was unbearably hot, and all but two of his five dogs suffocated to death in the airless baggage wagon. In mid-June they reached the end of the railway line at Perm. Here the expedition was to collect its ammunition. But the cartridges had not arrived. When at last the 12,000 cartridges came — 'for dealing with various animals in the deserts of Asia, not excluding man, if circumstances compel,' as Przhevalsky put it — and when the bag of confectionery, the 'constant appetite', had been replenished, the expedition set off on the 1,600-mile crossing of Siberia, its baggage pulled by thirteen horses. A quarter of the funds had already been spent. On frightful roads, in terrible heat, they crossed the more and more desolate steppes, riding half naked, bathing in every stream they saw. Even the eager Eklon soon withdrew into prostration, his head aching with the dust and heat. Only Przhevalsky rejoiced: 'My health is excellent . . . headaches, cough, throat catarrh — all gone. That's the joy of a wanderer's life, not like being cooped up in Petersburg's climate in a little dog-kennel on the fourth floor.'

At Semipalatinsk the first mountains of the Altai range came into sight. Here Dondok Irinchinov and Panfil Chebayev joined the expedition. Then, after another 500 miles, Przhevalsky left the party to visit Verny (Alma Ata) where he chose three more Cossacks. By August they had crossed the

Russian frontier into the occupied territory of the Ili Valley around Kulja (I-ning). But another misfortune overtook them. In the words of Przhevalsky's official complaint: 'When my wagon, which was coming first, crossed on to the opposite bank of the River Khorgos and the baggage wagons had stopped because of a difficult sharp turn almost in the middle of the stream and the fast current had begun to keel them over, my driver, Yepifan Koshkin, disregarding my order, would not go and help the carriage stuck in the river and rudely retorted: "I shan't get my head broken for your baggage." ' In the event, six passing Kirghiz rescued the baggage from the river and the expedition reached Kulja intact.

Przhevalsky had to wait there for a few weeks. Governor-General Kaufmann, virtually the satrap of the region, had secured from Yakub Bey a letter promising that the members of the expedition would be treated 'like guests' on their journey across Kashgaria to Lob Nor and Tibet. At the same time, the Chinese, who were about to invade Kashgaria, or Jetti Shahr, from the Tien Shan in the north, had to be placated. It took all the diplomacy of the Russian ambassador, Byutsov, in Peking to secure a passport for Przhevalsky.

With twenty-four camels, four horses and two dogs, Bai and Oskar, the ten-man expedition set off up the Ili Valley south-east to the passes over the Tien Shan. The valley had been depopulated, from 300,000 to 100,000, by the Tungans, but it was still an island of prosperity in a desolate region. 'It's the Lombardy of Asia,' said Przhevalsky, 'in climate and fertility. Really we ought not to hand back such a nook.' The expedition feasted on peaches, pears and melons; each man got through two pounds of mutton a day. But after thirty miles they passed into nomad country, peopled with Buddhist Turghud Mongols (Kalmyks), many of whom were refugees who had fled from the atrocities of Yakub Bey's Moslems. Here Przhevalsky relaxed in the cool mountain air and hunted bears.

But things went wrong. One dog, Bai, became so exhausted that he had to be sent back to Kulja as a gift to a colonel. Two Cossacks seemed lazy and they were dismissed and exchanged

for two soldiers. Przhevalsky was now left with no interpreter for Turghud Mongol. The Kirghiz camels proved less hardy than the Khalkha camels of the previous expedition. Three were killed in a month while negotiating difficult fords and mountain passes. After crossing the Narat Pass, which brought them to the Yuldus ('Star') ranges of the Tien Shan system, an area so cool and rich in pasture that the Turghud guide Tokhta-akhun described it as 'fit only for gentry and cattle', Przhevalsky suffered one more disappointment. His diary entry for 20 September/2 October records:

A depressing day. Today I sent Shvyykovsky back to Kulja and the regiment; he turned out to be absolutely useless to the expedition with his intellectual limitations and inability to do anything. Poor Yevgraf couldn't prepare birds, shoot or take bearings—nothing . . . I found it hard to take the decision, Yevgraf is very fond of me personally and he is a good soul . . . yesterday evening and this morning I cried several times like a child . . . I gave him travel expenses and salary—800 roubles in all; I stated the reason for his return as sickness . . .

The mountain sheep and the bears of the Yuldus consoled Przhevalsky; he came down to the Yuldus River into the domains of Yakub Bey in a cheerful frame of mind. The Moslems were alarmed by Przhevalsky's arrival. Not without reason they suspected him to be the vanguard of a Russian invasion of Kara Shahr and Kurla, the base towns of Yakub Bey, and they held up the party until authorization for the expedition to proceed came from the Emir himself. Tokhta-akhun, a refugee from Kurla, had to flee again. Seven days later, a messenger came: the party was to stay away from Kara Shahr and go directly to Kurla, where it was put under hospitable house arrest on the outskirts of the town.

Yakub Bey was compelled by circumstances to treat the Russians well; he sent them food and gave them camels. But he knew that his rule was coming to an end and that the Russians had only the most opportunistic interest in his fate. By autumn 1876 the Chinese controlled all the major oases on

the north of the Tien Shan. Dzungaria was theirs, and it would be only a matter of months before General Tso captured the Kashgarian towns along the southern slopes of the Tien Shan. Yakub Bey known as the Badaulet, or Fortunate, was happy only in name. Although he had secured recognition from Turkey, Britain and Russia, his position was precarious. He had proved often as oppressive to his own people as the Chinese had been. Taxation was not always distinguishable from pillage. The non-Moslem Mongols were enslaved, driven out or murdered. Even the Moslem Tungans were uneasy allies: in the end they were to block off Yakub Bey's retreat and threaten to hand him over to the Chinese army.

The Russians used Yakub Bey as an anti-Chinese pawn. They sold grain to General Tso's army and at the same time sent missions to Yakub Bey to amend the borders of Kashgaria and Russian Turkestan in their favour. One factor alone predisposed the Russians to Yakub Bey—his chief minister, Zaman Bek, a Russian citizen born in the little Caucasus who had emigrated to serve the Sultan of Turkey. When Yakub Bey asked the Sultan for military assistance, Zaman Bek was one of the advisers he received. Zaman Bek, though Moslem and Türki-speaking, was vehemently pro-Russian and well versed in European politics. While Yakub Bey was alive, Zaman Bek dared not show his pro-Russian leanings, for the Badaulet was a cruel and suspicious man, fearing poison and treachery, never going even to the mosque without his Winchester rifle. Only after Yakub Bey died did Zaman Bek openly join the Russians; he became a member of the Russian mission to Afghanistan in 1878.

It was none other than Zaman Bek who was sent by the Badaulet to accompany Przhevalsky along the Tarim River across the desert to Lob Nor. Zaman Bek's main task was to isolate Przhevalsky from the natives. He travelled with a suite of twenty men, outnumbering the expedition, and their shouts and the dust they raised frightened both inhabitants and wild-life. At first, Przhevalsky suspected Zaman Bek of choosing an unnecessarily devious and difficult path along the Tarim in order to discourage the expedition. But despite the drawbacks, he reluctantly came to appreciate Zaman Bek's

company; without it the Moslem Uighurs of Kurla and the Tarim might not have let the expedition pass.

Riding on camels that Yakub Bey had confiscated from the unfortunate Turghud, the party left Kurla for the desert. Przhevalsky was disappointed not to have seen Yakub Bey, who was probably rallying his army at Turfan, 200 miles to the north-east. Zaman Bek led the way not, as a map would suggest, along the left bank of the Konche Darya, but across it. This was the first of several dangerous fords across freezing, fast-flowing rivers that the party negotiated before following the left bank of the Tarim. The camels suffered so badly while crossing the fords that the expedition began to construct rafts and pontoons. The Tarim was fed by the snows and glaciers of the Karakoram and Pamir mountains in the far south-west of Kashgaria, and its icy waters rushed through an immense sand desert, the Takla Makan, which separates the chain of oases along the Tien Shan from the chain of oases beneath the plateau of Tibet. Channelling its waters through the sand and thick reed beds, a few fishermen and farmers managed to live along the river banks, surrounded by desert that Przhevalsky found even more horrid and lifeless than the sands of A-la Shan or the salt clay of Ordos. Only the reeds provided fodder, building material, fuel, bedding, even food for the inhabitants. In the sand they dug holes in which pools formed, and these were used to trap fish and feed irrigation channels.

The reeds sheltered the wildlife of the desert, the tiger being what Przhevalsky most sought. He believed he was the first European in the Tarim basin and he was determined to have his tiger, by gun, dagger or potassium cyanide. For two weeks he hid and he stalked. Only on the night of 18/30 November did he meet with any success: four large doses of cyanide went down with the bait, but there was no snow on which Przhevalsky could track down the poisoned animal. He turned his attention to the wild boar that roamed the impenetrable reeds, but they too, eluded him. By the end of November he had killed not a single animal since leaving the Tien Shan; this disappointment and Zaman Bek's horde annoyed him so much that he wrote, 'If it were not for the enormous importance of exploring Lob Nor geographically, I would turn back.'

There was one distraction: the expedition stopped to celebrate Pyltsov's birthday and the first anniversary of Eklon's military service. They opened a jar of Yelena's wild strawberry jam and ate about two pounds. But there were few such cheerful moments. Zaman Bek was hurrying them; Przhevalsky found he had too many camels and too many Cossacks to give him the mobility he needed.

Scientifically, the expedition was achieving little. Even surveying the Tarim, with its lack of features and the Moslem's suspicions, was all but impossible. At last, in December, Przhevalsky saw a tiger: it ate several mouthfuls of meat that he had spiced with cyanide, rolled over, vomited, and walked off, its tracks mixing with the footprints of other tigers. Przhevalsky found the Tarim the 'worst place for sport' he had ever seen.

Taking just one Cossack and the dog, Oskar, Przhevalsky set off in a dug-out canoe for the west bank of the Tarim to try his luck there. The dug-out overturned; Przhevalsky, laden with guns, managed to struggle ashore out of the freezing water, but the Cossack clung to the boat and had to be rescued by some natives who flung him a rope. They returned on a raft, and Przhevalsky warmed himself by a rub with spirits, a drink of hot tea and a brisk walk in pursuit of pheasants. His temper was not improved when the natives ventured to tell him that his misfortune was sent by Allah as retribution for stealing the horns of a maral deer from a saint's grave.

By the end of December, 400 miles from Kurla, Przhevalsky found the Tarim losing itself in the immense salty reed beds that surround Lob Nor. He had come to the ancient silk route and the mythical land of Lop, of which Marco Polo had been the first and last European to speak. But the excitement of discovering the legendary core of Central Asia soon faded: he preferred to visit lakes when he could watch the spring or autumn flight of the birds. For the winter he decided to travel south along the Cherchen Darya and the old, long-deserted silk road, to the foothills of the Altyn Tag (the Mountains of Gold), the first of the latitudinal ranges that walled off Tibet from the Takla Makan.

Przhevalsky established a base at the little town of Char-

khalyk, the last of the settlements on the track that used to lead from Turkestan and Lob to Kansu and China proper. Here Zaman Bek stayed, together with most of the Cossacks; Przhevalsky, Eklon and three Cossacks took the two most experienced local hunters they could find and went into the mountains to reconnoitre the route to Lhasa and to track down the wild camel reputed to live there. At last they were free of supervision. Early in January 1877 Zaman Bek was called back to Kurla: a Russian mission under Captain Kuropatkin had come to negotiate a new border with Yakub Bey.

For forty days Przhevalsky roamed the wind-swept, snow-covered chasms of the Altyn Tag, enduring all the rigours of a Tibetan winter that he had undergone four years before. In Charkhalyk they had eaten a Christmas dinner of goose, *pirozhki* (Russian pies) and brandy. Now they were reduced to rice and raisins, which were carried by two donkeys. The Altyn Tag was far poorer in fauna than other parts of Tibet. All Przhevalsky could shoot were hares. The exposed rock faces were arid and the party had to carry a sack of ice for drinking water. Snow blocked the passes. Przhevalsky had to rely on information from his guides, who described the route taken by Turghud Mongols on their pilgrimage to Lhasa over the Altyn Tag and the two other ranges of the Kun Lun system that lay beyond.

On 15/27 January 1877 Przhevalsky celebrated the tenth anniversary of his departure from Warsaw for an explorer's life; his luck returned. A wild camel appeared, sniffing at the domestic camels of the expedition. By the time the Cossacks realized that the stranger was not one of their camels and Przhevalsky had seized his Lancaster, it had galloped off out of range. It was the rutting season and the male camels were herding their harems into gorges. Przhevalsky never succeeded in shooting one, but at the end of March native hunters brought him three skins and a skull, beautifully prepared according to his instructions. He was convinced that the camels were original wild fauna, not feral escapees: he had made his first major contribution to zoology. But the Petersburg zoologists could not determine whether Przhevalsky's specimens were the original wild stock, from which the domes-

licated two-humped Bactrian camel was bred, or animals which had escaped from caravans or survived the death of their drovers to become feral. Modern scientists, with their more sophisticated techniques, have no wild camels to test.

Only at the end of this excursion did Przhevalsky kill a kulan and a yak, and the party then had their fill of meat. Blizzards made hunting out of the question afterwards, and in any case it was time to descend to Lob Nor, where the spring migration began in February.

Lob Nor, in Przhevalsky's day, was fed by the waters of the Tarim, or what was left of them after evaporation in the desert and diversion by the natives. It was freshwater near the reedy marshes where the Tarim ended and brackish elsewhere. But in mediaeval times Lob Nor was farther to the north-east and entirely saline. Thus it was marked on Chinese maps. Przhevalsky's discovery of a freshwater lake in another place was to stir scientific circles considerably. Not until the 1920s, when erosion, natural and artificial, caused the Konche Darya to break away to the east and take with it most of the Tarim's waters, and Lob Nor reappeared in its mediaeval position, were geographers to come to terms with the 'nomadic' rivers and lakes of Kashgaria.

At Lob Nor Przhevalsky met the most primitive of the Turkic peoples of Central Asia, the Khara Khoshun (Black Fief) tribe, who lived by fishing and hunting in the reeds. Living in reed huts, with a pit dug in the marsh for a fireplace, they led an iron-age existence, importing only a little cloth, and using skin, plant-fibres and the ubiquitous reeds to serve all their needs. Their boats were dug-out tree trunks; their iron tools were primitive in the extreme. The Khara Koshun chieftain, Kunchikan Bek, was soon on good terms with Przhevalsky. When he ate Przhevalsky's last box of monpansier, he brought an onion and mutton tart in recompense. Their conversations gave Przhevalsky material for one of his best ethnological studies; at Lob Nor he had a rare flash of insight into, and sympathy with, the barbaric. The inhabitants of Lob Nor were possibly aborigines, for their features were Indo-European as well as Mongol. They were nominally Moslem, but their burial practices showed traces of earlier religions, for

they buried the dead in the reeds with their fishermen's possessions. It was a hard life, dependent on the weather and the fish; the Khara Khoshun were often stricken by smallpox, and when disease came a whole village would abandon its sick and camp out in the reeds.

As soon as he arrived in Charkhalyk Przhevalsky learnt to his amazement that he was not the first Russian to visit Lob Nor. The inhabitants still recalled the arrival of a hundred or so Russian old believers in 1861. The old believers secretly left their farms in Siberia and went off in search of the sect's legendary promised land of Belovodye—literally, White Waters. Some deep folk-instinct must have led them south to Lob Nor: almost certainly the name Lob is Indo-European, cognate with the Latin *albus*, white, and Lob Nor, too, once meant White Water. Arriving on pack horses, the Russians apparently tried to settle in the reeds. But the damp summers killed most of the horses with insect-borne infections and they moved to Charkhalyk, where they were said to have built a wooden church. Only after further attempts to settle there, farming and hunting kulans (which they called Polish horses), even crossing the Altyn Tag to settle in the Gas oasis, did they give up their promised land. The Chinese authorities in Turfan sent them horses and supplies and they headed north for Siberia. But the Tungan rebellion broke out before they could cross the Tien Shan; all traces of them were obliterated and little is known of their fate, except that one girl, Pelageya Rakhmanova, was abducted by the Bey of Turfan and became his favourite wife.

When the salt-dust laden atmosphere allowed, Przhevalsky spent most of the days of March 1877 watching the birds flock to Lob Nor after crossing the Tibetan plateau at its narrower, western end, and flying east to feed and nest. Przhevalsky and his men shot so enthusiastically that they soon ran out of lead and were compelled to husband their rifle bullets by hunting only the larger waterbirds and the eagles. Their cooking cauldron simmered every day with twelve brace of duck, which somehow they consumed in three meals of game a day. By the beginning of April there seemed little new to observe or shoot: the millions of birds on Lob Nor belonged to only twenty-seven

species. The only mammal new to science was a furry-tailed rodent, a gerbil, *Brachiones przewalskii*; Przhevalsky flooded its holes and collected the drowned specimens.

But there was no question of going on to Tibet. One by one the camels had been overcome by dust and humidity; only five were still alive. Without camels and without guides, and on a track unused for fourteen years, Przhevalsky could not risk going on to Lhasa. In any case his diary records, 'I don't have the strength to go through all those horrors again.' For the second time he had to renounce his dream. He decided to retrace the 600 miles to Kulja and re-form the expedition for a fresh start.

Zaman Bek had now rejoined him from Kurla, bringing sugar, apricots and raisins, two skins from poisoned tigers — perhaps those Przhevalsky had baited — and, most important, news. The Russian mission to Yakub Bey had successfully negotiated its border concessions and had left for Kokand, abandoning Yakub Bey to his fate. From Europe came news of war with Turkey, a war which promised to anger half the world with Russia's territorial gains in the Balkans. Gathering up his specimens — which included a wild camel taken from its mother's womb — and making a final survey of Lob Nor by boat, Przhevalsky handed his spent brass cartridges to the natives and left with Zaman Bek for Kurla.

April passed in a forced march up the Tarim. Przhevalsky was irritated by Zaman Bek's attentions and opinions, and his proximity when dust storms forced them to share a *ger*. The expedition now took bearings openly, certain that Yakub Bey would be too preoccupied with the Chinese to care about Russian reconnaissance. As they neared Kurla, they were intercepted by a messenger from Kuropatkin bringing last year's newspapers. Przhevalsky was disappointed to read that no world war had developed. War, he felt, would revitalize a stagnant world and rouse a depressed spirit. He complained in his diary of the 'lack of moral fibre and energy which characterizes all the actions of diplomacy and governments today . . . I was convinced that war was inevitable . . . the mountain has given birth to a mouse.' His irritability was a symptom of the onset of the skin disease that was to torment him over the

next year. Oskar, the dog, began to tire on the waterless stretches: 'I even have difficulty getting the choice of dog right for an expedition,' grumbled Przhevalsky.

At Kurla they were housed away from the town, as before. After five days, however, Yakub Bey called for Przhevalsky, who made him a present of three modern carbines. The meeting was more pleasant than he expected and Yakub Bey's officers were too worried by their predicament to be interested in extracting more presents. Yakub Bey provided another ten camels to see the expedition off and asked Przhevalsky to remind the government in Petersburg of his existence. 'Yakub Bey,' wrote Przhevalsky to his brother Vladimir, 'is the same shit as all feckless Asiatics. The Kashgarian empire isn't worth a penny.' With a gift of three gold rings, one for Przhevalsky, one for his mother and one for Eklon, the party left Yakub Bey's court.

Zaman Bek escorted the expedition northwards. Only after four days did he agree to turn back; Przhevalsky had made him a gift of his book, *Mongolia and the Country of the Tanguts*, and of his old carbine, and he wrote an equivocal note, 'we met with all sorts of cooperation', which might satisfy both Yakub Bey and Przhevalsky's sense of honour. Then he shook the dust of Kashgaria from his feet and started to climb the Yuldus range.

Throughout June, one by one, the camels died. They ate poisonous plants, were attacked by gnats or gave in to the heat. Much baggage had to be jettisoned, and Przhevalsky and Eklon had to walk and transfer loads to their horses. By 8/20 June only ten camels were still alive; a Cossack had to gallop ahead to Kulja for new animals, while messages were sent to the Turghud refugees in the mountains asking them to hire out oxen to the expedition.

There were no oxen to be had, but parties of ragged, starving Turghud begged to be allowed to follow the expedition out of Kashgaria. They were killed outright whenever the Uighur Turks saw them; the Tungans, beggared by Yakub Bey, were reduced to preying on the Turghud. Przhevalsky could not refuse to shelter and feed them when the unassuming, stolid Dondok Irinchinov interceded for his fellow



1 Olga Makaryevna, Przhevalsky's nanny



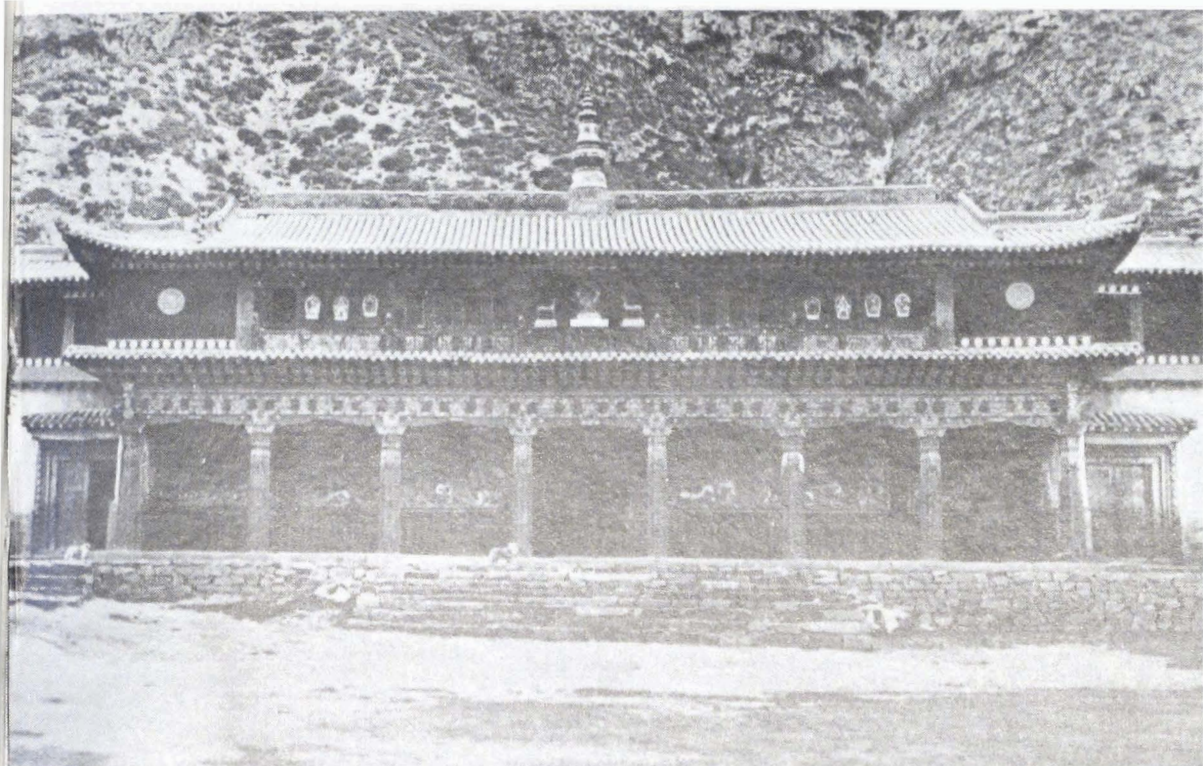
2 Przhevalsky in his late 30s, from his book, *Mongolia, The Tangut Country*, Vol. 1, translated by E. Delman Morgan, London, 1876



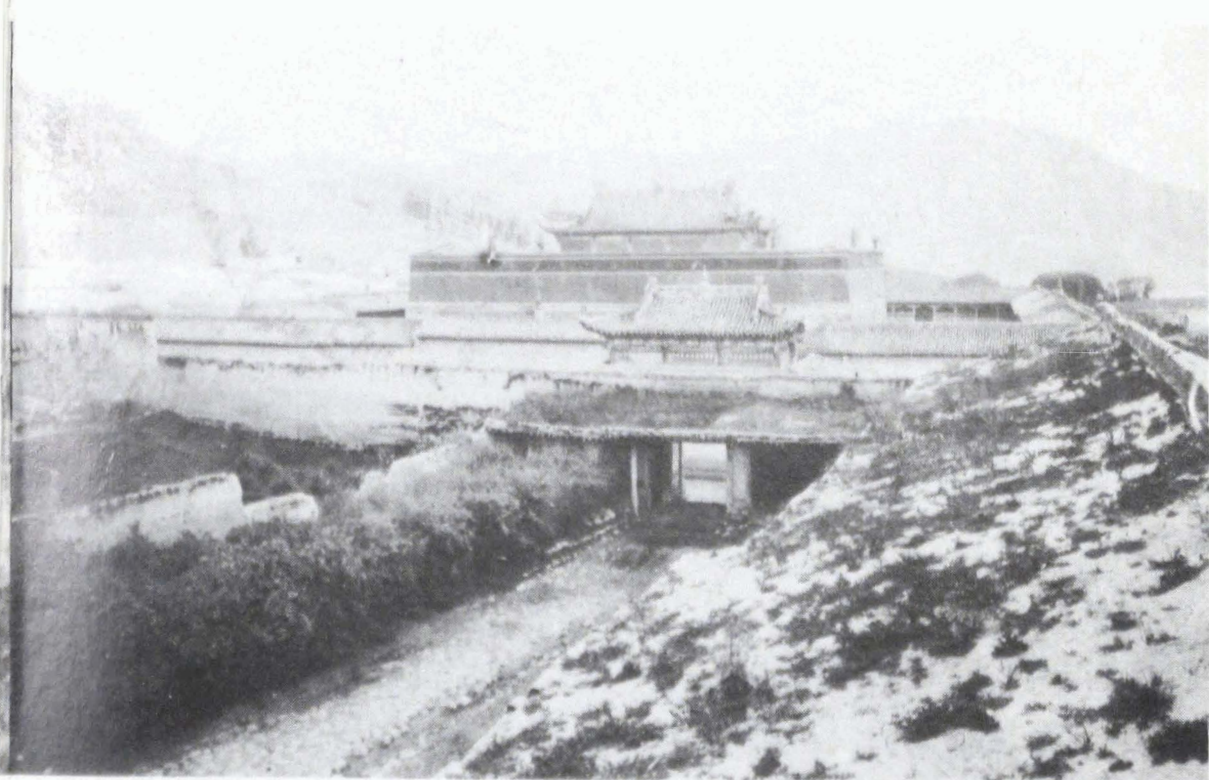
3 Fyodor Eklon, Przhevalsky's friend and travelling companion, 1875-83



4 Kalgan: Camels coming in from Urga, photograph by A. J. Moore-Bennett in 1918 (courtesy of the Royal Geographical Society)



5 Choibseng lamasery (photograph from the Overseas Missionary Fellowship)



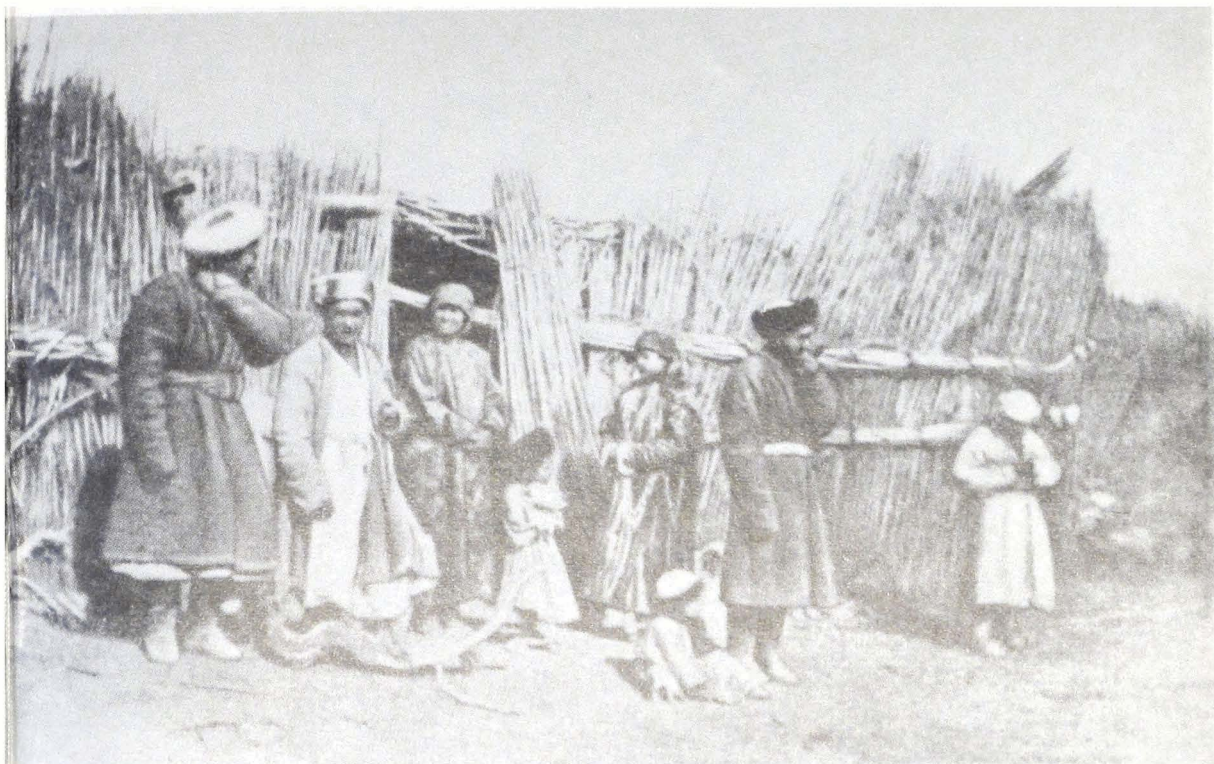
6 The main church of Choibseng lamasery, Kansu, photograph by R. Farrer (courtesy of the Royal Geographical Society)



7 The Do Chu (Yangtse Kiang), photograph taken by Roborovsky in 1884; reproduced in Przhevalsky, *Ot Kyakhty na istoki Zholtoy reki . . .*, St Petersburg, 1888



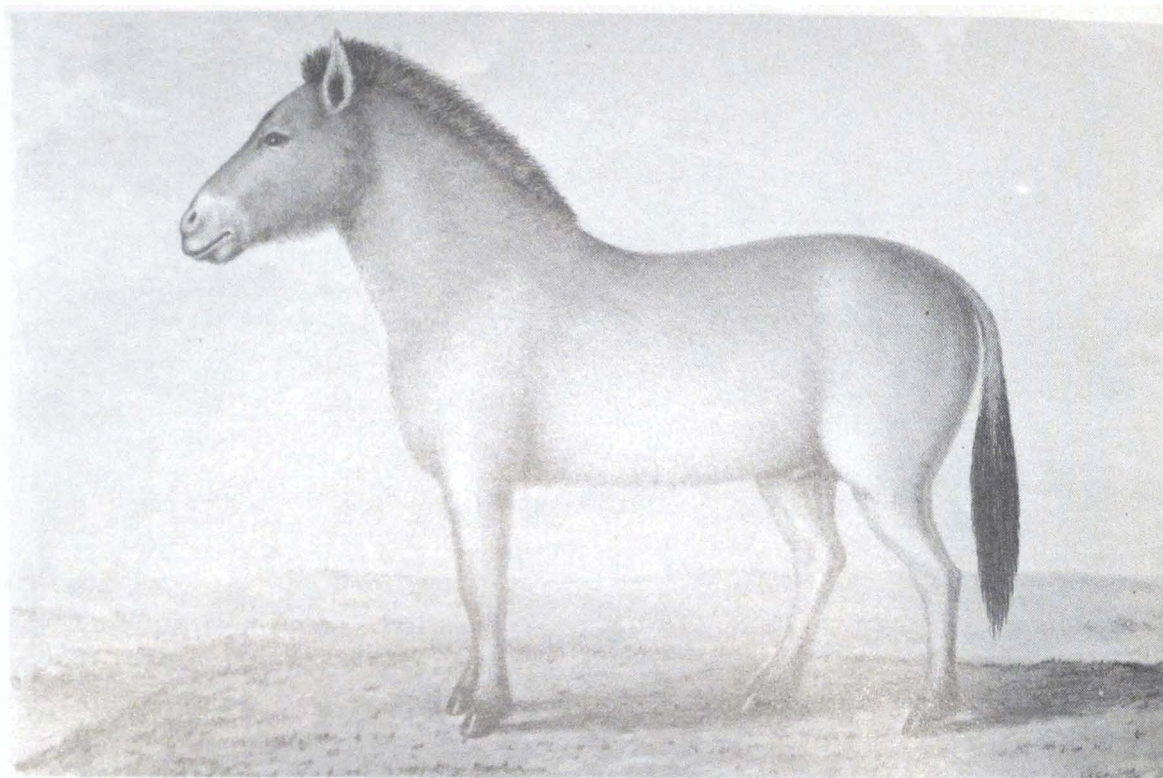
8 Lob Nor, photograph taken by Roborovsky; reproduced in Przhevalsky, *Ot Kyakhty na istoki Zholtoy reki . . .*, St Petersburg, 1888



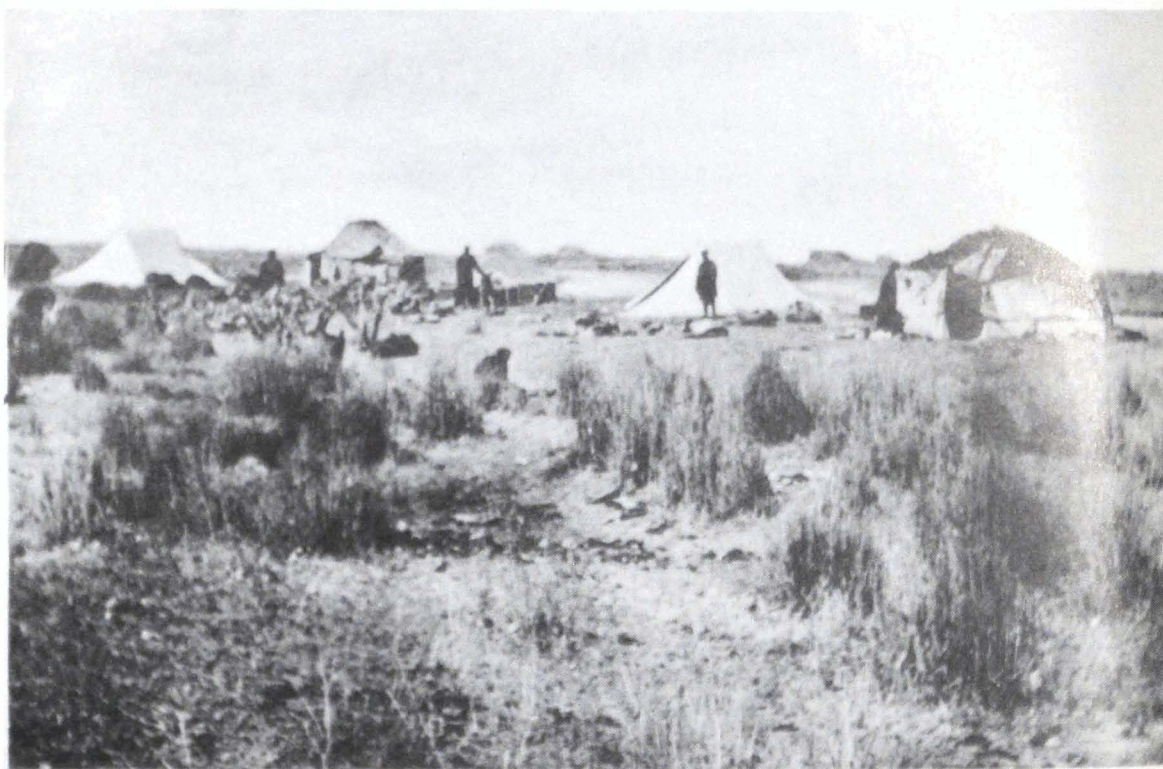
9 Lob Nor reed huts, photograph taken by Roborovsky; reproduced in *Ot Kyakhty na istoki Zholtoy reki*



10 Kunchikan Bek and his son, Lob Nor, 1885, photograph taken by Roborovsky; reproduced in *Ot Kyakhty na istoki Zholtoy reki*



11 *Equus Przewalsky*; from a contemporary lithograph

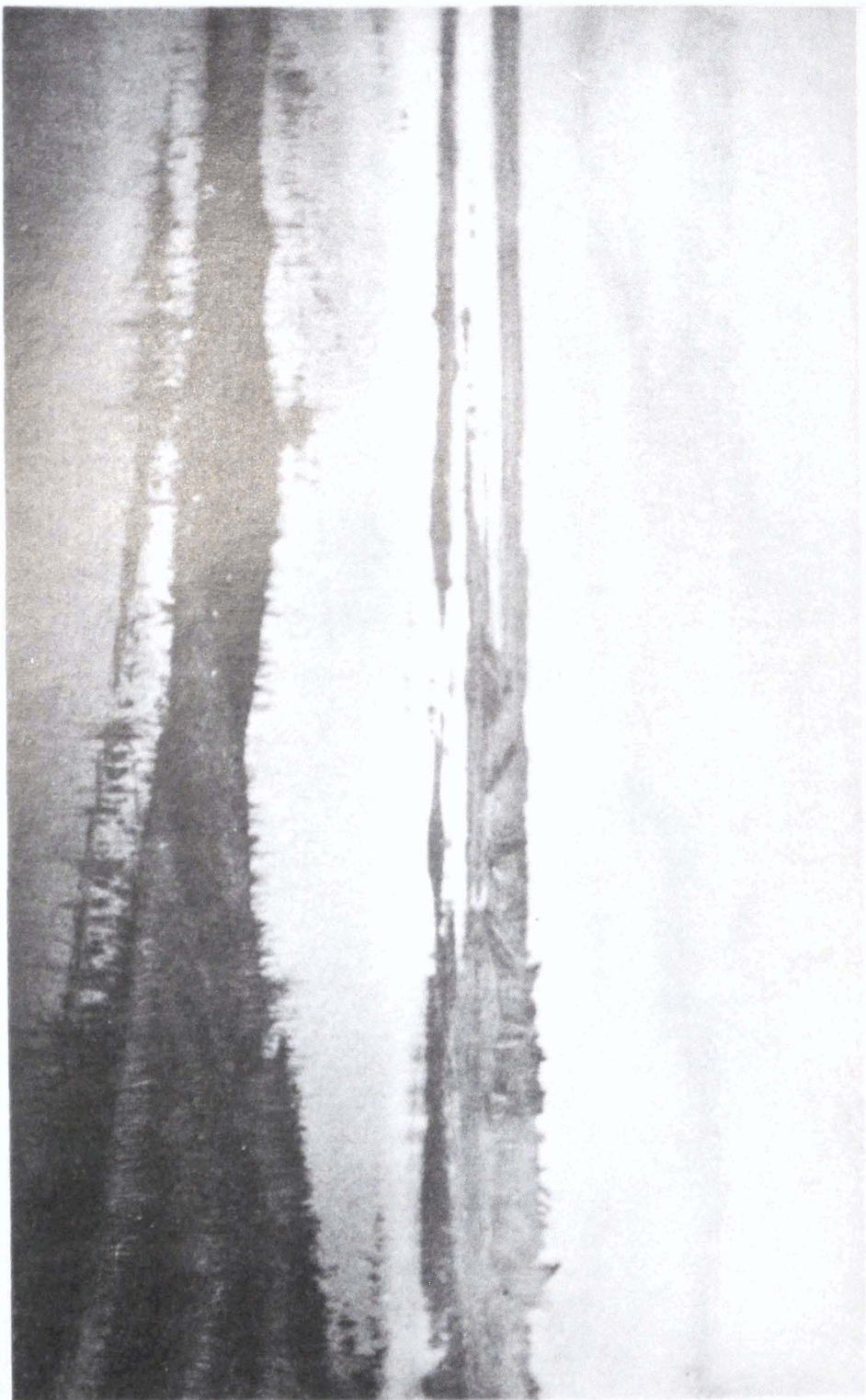


12 Przewalsky's camp at Lob Nor in 1885; reproduced in *Ot Kyakhty na istoki Zholtoy reki*



13 Przhevalsky, Roborovsky and Kozlov in 1886; from *Ot Kyakhty na istoki Zholtoy reki*

14 Lob Nor, photograph taken by Roborovsky; reproduced in *Oi Kyakhty na istoki Zholloy reki*



Mongols. Short not just of food but of pack animals, the expedition could only cover half its usual daily distance, so that the Turghud were still in danger of pursuit. On 9/21 May, Przhevalsky's name-day, it was cold and wet; nine men and all the dogs slept in one tent for warmth. They celebrated with their last bottle of brandy and the last pot of jam that Eklon had hidden against such a day. A few days later the last of the flour was eaten and the expedition and refugees had to exist on the gazelles which the Cossacks shot. Another twenty-one Turghud, mainly old men and women with babies, joined the party, but as they were leaving Kashgaria, at the Khaidu River, most of the Turghud decided to hurry on ahead. No sooner had they left than shots rang out; seven of them were killed by Uighurs. The rest stayed with Przhevalsky, swimming the rivers with the camels, somehow surviving on tea and meat, wrapped in old clothes and pieces of felt scrounged from the expedition, and despite the intense wet cold of the snow-covered upper Yuldus, glad to be alive. In one well, from which they had drunk, Przhevalsky spotted the corpse of a young Turghud woman.

As they approached Kulja, the Cossack returned with *dzamba* (roast barley meal) and butter; the local Mongols hired out a few oxen to relieve the camels of their heavy loads. But there was little fuel to make life bearable at night and Przhevalsky took to burning spade handles to keep warm. A little later Tokhta-akhun rejoined them, bringing more mon-pansier, brandy and a Swiss cheese. Coming down into the Ili Valley, the weather was warmer and, despite his haste, Przhevalsky at last began to find flora worth collecting. In mid-July, plagued by gnats and mosquitoes, the expedition was back in Kulja. Przhevalsky was overjoyed to hear of Russia's victories over Turkey. He telegraphed the War Ministry, asking whether he might join the army at the front, while in his diary he wondered if the course of his expedition towards British India might not be militarily just as important. 'Where shall I have to go? To the Danube or to the Brahmaputra?'

But Milyutin and his New Army had enough officers to fight the Turks; he ordered Przhevalsky to continue his explorations. Even before arriving at Kulja, Przhevalsky had begun

to re-form the expedition. All the Cossacks except Dondok Irinchinov, Panfil Chebayev and a Buryat called Garmayev had been sent ahead; Przhevalsky took on a Turghud as guide and interpreter; all of them were on probation for the next stage. Meanwhile, his predictions were coming true. Less than a month after Przhevalsky left Kurla, Yakub Bey was dead. Kuropatkin reported: 'On 16/28 May 1877 at 5 p.m. the Badaulet was severely vexed by his secretary, Hamal, and beat him to death with a rifle butt for carelessly handling certain assignments. Then Yakub Bey attacked and started hitting his treasurer, Sabir-akhun. Then he had a stroke and lost consciousness and speech. The Badaulet remained in this state and died on 17/29 May at 2 p.m.' Yakub Bey's eldest son drew a revolver over the coffin and shot his brother dead. The Kashgarian empire was in ruins. The Chinese quickly took Kara Shahr and Russia's policies were forestalled.

Before the fatal news reached Kulja, Przhevalsky wrote a report for the General Staff, 'On the Present State of Eastern Turkestan.' He gave a searching analysis of Yakub Bey's weaknesses, predicting the imminent collapse of Kashgaria. His main recommendation was that the Russian authorities should profit from the disorder by bringing the Russian border south from the Ili Valley and annexing the southern Tien Shan and Yuldus 'with their excellent grazing on which many thousands of Kalmyks can be settled, who are in any case more inclined towards us than to the fanatical Moslems'. But the recommendations came too late. The victorious Chinese were not going to let Russia benefit from Kashgaria's ruin.

Przhevalsky had brought back to Kulja not just scientific collections and political intelligence, but sickness. Psychological tension, months of unwashed intimacy, salt dust and insect bites had weakened everyone in the expedition. Przhevalsky and Eklon found themselves suffering from an excruciating itch which the Kulja doctor diagnosed as *pruritis scrofi*. Przhevalsky's testicles itched, his head ached and nothing in Kulja's meagre dispensary brought relief. Eklon developed a serious fever. Przhevalsky tried to forget he was ill, though he could hardly sleep. He wrote up his journey and in a matter of weeks he finished the most laconic of all his acc-

ounts, *From Kulja across the Tien Shan and to Lob Nor*, and began, headaches, itch and diarrhoea notwithstanding, to make a fair copy for publication in the Imperial Geographical Society's communications.

He went on preparing for a new departure for Lhasa. He chose twenty-four apparently superb camels from the animals that the local Kirghiz offered. He and Eklon, tears rolling down their cheeks, gave Oskar, the dog that tired too easily, to a Major Gerasimov. Cossacks and soldiers were carefully chosen. Some of the scientific collections were sent to the Academy of Sciences, some were left in the care of the prefect of Kulja. Przhevalsky was buoyant; he had just been promoted to full colonel. But he had more worries. A letter came from Yelena, congratulating him on his promotion, but full of sadness:

You generals all ought to stay in one place. Probably this is your last expedition. Don't you torture yourself and me as well. What more do you want? As it is, the memory of you, your being deprived of all life's comforts have made my life a misery and really I've aged during this time by ten years and I shan't see you for another two years!

Now your uncle Pavel Alekseyevich died on 26 December. He had a short illness and Mikhail Aleksandrovich [Pylytsov] gave him a good funeral; of course afterwards Vladimir took on all the burial expenses . . . The last months of his life he was quite unconscious, couldn't recognize anyone and it was a good thing that he didn't drag on but just died peacefully. But everyone was drunk at the funeral, the people who all dropped in got through ten gallons of vodka in one day . . .

Przhevalsky set aside illness and worries and put his mind to the journey to Lhasa. This time he would have to move through Chinese-held territory and skirt round the battles and massacres in Kashgaria by describing a great arc through Dzungaria, the oases of Hami and An-hsi to Tsaidam.

The expedition set off on its 'second stage' on 28 August/9 September 1877, with three horses, twenty-four camels, two-

and-a-half tons of baggage, thirty-three firearms, 7,200 rounds of ammunition, twenty-five bottles of brandy, a hundredweight of tea, and about seventy pounds of Turkish delight, monpansier and marmalade. As well as his nucleus of eight men, Przhevalsky had now taken on a Chinese-speaking Moslem, Abdul Basid Yusupov, who was disarmingly stupid, with 'a head like a pumpkin', as Przhevalsky put it, and a guide, a reformed Kirghiz horse-thief, Mirzash. Both were engaging characters, but they had serious drawbacks. Abdul's loyalty to Przhevalsky made him offensively bumptious when speaking with Chinese officials; Mirzash led the expedition on even more of a detour than was already necessary to avoid Chinese soldiers and convict gangs, in order to call on his relatives on the Borotala River. The Cossacks soon nicknamed Mirzash the 'fat-faced kumys-shitter' for his virtuosity in relieving himself without dismounting and his passion for fermented mare's milk (*kumys*). Przhevalsky thrashed Mirzash on three occasions for deceit and for nearly missing a well; but he was secretly fond of this 56-year-old rogue with a record of 1,000 stolen horses and a deep axe-scar on his forehead to prove it.

In overpowering heat they set off down the Ili Valley, through the Tungans' orchards and gardens, before climbing the Tien Shan and moving north-east, parallel to the Russian border. Two more local guides were taken on and then dismissed. Mirzash took the lead, and as they descended to the Borotala, one of the expedition's horses was stolen by local Kirghiz; Przhevalsky ordered his Cossacks to confiscate another horse from the first Kirghiz settlement. The heat drove men and animals desperate with thirst; at nightfall the horses would drink from ladles and the small flock of sheep that they drove with them drank from hand-held bowls. The heat activated Przhevalsky's *pruritus*; his whole body itched and he longed for the first autumn frosts to cool it. Scorpions invaded the tent, and all the gaps had to be plugged with felt.

The great arc on which Mirzash led them had at least a few wells and a little fodder, but the heat was so great and the Kirghiz camels, despite their imposing appearance, so unused to caravan work that each day exhausted them. There was little game: chukar (*Alectoris kakeli*) fed on the berberis and

ephedra berries in the sheltered valleys; Eklon shot twelve partridges, and Przhevalsky shot a wild sheep and a vulture. But illness and doubts about his men and animals discouraged him. As they approached the carriage road from Manas to the border town of Chuguchak (T'a-ch'eng, Tarbagatai), the cold weather set in (26 September/8 October) but it brought no relief. Przhevalsky's diary records: 'Today, next to our camp, there were piles of straw left over from threshing. Early in the evening I went to the straw, got into it and sat there for about an hour. I vividly recalled my childhood when I used to lie about just like that on the straw under the shed in Otradnoye.'

Turghud pickets in Chinese service tried to halt the expedition; they could not read Przhevalsky's passport. He chased them off with blows from his whip. A week later, a Turghud officer asked him to stop until authorization came from the nearest town, Bulun Tokhoi (Fu-hai). Przhevalsky threatened to shoot him, and went on. Illness was getting the better of him; the weight he had put on in Kulja had vanished: 'My *testiculi* are itching badly as before, I wash them every evening and morning in a tobacco infusion — it doesn't do any good . . . It's as if I've put the evil eye on my health.' His face swelled up; the nicotine he washed in, to kill any scabies mites, did nothing but further irritate his skin and finally poison his whole system. Only a stinking mixture of tar and mutton lard brought temporary relief. The severe cold that now covered the Dzungarian desert made the itch far worse. Then he developed a boil on one buttock which soon became an abscess: riding became so painful he had to dismount, and walking made him more tired.

There was little game and the price of sheep in this war-devastated region was such that it was hard to feed eleven men. Rations were cut: a sheep now had to last three days instead of two. Their route led them within two days' gallop of the Russian post of Zaysansk (now Zaysan), but Przhevalsky dared not send Mirzash for supplies lest he fail to return, and he could not induce any of the Turghuds to ride there, for they were afraid of being murdered by the Moslem Kirghiz. So he had to trudge on, without medicine or newspapers. Some of the Turghud chieftains were friendly, but Przhevalsky was in

no mood for talk: 'To get out of visits from all this rabble I decided to move on, despite the fact that the abscess on my behind hurts unbearably.' Even the ducks on the Bulin River did not tempt him: 'I prefer to put up with pain rather than stop in inhabited areas.'

At this point the expedition turned south-east for the 300 miles across desert to Guchen (Ch'i-t'ai). It was flat and easy country, but the wells were foul and at Badan Khuduk, 200 miles from Guchen, with sixty-five waterless miles ahead, they dug out the remains of a well to find only a few drops of moisture left. Once again, Przhevalsky's luck held out: snow began to fall and the camels and horses were able to stave off complete dehydration. But there was no fodder and the horses had to subsist on rice. Early in November, across 100 miles of desert, the 17,500-foot Bogdo Ula, the sacred mountain of the Tien Shan, came into sight. Przhevalsky felt sad that he had no one with whom he could share his impressions. The cold was intense; the expedition had left its *ger* and felt boots in Kulja. Not until mid-November did they reach Guchen, men and beasts hardly able to stand.

Przhevalsky stayed away from the town, sending Abdul, Mirzash and a Cossack to deal with the authorities, buy supplies and seek out a Chinese doctor. Anointment with tar had peeled all the skin from his groin: he was desperate. He tried applications of tobacco ash in olive oil, but the nicotine made him vomit and turn delirious. The Cossacks seemed happy to rest; they met some Tatars who had come to trade in Guchen; they laughed and played the balalaika. Chebayev came back from Guchen drunk, to Przhevalsky's utter disgust. But after a week the Cossacks found an old *ger* in which Przhevalsky could rest and treat himself. One of the Tatars advised him to anoint himself with ground vitriol on pieces of fat from a sheep's tail: he trustingly did so, and wrote in his diary: 'I couldn't bear the unendurable pain and irritation for more than ten minutes.' Three more times he tried the ground vitriol treatment until he could take no more and called in a Chinese doctor. The doctor came out from Guchen with a mixture, to be drunk and applied, of forty different herbs, among which Przhevalsky recognized medicinal rhubarb and

ginseng. The doctor made Przhevalsky cut out his staple diet of mutton and sweets; he tried salt and alum and, as a last resort, an ointment of mercury and musk oil. It was all in vain, though Przhevalsky offered the doctor fifteen liang for a cure.

He lost interest in the expedition. Chinese soldiers whipped the Cossack Chebayev; Przhevalsky sent only Abdul to protest. He took refuge in reading Markov's *Barchuki (The Squire's Children)* for the tenth time, 'My own childhood as in a mirror'. He began to shun the Cossacks and they him. His diary is no longer a mixture of high-flown sentiment and astute observation, but a confused and ill-tempered record of depression: 'Filth, cold, tiredness. Morally still worse . . . even the company of my Cossacks is far from being suitable for an intellectually advanced man . . . The Cossacks themselves can instinctively sense this and fear my *ger* like the plague.' Only in reading and writing could he soothe his pain and irritation.

The Tatars were now leaving Guchen for Russia. Przhevalsky asked them to tell the authorities in Zaysansk to send medicine and papers. But the very next day he changed his mind and decided to turn back and make for the Zaysansk hospital himself. His hands were shaking, his strength was failing with the terrible cold and the smoke of the pathetic fire inside the *ger*; soot and dust only aggravated his skin disease. The last of his scientific instruments, his chronometer, was blocked with the dust that filled the air of Guchen.

He was disgusted by his Cossacks who were only too pleased to be on the move and on the way home. They were, he concluded, no better than the Asiatic animals on whose strength any expedition was forced to rely: 'A good man wouldn't come out of it alive. But on the other hand, with companions like mine, especially Cossacks, you have to be extremely strict . . . You can't find any anxiety to please or devotion. Everything is done out of fear of the stick . . .' Only Eklon commiserated. Przhevalsky was so immobilized by pain that they bought the front half of a Russian cart, set it up on an axle, and made a wooden box for the sick man to lie in. Harnessed to a camel, this cart jolted Przhevalsky over the desert; it was hardly less painful than walking or riding, but at least he could undress and anoint himself with tar and lard every hour, till his

clothes stank of tar and he could bear exposure to the freezing air no more.

All their supplies had to be taken with them, for Przhevalsky could not entrust them to the Chinese. The camels were rested, but still unfit for the journey. Nevertheless, they covered the 450 miles to Zaysansk in a month. Mirzash had gone ahead and met the party with some medicine and a bottle of champagne; Przhevalsky was so grateful that he invited the 'kumys-shitter' to spend the night in his *ger*, but Mirzash retched and spat so violently after a feast of mutton that Przhevalsky and Eklon threw him out. The Russian authorities sent post-horses to the frontier picket of Tsagaan Obo and Przhevalsky was rushed to Zaysansk.

He spent January and February 1878 in private quarters, anointing his groin with whatever the hospital could provide. Zaysansk was a typical frontier settlement, every bit as bad as Nikolayevsk on the Amur. The officials drank, played cards, whored and embezzled. There were no amenities. Przhevalsky's medicines came in old blackcurrant cordial bottles; he had to order medicated soap from Semipalatinsk. These were 'the worst days of my life'. Eklon too had *pruritus*, but he was recovering. Two Cossacks, Chebayev and Urosov, had caught it. Only when Przhevalsky had resigned himself to going to Omsk for treatment did the disease seem to abate. But he found little to cheer him. Zaysansk seemed to demoralize his Cossacks; he sent Chebayev back to the army for drunkenness and theft. Even Eklon did not please him. The only agreeable company Przhevalsky found was a German taxidermist called Habergauer who had come to collect birds on Lake Zaysan.

Przhevalsky tried drinking potassium iodine and, although his throat was badly burnt, his skin began to heal. Spring was coming and he wanted to go to Lake Zaysan himself and watch the spring migration. Eklon stayed behind to buy new camels and re-equip for the expedition's third departure. But cold nights spent on the lake-shore resulted in a relapse and Przhevalsky was forced back to Zaysansk. On 18/30 March 1878, the eve of the expedition's departure, a messenger came from Semipalatinsk, ordering them to halt. The Chinese government was insisting on the extradition of the Tungans

and was about to send a legation to Petersburg in the hope that the Russian government would be more amenable over the Ili Valley than was its ambassador, Byutsov, in Peking. But the Russians, exhilarated by their triumph over the Turks, were standing firm, and war was in the offing. Przhevalsky would not stay in Zaysansk, but agreed to halt a day's march away at Kenderlyk to await further orders. He stayed there a week, observing the birds on the river, while supplies continued to arrive. Pyltsov sent quinine, citric acid and confectionery. A camera and two chronometers came, but they had been overturned and wrecked while crossing the River Irtysh. Another two Cossacks, Kalmynin and Teleshov—the latter to become Przhevalsky's favourite—joined the expedition.

Since coming to Zaysansk Przhevalsky was perturbed not to have heard from his mother. He telegraphed enquiries, only to have a strange message from Tolpygo, his stepfather, that she had a bad hand and could not write. He persisted with more telegrams and eventually, at Kenderlyk, was told that Yelena had died of stomach cancer nine months before in June 1877. Pyltsov had not wanted to break off the expedition and had concealed her death. Now there was no point in secrecy; four days later orders were telegraphed from Petersburg telling Przhevalsky to postpone his journey until the political crisis was over. Secretly relieved, though very depressed, Przhevalsky disbanded his men, stored or sold his supplies, and went home on leave to Otradnoye. But he was resolved to return: his diary closes: 'Interruption, not end of diary'.

The 1878 crisis was global. Russian armies had reached the suburbs of Constantinople; the British and French were subjecting Russia to severe pressure, demanding that she relinquish much of the territory she now proposed to make over to a pro-Russian Bulgaria. In case of war, General Kaufmann had mobilized an army of 20,000 men to cross the Pamirs and invade British India; and although the Chinese were sending a Manchu, Ch'ung-hou, to negotiate the return of Ili, an Anglo-Turko-Chinese alliance was threatening Russia.

For the fourth time Przhevalsky had to put aside his dream of reaching Lhasa. But he decided: 'A year will pass, the misunderstandings with China will be settled, my health will re-

cover — and then I shall take up the wanderer's staff and set off again into the Asiatic wilderness.' He passed through Petersburg, where the doctors prescribed daily bathing, and went straight to Otradnoye. His account of Lob Nor had already been published, and he had no work to preoccupy him. The Lob Nor account, despite its brevity, was a sensation. In Berlin, Baron Richthofen, the most distinguished of German explorers of China praised Przhevalsky's enterprise but cast doubt on the authenticity of his Lob Nor, because it was too far south and not saline. Przhevalsky replied with a polite rebuttal, which prefaced the English translation of his account, emphasizing that he had found no river flowing away from the Tarim which could lead to a lake elsewhere and dismissing Chinese maps as worthless. Not until after his death could it be shown that Richthofen and Przhevalsky were both right: Lob Nor 'wandered'. Przhevalsky was awarded the first gold Humboldt Medal from Berlin, and medals came from London and Paris. Sir Douglas Forsyth, like Przhevalsky a former emissary to Yakub Bey, wrote a preface to the English translation by Delmar Morgan. The Royal Geographical Society in London lauded Przhevalsky for having shed more light on Central Asia than anyone since Marco Polo.

The Russian government was naturally anxious for Przhevalsky to resume his explorations as soon as possible. In Petersburg, Ch'ung-hou proved a remarkably naive negotiator: the Ili question was being resolved as the Russians wished; the Chinese were being committed to surrender much of the valley to Russia and to pay an indemnity for the rest, thus financing a Trans-Siberian railway and securing all Russia's needs in the Far East. In Berlin, the Russian Foreign Minister, Gorchakov, agreed to Disraeli's idea of 'peace with honour'; the risk of China finding an ally in Britain vanished. A Russian fleet under Admiral Lesovsky sailed off to warn the Chinese that, however strong General Tso Tung-t'ang might be in Central Asia, Russia could hurt maritime China far more badly. Byutsov was recalled to Petersburg to help Milyutin and Girs, the Deputy Foreign Minister, subdue Ch'ung-hou; a chargé d'affaires, Koyander, began to discuss Przhevalsky's new expedition with the Chinese Ministry of Foreign Affairs,

the Tsung-li-yamen. The Chinese had already granted Count Széchenyi, the Hungarian explorer, a safe conduct from Kansu to Tibet; to refuse Przhevalsky would have created an anomaly.

Przhevalsky quickly recovered in Otradnoye from illness and the shock of his mother's death. He reflected: 'True, our education was very spartan, but it hardened our strength and made our character self-sufficient. Peace be to your ashes, dear mama.' At Otradnoye his old nurse Makaryevna saw to his needs with the same energy and with even greater devotion. The summer flew past; the days were spent bathing and shooting. In August Przhevalsky sent a memorandum to the Geographical Society and the War Ministry, setting out his plans.

His memorandum stressed that Russian approaches to Tibet from the north had met with more success than those of missionaries from the wild eastern borderlands of Amdo and Kham, or of the British (except for their pandits) from India. He drew a picture of Lhasa as the Rome of Asia with spiritual power stretching from Ceylon to Japan over 250 million people: the most important target for Russian diplomacy. He mentioned the scientific value of ethnological study and mapping, but he stressed the political goal, the spread of Russian influence to Tibet and the Himalayas, encircling China and threatening India. 'Besides, scientific explorations—as is very rightly put in the Deputy Foreign Minister's [Girs'] letter to the Minister of War on 6/18 June 1878—will mask the political aims of the expedition and deflect any suspicions of those hostile to us.'

He still wanted a small expedition, but it expanded to include himself, two assistants, a taxidermist, two interpreters, two native guides and seven Transbaykalian Cossacks: fifteen in all. Nine thousand roubles were left over from the Lob Nor expedition; Przhevalsky asked only for another 18,500 for a two-year journey, carrying out a full survey, climatic observations and collections of flora, fauna and minerals, via Dzungaria and Hami to Lhasa, returning direct across war-torn Lob Nor, on the assumption that 'the Chinese are always willing to see Europeans out of their country'.

The memorandum was a formality; as long as Semyonov-

Tyan-Shansky was at the Imperial Geographical Society and Milyutin at the Ministry of War, Przhevalsky got whatever he asked for.

In the autumn he called on his brothers in Moscow and went to Petersburg to do the tiresome round of lectures, banquets and meetings without which no expedition was conceivable. In November he gave a public lecture which contrasted the dark state of knowledge about Central Asia before his Lob Nor Expedition with the information it had amassed. Lob Nor had been located, the Altyn Tag had been discovered 200 miles north of its conjectured latitude, and the route of the old silk road along the wells and oases between the plateau and the desert had been accounted for.

One thing preoccupied Przhevalsky: the choice of a traveling companion to replace poor Yevgraf. Przhevalsky wrote to Fateyev again, asking for help in the choice: 'Every extra person is a tie, especially if he doesn't answer to the demands of the expedition . . . where friendship and brotherhood must reign, together with unconditional obedience to the leader of the cause.' Civilians were out of the running. In the end Przhevalsky interviewed a school-fellow of Eklon's, Vsevolod Roborovsky. Roborovsky was a lance-corporal in the Novocherkassk Regiment and, to Przhevalsky's delight, he had a talent for drawing as well as a knowledge of surveying. There was now no need to burden the expedition with delicate photographic equipment.

In January 1879 the Tsar returned from the Crimea and gave his approval for the release of 10,000 silver, and 10,000 paper roubles for the expedition. Przhevalsky wasted no time. He, Eklon, Roborovsky and two Cossack N.C.O.'s made straight for Moscow. Przhevalsky stayed with Vladimir, whose house was turned into a shambles by the mass of equipment and the comings and goings. It was a holiday for Vladimir's daughter, Alevtina; boxes and rifles cluttered up the hall, soldiers and Cossacks crowded the kitchen, and only their evident adoration of Przhevalsky taught her not to be afraid. But the family joked that Alevtina was the only girl Uncle Kolya could ever fall in love with, so that Przhevalsky's niece blushed and cried with embarrassment.

He stayed just a few days; Vladimir was left a complicated list of instructions for issuing pensions to their half-brothers and the family servants. By mid-February the expedition had reached the new railhead of Orenburg; another month on fast post-horses across 1,600 miles of snow brought them to Zaysansk again. Here Przhevalsky found Andrey Kolomeytsov, who had travelled with Potanin over Mongolia and with Severtsov in Turkestan. Severtsov had left Kolomeytsov stranded in Zaysansk with nothing but a collection of birds and mammals and his position as a retired N.C.O. to support him. Przhevalsky paid his debts, put his collections in the custody of the Zaysansk police and took him on as a taxidermist to assist Eklon. The rest of the men—Dondok Irinchinov, Teleshov, Kalmynin and Garmayev among the Cossacks, not to mention Abdul Basid Yusupov and the Kirghiz horse-thief Mirzash—were waiting at the frontier post of Kenderlyk for Przhevalsky. The most magnificent of his journeys was about to begin.

6

The Great Tibetan Expedition

He paweth in the valley and rejoiceth in his strength; he goeth on to meet the armed men.

JOB 39.21

In 1879 Russia and China were confronting each other. The chargé d'affaires in Peking, Koyander, warned Przhevalsky that the Chinese 'were less to be relied on than ever'. But he was turning forty and risks excited him: 'Perhaps the main chance of success is to be found in the risk itself.' He also knew that he was in a race, not just with the British, but with Count Széchenyi, who was heading for Lhasa from the capital of Kansu, Hsi-ning. His final preparations were thorough. He bought a flock of sheep to be the rearguard and a guarantee of fresh meat. (Other travellers to Tibet, the pandits, had used sheep to carry small packs as well.) The twenty-three camels were loaded with two-and-a-half hundredweight of sugar, forty pounds of dried fruit, a crate of brandy and a crate of sherry, brick tea and *dzamba*. Przhevalsky had personally boiled up wild strawberry jam for the Dalai Lama. The staple diet was to be mutton stew and game; five Cossacks were to do the cooking by rote. Two Mongolian sailcloth tents were to house the expedition. (In Tsaidam Przhevalsky bought a *ger* for himself, Eklon and Roborovsky.) The party was to wear sailcloth and cotton in summer, sheepskin in winter. Felt groundsheets, leather pillows, flannel blankets and plenty of sheepskins were their bedding.

Przhevalsky's scientific equipment was still meagre. He re-

fused to take cameras; Roborovsky was to be the expedition's artist. He had chronometers, surveying compasses, maximum-minimum thermometers and simple instruments for measuring humidity and altitude. Five gallons of spirit and 1,500 sheets of blotting paper were to cope with the specimens of fauna and flora. Przhevalsky had spent 1,400 roubles on 'beads for the natives': guns, watches, mirrors, magnets, a battery and a telephone (which were not appreciated), and tinted pictures of Russian actresses (which were popular).

They were more heavily armed than before. Each man was issued with a Berdan carbine and two Smith and Wesson revolvers, and carried a bayonet and forty rounds of ammunition on his person. The camels carried seven more rifles, a hundredweight of powder, 9,000 rounds of ammunition, and the loads were balanced by distributing four hundredweight of lead shot in the packs. Przhevalsky was determined not to be stranded defenceless; he also took twelve extra camels, eight for riding, four in reserve; the gentry and Abdul rode on five horses.

Before setting off, the expedition spent three weeks on fire-arms drill. 'This,' said Przhevalsky, 'was our guarantee of safety in the depths of the Asiatic deserts, the best of all Chinese passports . . . and if our little group had not been like a bristling hedgehog which can prick the paws of the biggest wild beast, the Chinese could have found a thousand opportunities to annihilate us . . .' In April 1879, as the snow melted, Mirzash once more led the way through Dzungaria on a route skirting populated areas to the oases of Barköl and Hami.

Przhevalsky had not gone a mile from Zaysansk when Kirghiz hunters brought in the skin of an animal that they called the *kurtag*, and which the Turghud Mongols knew as the *takhi*. The chief of the Zaysansk post, Tikhonov, handed the skin to Przhevalsky, who realized that this was the primitive Mongolian wild horse, so often reported and rumoured in Mongolia and Tibet, but never before seen by a European.

The skin had come from a young animal, with the stocky body, short legs and large skull of the Mongolian ponies. But it was no ordinary horse. It had no forelock, its mane was short

and erect like a donkey's. Its tail was more like a kulan's than a horse's, the hair beginning well below the base, yet it was not a kulan or any other race of wild ass. Przhevalsky noted its large, powerful, horse-like hooves, its deep-set eyes and short ears, and the enormous teeth that would have suited a cart-horse better than an animal of barely twelve hands. The skin and skull were enough to tell Przhevalsky that the horse was no feral escapee, but a specimen of the more powerful, bigger-brained primitive horse that once ranged the Eurasian steppes. With a perspicacity that scientists have only recently confirmed, Przhevalsky sent the skin back to Petersburg as a race of the tarpan. The tarpan is—or rather was—the only extant primitive horse. In the southern steppes of Russia, one or two small herds and the occasional isolated stallion were all that was left of the great prehistoric herds. In Przhevalsky's day the peasant settlers were hunting down the last remnants of the tarpan, for the stallions would often raid domestic herds and abduct the mares. Larger, more sandy-coloured and even wilder than the tarpan, the *takhi*, or Przhevalsky's horse, was in fact the same species of equid, a shaggy muscular form that had adapted itself to the rigours of the Dzungarian deserts, to living for days without water, subsisting on clumps of worm-wood and saltbrush, to fighting off wolves and rivals. The Przhevalsky horse is the 'edge form' of a species that flourished in the Pleistocene and which had survived in a pocket too remote for man to domesticate.

Przhevalsky had rediscovered one of the wild strains from which our modern horse breeds are, in toughness and fierceness, a degenerate descendant. The *takhi* of Mongol folklore, the short-legged, thick-necked symbol of speed and endurance painted by Palaeolithic man in caves from the Atlantic to eastern Siberia, was still alive. But not until mid-May of 1879 did Przhevalsky catch sight of his horse, *Equus przewalskii*, in the Dzungarian desert, and never was he to come within shooting distance of one. The wariness of the *takhi*, which had preserved it from capture and examination over the millennia was undiminished. Over the centuries man had only domesticated the half-castes from mares covered by a wild *takhi* stallion, which gave the ponies of the Mongols since Genghis Khan

their legendary stamina.

Przhevalsky's route into Dzungaria led east to Lake Ulünger and the town of Bulun Tokhoi (Fu-hai), and then followed the River Urungu up into the Altai mountains. Here they were to turn south across successive ranges and deserts to Barköl, before breaking through the Tien Shan to Hami, Tsaidam and Tibet. Przhevalsky and Eklon rode ahead with Mirzash, three echelons of camels, each managed by two Cossacks or two soldiers, followed; Roborovsky, Kolomeytsov and Abdul brought up the rear with the sheep and a party of dogs from Zaysansk that had volunteered as sentries for the journey.

It was cold; five days out a blizzard struck. But as they moved towards Lake Ulünger along a valley, with the Altai to the north and the Saur range to the south, with its patches of larch or birch woods and occasional crab-apples and meadow-sweet, life seemed idyllic. Lake Ulünger was an oddity: it was fresh and drinkable, although undrained. Only a few hundred yards of land separated it from the River Irtysh and drainage to the Arctic Ocean. As they arrived, the ice was melting. But few birds, save a flock of Bewick's swans, came to disturb the reedy marshes and the tamarisk-covered hills. The lake was as if untouched since Rubruquis, sent by Louis XI to make contact with the Mongols in Karakorum, had passed by in 1253. There was nothing to hold Przhevalsky's attention; he moved round the lake to Bulun Tokhoi. Once the focal centre of Dzungaria, it had been ravaged by the Tungans; only 100 Chinese soldiers lived there, enduring its notorious mosquito-ridden summers.

Przhevalsky went up the River Urungu, which cuts through the desert, feeding the lake with the rainfall of the mountains in the east. For twenty days the expedition followed the river, mountain timber rushing past them. The water created a strip of life in an organically dead land. Boar and wolves scavenged along its banks. Sea-eagles fished and woodpeckers hammered at the timber. Here and there a few tulips were in flower. One draw of the fishing net gave the men two hundredweight of bullheads, each a foot long.

But signs of tragedy overlaid these impressions. Most of the grass had been trampled out of existence, and the trees were

gnawed and barkless. Dung and still-rotting carcasses that the wolves had not been able to finish told what had happened. The previous year 9,000 Kazakh nomads had migrated from Russia to Chinese territory; they had tried to make for Guchen, directly from Bulun Tokhoi. The desert proved impassable; their flocks and herds died of thirst. The survivors retreated to the Urungu for the winter, stripped it of its vegetation and left it strewn with cadavers. The devastation sobered Przhevalsky; he could only think of what the Mongol hordes must have left in their wake across the fields of Europe. Now no one but one or two Turghud pickets lived on the Urungu.

They came to the Guchen road; Przhevalsky avoided it and continued up the River Buluguk higher into the mountains, until finally he had to break out southwards. Near the pass out of the valley was a lake, Gashun Nor. Here Przhevalsky stopped for his first good day's hunting. Wild boar roamed the reeds and the vines; one of them was a 400-pounder, another leapt at Przhevalsky and dropped dead only at the fourth bullet. He thought of an ingenious idea for making his carbine more lethal: he had the Berdan bullets drilled out and the hole filled with sulphur and potassium chlorate, so that the gun now shot an explosive dum-dum into the wild boar. Only in Tibet, Przhevalsky reflected, were large game animals tame enough to come within range of ordinary bullets.

They were now in the southern Dzungarian desert. Here Przhevalsky found the fine-grained, wind-eroded yellow loess so typical of China — whether in the form of grotesquely sculptured cliffs, or dust more treacherous than sand-dunes, or alluvial silt in the lowlands. In Dzungaria, where loess met water, it made the oases extraordinarily fertile, for it was rich in fossilized organic material and had a good porous structure. Despite the winter cold and the spring dust storms, the slight summer rains thus turned the oases along the Tien Shan from Kulja to Urumchi and around Guchen and Barköl almost into a cultivated belt.

The dust storms were trying. The morning sun heated the east side of the rocks and the air rose turbulently against the cold western side, giving rise to regular squalls of sand and

dust that infiltrated everything. Somehow vegetation survived; there were no proper trees, but the *saksaul* (saltwood, *Haloxylon*) succeeded in the pitted sand. From the Caspian to China, from Siberia to Afghanistan, the *saksaul* is the desert's chief fodder and best fuel. Camels love its brittle, leafless twigs; fire flares up even on the green timber. Where *saksaul* grows, so, often, does *dyrisun* (*Lasiagrostis splendens*), a wiry sharp-edged grass which forms clumps nine feet high; camels thrive on it and birds and mammals can nest in it. Of the 160 species of bird Przhevalsky saw, only ten, such as the desert jay and a small screech owl which preyed on reptiles, were tough enough to live in the desert the whole year round. In any case, the main migratory routes followed the water-holes along the mountain chains to the west. There were even fewer mammal species: only thirteen lived here—sand marmots, the diminutive, bulbous-nosed saiga antelope, the kulan or wild ass, and the wild horse, as Przhevalsky now knew.

Not far from Gashun Nor he saw two herds of *Equus przewalskii*, groups of five to fifteen mares led by a stallion. His account of the journey relates:

Kurtags are in general extremely cautious; they are also endowed with excellent scent, hearing and sight . . . They are met with rather seldom; and in any case live in the wildest parts of the desert from which they visit the water-holes . . . probably they can go without water for long periods, getting by on the succulent vegetation of the saltlands. Hunting wild horses is extremely difficult and is possible only in winter when snow falls on the waterless desert. At least then the hunter can't die of thirst. But he will be sorely tried every day by the severe sub-zero temperatures . . . such a hunt would mean going out for hundreds of miles for a month at a time. I personally came across only two herds of wild horses. One of them let us creep up to within a marksman's distance, but the animals caught my companion's scent at not less than a thousand yards and withdrew. The stallion ran ahead, his tail arched, his neck stretched out in an utterly equine way; seven females, probably, followed him. The animals

stopped at times, crowded together, looked in my direction and sometimes kicked out at each other; then they set off again at a fast trot and finally vanished . . .

Przhevalsky's conjectures were confirmed by later Russian travellers; the wild horse was limited to a small area on the borders of Dzungaria and western Mongolia. They remained elusive. Except for the brothers Grumm-Grzhimaylo who shot two stallions, Russian explorers such as Shishmaryov, Obruchev and Kozlov brought back specimens which had been killed by native hunters. Not until the twentieth century were any specimens of *Equus przewalskii* captured alive, to be sent to Falz-Fein's Ukrainian estate, Askania Nova.

At Gashun Nor, Mirzash left Przhevalsky: this was as far as he could guide them. The expedition took on a Turghud guide to Barköl and set off south. The extraordinary visibility made orientation easy: the Baitik mountains were visible, dust and sand permitting, 120 miles off; the lack of tracks did not matter. But when they reached the mountains and had to find the best passes, the guide proved useless, leading them from one gorge to another. For the first mistakes Przhevalsky thrashed him; finally he dismissed him and crossed the successive ranges of hills as best he might, until they struck the road to Barköl, a branch of the 'Northern Road' along the Tien Shan foothills.

Nearer the Tien Shan the landscapes were less arid. Kulans grazed the southern slopes; potentilla and *Iris tenuifolia* were in flower. Few Kirghiz or Turghud grazed their flocks here, for the Tungans or the avenging Chinese army had killed them or chased them off. In the Tien Shan there were no nomads at all; immigrants were walking from Kansu, a hoe and a bundle of possessions on their shoulders, to reinforce the handful of Chinese peasants who had escaped massacre fifteen years ago. Through Abdul, Przhevalsky tried to ask directions of them, but he was met with blank hostility. Soon the snows of the Tien Shan peaks were in sight and the expedition rode along the carriage road into the oasis of Barköl and pitched camp twelve miles outside the town.

So far, so good: Przhevalsky wrote to his brother Vladimir

(in a letter sent back with Mirzash): 'Even the itch has passed almost completely . . . Give me health and luck and all will be done . . . Sometimes on special occasions after a good hunt we indulge ourselves with jam from Otradnoye and cordials from Smolensk. We are driving about fifteen sheep behind the caravan and eat two every three days. But now we are eating boar.'

The journey had been almost leisurely: fifteen miles a day, covered in six or seven hours; bearings mapped without interference; Cossacks taking turns to kill and cook a sheep, to graze the camels and horses at night and load them in the morning. At the end of May there was plenty of grass around Barköl; the camels were tied in pairs and the horses hobbled, free to forage. Przhevalsky wrote up his diary and observations, Eklon and Kolomeytsov skinned the mammals and washed the skins down with arsenic soap, and Roborovsky dried plants and drew the local inhabitants and landscapes. Sometimes curious Mongols would visit the camp; the Cossacks often struck up a friendship or gave the Mongols meat in exchange for their help in fetching water and dried dung or in rounding up stray camels.

Dinner was the event of the day. It began with soup, thickened with rice or millet; the next course was game or fish; the entrée was invariably mutton. 'I doubt,' wrote Przhevalsky in a letter 'whether any gourmet eats the various refinements of European cuisine with the relish with which we drink brick tea and eat *dzamba* and mutton lard.' The brackish water that smelt of tallow after being carried all day in the skins of the slaughtered sheep did not deter him. 'The traveller must seek within himself the strength to fight all these disadvantages and not try to get rid of them by various palliatives.'

In the less arid hills, Przhevalsky would stop for a day's hunting; shooting lasted from dawn to ten in the morning and the rest of the day would be spent shoeing the horses, patching the camels' heels with raw hide, and preparing the day's kill. The night always began early and everyone slept with loaded revolvers to hand.

At Barköl Przhevalsky forfeited this independence from his surroundings. Abdul and a Cossack rode into town to buy supplies at the market and to find a guide across the Tien

Shan to Hami. They found the governor of Barköl distinctly cool. Soon a guide arrived, with an escort of six soldiers, more an impediment than an honour to Przhevalsky, for surveying would now be barred. (Fortunately, earlier Russian expeditions had mapped the Barköl-Hami road in 1875 and 1877.) After only two days' rest, the expedition left Barköl's pastures and arable land to cross the Tien Shan ridge, here at its narrowest. It was already June, but the poplar leaves were just unfurling to greet the first heavy rains.

Soon they reached the *pei lu*, the Northern Road, which ran from Hami to Urumchi and there joined the 'southern road' to make the only usable artery connecting the Ili Valley and Kashgaria with China proper. The road had been in use for 1,600 years and was well posted and engineered. It climbed 3,000 feet to cross the Tien Shan, before descending 6,000 feet to the oasis of Hami. The mountains were almost perpendicular. There was a dramatic transition from the aridity of Dzungaria to the larches and firs with their thickets of spiraea, honeysuckle and wild currants. At 9,000 feet the trees petered out and the first flowers of the alpine pastures—violets, forget-me-nots, *paeonia anomala*—were blooming. Przhevalsky wanted to linger in the larch forests and hunt the maral deer and wild goat on the crags; the Chinese escort party urged him on and, when he would not budge, rode ahead to the next garrison. The expedition had a day or two of freedom, but messengers arrived from the governor of Hami 'inviting' them to hurry down.

It was nearly seven years since Przhevalsky had last visited a Chinese town: Hami did nothing to change his aversion. He rode in to pay his respects to the *chin-ts'ai* (military governor); the heads of three recently executed criminals adorned the city gates. Soldiers with banners solemnly escorted him to the residence. The next day the *chin-ts'ai*, Min Ch'ung, repaid the visit and came to Przhevalsky's tent and invited the Russian officers to dine. Dinner was magnificent: sixty courses, including swallows' nest soup, shark's fin and prawns (Hami was two months' journey from the sea), washed down with wine and spirit. Przhevalsky barely concealed his loathing for the food and drank nothing but water. Nevertheless, he and Min

Ch'ung got on well. The governor seemed 'the best of a bad lot' and was content with the gift of a revolver and a silver toilet set. The expedition offered to put on a display of marksmanship. They fired a salvo of 200 bullets; Przhevalsky shot down swifts and sparrows with his shotguns, and with both barrels of his Lancaster he shot two eggs at a time, hurled into the air by spectators. Min Ch'ung was politely impressed, declaring that twelve Russians were as good as 1,000 Chinese soldiers and that war was therefore out of the question. Przhevalsky concurred. 'I was sorry to waste cartridges which were now irreplaceable, but the reputation of a good shot . . . produces a spellbinding impression on Asiatics.'

Przhevalsky wanted two things from Hami: information and supplies. There was little of the first. Min Ch'ung led the officers on a tour of the town but avoided answering specific questions. Hami had some 4,500 soldiers and over 5,000 civilians, roughly equally divided between Chinese immigrants, Tungans and Uighurs. The population had stayed mainly loyal to the government and had undergone three Tungan attacks which destroyed all the gardens and orchards, and all the trees save Hami's sacred 'nine-dragon' willow. Now the canals and fields on which this oasis of fifty square miles depended were coming to life. The population, in return for its loyalty, was allowed to live under the rule of the local Uighur Wang, a dowager who refused to have anything to do with Przhevalsky. The people were colourful and cosmopolitan; the Moslems wore mitre hats and bright gowns; the women Przhevalsky noted, were 'fairly beautiful' but wore rouge and were 'of very loose behaviour'.

The essential feature of Hami was its strategic military position. Przhevalsky wrote: 'Once this point is occupied by an enemy, the whole Chinese army to the west will be cut off from its sources of supply, i.e. from China proper. It will have only the very circuitous and difficult northern route via Uliasutai, but that too will be occupied by any enemy attacking from the north.' The only road from east to west went through Hami, and this made it a focus of Russian commercial interest; the copious supply of silver left by Chinese soldiery and the dearth of goods made it a trader's dream. But the army interested

Przhevalsky more. Unlike most Russian observers, he had no high opinion of General Tso's victorious troops; he advised Milyutin that there was nothing to fear from them: 'Manchu soldiers remind us of loose-living peasant women, which their indescribable habits make them resemble all the more.' They had smooth-bore guns with sawn-off barrels, dirty and rusty. The infantry were too lazy to walk and rode on confiscated horses. The officers neither shot nor lived under canvas. The men smoked opium, the officers dealt in it. Przhevalsky's reports encouraged Milyutin to take a hard line over the Ili negotiations then in progress.

A cultivated oasis held little for the naturalist: a total of thirty-seven species of flora and thirty-two of birds. Only poisonous spiders (*Galeodes sp.*) that crept into the bedding aroused any excitement. June was hot; the Cossacks dammed the stream to make a swimming pool, but Przhevalsky wanted to leave Hami. He spent five days buying 200 buns, ten sheep and some rice and barley. Min Ch'ung would not release him without an escort of two officers and fifteen soldiers.

One of these officers 'turned out to be a decent man'; he acquiesced with Przhevalsky's desire to be left alone and sent back nine of the soldiers, while the rest rode on ahead of the expedition to the next station. For the first days the expedition was escorted along the road that led to An-hsi and China proper, across an undulating plain with ridges of loess still not eroded by the wind. This was the Hami desert that separates the Tien Shan from the Nan Shan ('southern mountains'). There were no animals or plants, just red-hot earth littered with bones and smoky, dusty, still air. Salt clouds created mirages, and the ground was so hot that even at night they were all uncomfortable. In vain they doused the tents with water. From Yen-tu they moved at night and in the early morning across a totally waterless expanse to K'u-fi (K'u-shui), battling with a hot east wind and with drowsiness. At K'u-fi the water was bad, muddied by men and cattle fighting to drink. The entire Chinese army had trodden this road and there was no fodder except for bushels of reeds, for each of which Przhevalsky had to pay one-and-a-half liang—two ounces of silver.

At K'u-fi the expedition left the road and turned towards Sa-chou (Tun-huang). They crossed the sterile gravel and dolomite of the Pei Shan ('northern mountains') into relatively fertile gobi—a few shrubs of a new species of nitraria and an occasional group of kulans and wild camels that fed on the nitraria. Nearly 100 miles away, the Nan Shan came into view, with its prospects of cool air and running water. So alluring were the mountains that the expedition covered the distance from Hami to Sa-chou in eighteen days, despite the unbelievable heat and the gales which deluged them with salt, tore up metal tent-pegs and ripped the sailcloth tents to shreds. They crossed the waterless bed of the Buluntsir (Su-lo Ho), desiccated by the irrigation ditches of Sa-chou, but whose floods now and again reached Lob Nor if the oases, sun and sand did not swallow them up first. They climbed the Chiao Ho (Tan Ho) to the oasis, an improbable island of flax, barley and wheat, with fields and lanes edged by poplars and willows.

The expedition camped for a week by a stream four miles out of Sa-chou. Przhevalsky refused all invitations from town and beat off the crowds that came to gawp at the 'foreign devils'. Sa-chou was unfriendly. Abdul's Tungan dialect did not make for fluent conversation with Mandarin-speaking officials. Przhevalsky was refused guides and told to halt at Sa-chou until authorization to proceed was received from General Tso, whose headquarters lay over 200 miles away in Su-chou (Chiu-ch'üan). The officials told Przhevalsky, as Koyander had been informed in Peking, that they knew of no route over the Nan Shan to Tibet. Only two months ago, persuaded that there was a price on his head, Count Széchenyi had ended his journey to Lob Nor and Tibet at Sa-chou and agreed to give up. The authorities urged Przhevalsky to follow Széchenyi's example and tried to frighten him with an account of the dreadful waterless Kum Tag between Sa-chou and Lob Nor, should he try to break out to the west on Marco Polo's route of 1272 or the Tungans' of 1870.

Przhevalsky had the sense to refrain from argument; deviously, he told the officials that he would take his party to the Nan Shan for six weeks' hunting and then come back to learn what General Tso advised. Given this perfidious promise, his

officer-escort helped him buy the provisions he would need for a stay in the mountains: a ton of cereals for men and horses, and another fifteen sheep. Then, with an officer and three soldiers, the expedition left the oasis for the mountains to the south.

Fifty yards from the last field of Sa-chou they were in desert again, where the gazelles that raided the barley fields spent the daytime. Briefly, Przhevalsky explored the splendid eighth-century 'thousand caves' shrine seven miles south-east of the oasis, with its gigantic Buddhas mutilated by the Tungans, but still attended by a few lamas. 'Imaginary' gods did not appeal to Przhevalsky; he left the caves for later Russian explorers, such as Oldenburg in 1914, to describe in full. Two guides and two Chinese policemen led the party to the Tan Ho, forced them to ford it and finally to stop at 'an impasse where the river emerged from mountain ravines. Przhevalsky suspected his guides of sabotage and dismissed them. For the rest of the year he was 'lost', he had vanished in the wilds as far as the Chinese or Russian authorities were aware.

In unmapped, impenetrable country, without guides, Przhevalsky felt only exultation. He sent Dondok Irinchinov and Kolomeytsov to climb the Tan Ho, at this point a river four feet deep, twenty-four yards wide, flowing fast and dirty yellow between vertical loess cliffs. Irinchinov and Kolomeytsov traced it into the mountains, past ruins of abandoned goldmines. Finding no pass from the Tan Ho across what Przhevalsky was to name the Humboldt range, the two men retraced their steps. Meanwhile, Przhevalsky had taken a Cossack, Urusov, and left camp on the Tan Ho to climb the mountains to the south. They rode thirty miles a day and found not a sign of a pass, but they came across two Mongols, each of them with a spare horse. Przhevalsky rode them down and forced them to rein in. He suspected that they were horse-thieves, but thought them likely guides. 'We gently invited them to come with us to our camp. The Mongols refused outright. It was no good my promising good pay and gifts—nothing had any effect. Then I announced to the Mongols that I was taking them by force to my camp . . . in case of flight I warned them I would shoot.' Back at camp the

Mongols were fed and put under guard. The next day the party set off under their 'guidance', leaving a note in a cleft stick for Irinchinov and Kolomeytsov. They crossed the Tan Ho, went over a ridge, then recrossed the river, the camels fording, the men using a derelict military bridge. The route then led up a tributary, the Kuku Usu, to alpine slopes which allowed the starving, weakened camels to graze and the men to light a fire of tamarisk. The main party stopped to recuperate; two Cossacks went ahead with the Mongols to reconnoitre the route to Tsaidam. The Cossacks returned (after letting the Mongols go on home) with the information needed, and the expedition enjoyed five days' rest, hunting and mountain-climbing from their base of green meadows and spring water, while they waited for Kolomeytsov and Irinchinov to catch up.

Ten days at the 'well of grace', as Przhevalsky named his camp, enabled him to provide geographers with a missing link in the great system of mountains linking the Pamir with the Nan Shan. From his reconnaissance at this altitude Przhevalsky saw that the Humboldt range he had entered was an unbroken continuation of the Altyn Tag he had located south of Lob Nor, walling off the whole of Tibet from the desert and making Tsaidam an undrained plateau, hemmed in by mountains on all sides. Beyond the Humboldt range, dividing the northern part of Tsaidam from the rest, came another range, which Przhevalsky named, after Humboldt's fellow genius, the Ritter range. They were forbidding ranges: up to 11,000 feet they were composed of loess and fine gravel, above this level they were rounded granite boulders in a sea of rubble and gravel, ground down by wind. Only a few Mongol encampments and perhaps a Chinese picket lived here; a few kulans, gazelles, wolves and hares inhabited the outcrops of buckthorn and wormwood in the more sheltered watercourses. In the alpine zone there were meadows carpeted with gentians and astragalus, saxifrage and daisies that grew right up to the snow-line; here Tibetan fauna, the wild yak, a new species of marmot, the Himalayan vulture and a giant partridge the size of a hen, could be found. But the Humboldt range (the western Nan Shan) was as dry as the Ta-t'ung range (the eastern Nan Shan) was wet. It lay out of reach of the monsoons of

Kansu or Tibet.

The 'well of grace' gave the expedition breathing space: they could beat the salt out of their clothes; set up a proper kitchen to bake buns; slice, salt and dry meat for the autumn and winter ahead. Abdul and two Cossacks were sent down to Sa-chou to appease the authorities and buy more supplies. They had a message from General Tso suggesting that the expedition should come east to Hsi-ning and thence set out for Tibet—the route, in fact, of Széchenyi's withdrawal. Abdul cunningly ordered and paid for supplies he did not take, and thus lulled the Sa-chou authorities into thinking Przhevalsky would return. When Abdul and the Cossacks regained the camp, they all set off instead for Tsaidam. Przhevalsky had now despatched his last letters: he told Vladimir he was confident of reaching Lhasa 'by threats or bribes', relying on his armed force; he complained to Koyander of the Sa-chou authorities' refusal to give him guides, a complaint which Koyander took up with the Tsung-li-yamen. They could only beg Koyander to urge Przhevalsky to withdraw.

But the explorer was now out of reach of advice. He was in the wet alpine zone, picking his way over stone fields, forcing the footsore camels on, collecting the dwarf flora. It was hard to hunt here; the quarry was invisible against the grey-brown, rain-soaked rocks, and the stone fields and rarefied air made the hunter hopelessly slow. Each morning the party would split into two and hunt until noon in a landscape whose silence was broken only by the marmot's whistle or partridge's cry. They had no luck, but Przhevalsky found happiness in physical exhaustion: 'Just for a minute you become a really spiritual creature, you are cut off from everyday trivial thoughts and urges.' Only the wilderness could purge the irritations and the undefined dark side of his nature that he abhorred.

After resting the camels, Przhevalsky sent Kolomeytsov and Irinchinov down to northern Tsaidam, the plain of Syrty, to see if the Mongols would provide guides to Tibet. If not, Przhevalsky proposed to cut along the Tan Ho and find his 1873 route. But the Syrty Mongols turned out to be hospitable: Irinchinov and Kolomeytsov brought back butter to vary the monotonous diet of hare, ptarmigan and venison.

Immediately the expedition set off for Syrtyñ. Only one more pass lay between them and the plain. The salty clay valley gave way to moraines with abandoned goldmines, then to glaciers and snow.

The next day Kalmynin went off with another Cossack, Yegorov, to fetch the carcass of a yak the latter had shot and left wounded. They tied up their camels and walked cautiously into a network of chasms, any one of which might hide the dangerous wounded yak. A trail of blood led over the Syrtyñ range. On the way they shot wild sheep and Kalmynin had to go back to collect the bodies. As he went, he also shot a kulan and by the time he was finished, Yegorov was out of earshot and darkness was falling. Kalmynin went back to camp; Yegorov had disappeared. A search party went out in the morning. They found the yak's blood trail and followed it another two miles along stony ravines until it faded out. The party separated, calling, firing their rifles. Przhevalsky himself rode out and found nothing. The next day they met a group of Mongol herdsmen driving sheep to Sa-chou: they had seen no one. Two Cossacks rode to a Mongol encampment twelve miles away; others searched over a radius of sixteen miles. Yegorov had vanished. They waited three more days until all the searchers had returned. Deeply unhappy, the expedition moved on. It was only August; already the first sharp frosts had come.

After travelling sixteen miles, the expedition stopped by a well. Just as they were moving off, Irinchinov spotted a human figure coming down a mountain. Fyodor Eklon and a Cossack rode to investigate and brought back Yegorov, still alive after six days in the mountains, dressed just in a shirt. Only Cossack toughness and ingenuity had saved him. He had walked all the first night and, the next morning, had wandered west instead of north. His shoes were torn to pieces almost at once; he ripped off his trousers and bound his feet with them. Then he shot a hare, ate the raw flesh and shod himself with the skin; once he lit a fire by firing a bullet into tinder; on other nights he covered himself with yak dung to keep warm. Eventually he reached the plain, where he spotted some nomads and their cattle. But the nomads hid from him and Yegorov tried in vain

to milk their cows. He had given up hope and was making for the well only in order to wash his shirt and die in a decent clean shroud.

Przhevalsky covered Yegorov's broken skin with poultices and alleviated his exhaustion with quinine. In two days Yegorov was able to mount a camel, and the expedition, intact and happy, picked its way over the debris of broken rock and slippery granite domes down to Syrtyñ.

Like the rest of Tsaidam, Syrtyñ was a salty marsh which barely supported a few cattle and their herdsmen in the cool and cold seasons; here, too, isolation drove the Mongols to grow a little cereal to eke out their diet of meat and *kharmyk* berries. Thick layers of salt made much of Syrtyñ quite barren, but there were springs and streams in the east, rushing down from the Nan Shan, where the marshy flora gave subsistence pasture. Syrtyñ had no fish or amphibians, only a few kulans, wild camels, gazelles and marmots. Only a lemming, *Eremiomys przewalskii*, was new to science.

The people gave the expedition milk and a guide across the Ritter range to central Tsaidam. The guide, Tan To, was an unusually spruce Mongol; Przhevalsky felt sure he was a lady's man and paid him appropriately, with scissors, soap and beads. Tan To led them for two days over flat, waterless country to the Oregyn River; the camels were relieved by the desert conditions. Yegorov had fully recovered, but one Cossack was trampled by the lead ram in the flock of sheep, and Dondok Irinchinov lost three front teeth when a camel tore out a metal stake and flung it in his face. The expedition spent a day by the Oregyn to get over these misfortunes.

The Oregyn River brought them out of the Ritter mountains to two lakes, Yikhe (Great) and Baga (Little) Tsaidamyn Nor. Though it was only early September, the cattle were already down on their winter pasture. It did not augur well for conditions on the Tibetan plateau, another 5,000 feet up. First of all, however, Przhevalsky turned east to Kurlyk Nor, where the local chieftain, or *beise*, might provide supplies and a guide. Kurlyk Nor was overlooked by Tsaidam's only forest, a sparse copse of *Juniper pseudosabina*. By the lake were fields in which barley grew among the *kharmyk* shrubs, and here

Przhevalsky camped, watching the women laboriously grinding barley. He drank a salty-sweet liqueur made from *kharmyk* berries; he shot another specimen of a bird, *Rhopophilus deserti*, which he had discovered in Tsaidam in 1872.

The *beise* paid the camp a visit, which Przhevalsky returned. The chieftain's filthy fingers covered with filthy silver rings put rancid butter in Przhevalsky's tea; but the *beise*, for all his graciousness, refused him a guide. Przhevalsky threatened to take provisions and a guide by force; he swore at the *beise* and threw him out of his tent. After this display, the *beise* grew more friendly. He found Przhevalsky a guide and personally counted the shovelfuls of grain that were dug out for Przhevalsky; he lit the pipe of a Cossack whose singing he admired, and he accepted a farewell gift of tobacco, a silver coin and a loaf of sugar.

A few more days, the north-west gales blowing them along, brought the expedition to the Bayan River — two shallow channels compared with the formidable river it had been in 1872 — in which Przhevalsky discovered two new species of loach. In mid-September he intersected the line of his first Central Asian expedition at Dzun-dzasak. The chieftain was not as forthcoming as he had been seven years before when Przhevalsky's sacks of meal were talismans for his people. Others who had helped Przhevalsky were dead — Kambe Nantu, the Lhasa ambassador to Peking; Chutungdzamba, the guide to the Mur Usu; the young Wang of Kuku Nor. Przhevalsky had to offer fifty liang (over four pounds of silver) and threaten a firing squad before he induced a guide to come to Tibet. Only Kambe Lama, the local ecclesiastical dignitary, offered to help; Przhevalsky left half a ton of specimens and supplies at his *kherem*, so that the camels' load could be lightened to a mere two hundredweight for the rarefied air ahead.

Przhevalsky left Tsaidam for the mountain 'giants that guard the inaccessible world of the plateaux beyond the clouds, unwelcoming to man in the climate and nature and still utterly unknown to science', well prepared. For once his camels were fit. No European in modern times, discounting the amateur abbés Huc and Gabet, had come so far; even the Indian pandits sent by the British had so far surveyed only

southern and western Tibet — not until the following year does a pandit seem to have joined a Mongol caravan from Lhasa to Tsaidam. The dream of reaching Lhasa from the north seemed about to come true, Przhevalsky was confident: ' . . . the darkness will not long continue and the mighty force called the spiritual energy will break down all barriers and will take European travellers the length and breadth of the mysterious land of Buddhism.'

Over 200,000 square miles of plateau — the northern and most desolate of Tibet's three zones — were still a virtual blank on the map. An area never lower than 14,000 feet, of arid, freezing winters and cool, wet summers, eroded and made uninhabitable by perpetual gales, its waters undrained except for those that broke through to the eastern gorges, the plateau was the largest and most hostile unexplored region outside the polar circles. At first Przhevalsky thought the hostility of the climate overrated: he was after all a Russian, used, unlike the Indian pandits, to thirty degrees of frost in winter. He was glad to be back in the *guresu gadzyr*, the land of wild animals, drenched by the Indian monsoon in summer, dried out by the gales in winter, which turned the yellow grass to dust and dispersed the snow. Fabulous numbers of game mammals and birds existed on the poorest of flora. Buckthorn (*Hippophae rhamnoides*), potentilla, and what is now known as *Przewalskia tangutica* persisted up to 15,000 feet, above which only the occasional clump of sharp-bladed reeds could live.

Przhevalsky moved west until he reached the Nomokhun valley, which gave an easy ascent over the first range, the Burkhan Buddha. At the fortress of Nomokhun Khoto, whose architect had been beheaded by the governor of Hsi-ning for building the walls too high, a message reached him from Dzun-dzasak, urging him to wait. Przhevalsky was sure that this was a Chinese trick and ignored the message. In a letter that never went farther than Hsi-ning, he complained to Koyander that he could not get a guide until he had threatened to kidnap the chieftan of Dzun-dzasak himself. 'The measure of my patience is finished . . . For God's sake, can't you force the Chinese authorities to act more openly? Either let them forbid me to travel in their domains or stop their tricks.'

Russia and China were on the brink of war. Ch'ung-hou, sent to retrieve the Ili Valley, gave way to the bullying of a committee headed by Milyutin and Girs. Although the Tsar and Gorchakov were afraid of British and French reaction, the committee cajoled Ch'ung-hou into surrendering much of the valley, agreeing to an indemnity and to surrender valuable trading rights. Milyutin had no fears: 'Asiatics will attribute generosity or even justice solely and simply to an incapacity to hold what has been taken,' the British ambassador reported him as saying. Ch'ung-hou returned to China after signing a treaty which left the Chinese court and government no option but to repudiate it. Ch'ung-hou was sentenced to beheading for his incompetence. General Tso mobilized his troops, and Chinese diplomats sounded out the Turks, the Japanese and the English. Only China's certainty that these 'allies' would prove as predatory as Russia put a stop to a grand alliance against Russia. Colonel Gordon, who had crushed the Taiping rebellion and whom China regarded as her only friend in Europe, was invited by Li Hung-ch'ang to advise the government. Gordon's eccentric but wise counsels and Li Hung-ch'ang's awareness of China's coastal vulnerability pulled them back from the brink of war. The Chinese prepared to send a new diplomat to Petersburg 'to look into the tiger's mouth for the food it has swallowed', though with no sanguine hopes. Diplomats in Peking and Petersburg feared the worst for Przhevalsky, marching on the forbidden city of Lhasa at such a critical time, tempting the Chinese to wipe him out. No wonder that General Tso, the chieftain of Dzun-dzasak and the governor of Hsi-ning were proving so unhelpful.

In the stony ravines Przhevalsky's horses lost their last shoes. But they crossed the Dynsy' Pass with its *obo*, the cairn to which each pious traveller should add a stone in gratitude for his safe passage. It was a new world: immense herds of kulan and yak grazed unalarmed. As before Przhevalsky shot so many that most of the meat had to be abandoned. The expedition was followed by crows and vultures and, at a distance, by a strange, furtive Mongol who collected the meat and stored it under stones. The Cossacks caught him when he was sleeping off a feast of game and dragged him to camp for questioning

before letting him go.

The rarefied air slowed them down. Snow began to fall, and hail the size of cedar cones rained down. The next range to the south-west was already under snow, even below the pass. Winter was unusually early. Przhevalsky swung farther west, to avoid his 1872 route and to find better pasture. He crossed the range and came down to the Shuga River; here he lightened his load by burying a yak skin and a kulan skin beneath the boulders (where the skins may well lie to this day). It was a strange Eden. Kulans trailed inquisitively after the camels; the yak did not even bother to get to their feet. Storks and cranes had not yet migrated. Przhevalsky stopped for a day of slaughter, but found the quarry too tame to give real sport: ' . . . after killing a score or so you get almost completely indifferent, particularly to kulans and antelope; wild yak are still attractive because this animal sometimes charges the hunter . . .' In a matter of minutes he killed at least eight bharals (blue goats) which appeared on a crag through the blinding snow. He was invisible to his prey; they leapt in panic over a ravine. He fired twenty-one bullets and stopped only when his Berdan was too hot to hold. 'It was,' Przhevalsky admitted with unwonted embarrassment, 'just like a slaughterhouse.' He kept the five best skins and some of the meat. Four men took a whole day to prepare them.

The Shuga River flows back north into Tsaidam: Przhevalsky had to turn south across a range he named Marco Polo, climbing to over 16,000 feet before coming down to the plateau again. The guide began to falter. Przhevalsky 'punished' him and put him under guard. But physical force was useless on the wretched idiot that Dzun-dzasak had foisted on the expedition. Przhevalsky had to make his way by trial and error over passes to the Napchitai Ulan Müren, a tributary of the upper Yangtse Kiang on which his last approach to Lhasa had terminated.

There were camel footprints on the sandbanks of the Napchitai, sure signs of a pilgrim's caravan ahead of them. But October was drawing to a close; Przhevalsky was a month late. In two days eighteen inches of snow fell, obliterating these tracks and all fodder. The camels tore open their saddles

and ate the straw. (Przhevalsky had to re-upholster the saddles with yak hair.) The horses were on iron rations of barley. Dung, on which the expedition relied for fuel, was buried beneath the snow. Tibet was every bit as hostile as it had been in 1872. For several days the expedition was holed up in its tent and the *ger* Przhevalsky had bought in Tsaidam. Wild yak were migrating down to the upper Yangtse: a sure sign of a bad winter. The Mongol guide groaned and prayed (even though the Cossacks 'were eager to a man to go on'). Przhevalsky looked at him in disgust. 'No wonder,' he wrote, 'such people die by the dozen in pilgrim caravans.'

At first he considered following the wild yak to more temperate valleys; then he boldly decided to head straight to Lhasa, south-west into the mountains. Snow blinded the sheep; the camels' eyes had to be washed with strong tea and a lead poultice. Sunglasses were no use to the men; the Cossacks tried blindfolds of blue cloth, and the Mongol tied a yak's tail hairs around his eyes. The sun, when it re-emerged burnt their faces while the wind froze their backs. Once more they found that there was not enough oxygen to burn fuel and water boiled at so low a temperature that tea, which took two hours to boil, tasted insipid and meat would not cook. Somehow they reached the Kuku Shili range where reedy marshes gave the camels food, and also provided cover for a new race of bear. Przhevalsky watched a wolf pack follow a bear, seizing marmots as the bear scraped them from their burrows.

The guide led them up a ravine which ended in an impasse where the horses and camels stumbled and fell. Przhevalsky gave him a little food and sent him off to find his own way, if he could, back to Tsaidam. The expedition was stranded in the Kuku Shili; only after Cossacks had roamed in search parties was a pass discovered. Over unnamed ranges they found their way to the upper Yangtse, the Mur Usu, some 200 miles upstream from the point they had reached in 1872. Przhevalsky was back on one of the three main pilgrim routes to Lhasa from the north, which followed the river into the Tang La range and then crossed into the temporal domain of the Dalai Lama. The river was deep, wide and still unfrozen. There were hundreds of wild yak that had not yet migrated down-

stream. Przhevalsky took the two Zaysansk mongrel dogs that had survived and went to hunt yak. The dogs had learnt to ignore all but rifle shots and then to run and hold down the wounded yak cows, so that Przhevalsky could walk in and kill the animal with a volley of explosive bullets. He would then take the tail, a piece of meat and part of the hide. 'My brass cartridge cases,' he recorded, 'scattered in plenty over the mountains and valleys of northern Tibet, will remind the natives for many years, when they chance upon them, that Europeans have travelled and hunted here.'

After two days' hunting he went up the river to find that sand and wind had obliterated the path. The Mur Usu plunged into gorges; he had to reconnoitre a detour. Starvation and lack of oxygen told on the camels and horses: four died. Przhevalsky threw away another four packs, all the skins collected since leaving Tsaidam. The expedition sheltered in a cave, immobilized by headaches and nausea, weighed down with wind-borne filth, suffocated by the smoke from the fire. When they were on the move again, the Cossacks had to walk and carry the horses' loads; at night they had only a thin tent to protect them. They walked past human skulls; once they met the body of a Mongol pilgrim, his staff, bag, clay cup and packet of tea by his side, the corpse half-eaten by wolves.

Eventually they reached a tributary of the Yangtse, the Toktonai, fordable only in winter, and from there they made their way to the river known in Chinese as the A-k'o-ta-mu, which rises in the Tang La mountains. The river led them up a gentle gradient to a pass just under 17,000 feet. They saw no animals, but sighted the first human beings since leaving Tsaidam over 300 miles away. These were Yograï tribesmen, known in Tibetan as the Sokpa, a nomadic tribe, often bandits, who recognized neither the governor of Hsi-ning nor the Dalai Lama. It took Przhevalsky's men eight days to cover the seventy miles to the pass, weakened by storms, starvation and the death of more pack-animals. The Yograï watched them; some galloped up, offered sheep for sale and asked for tobacco. 'The only suspicious thing,' observed Przhevalsky, 'was that these Yograï kept asking us to show them our rifles and then argued heatedly about something.' None of

Przhevalsky's men spoke Tibetan; none of the Yograï spoke Mongol.

As they crossed the pass by a glacier, Przhevalsky put a bottle on the *obo*; the Cossacks fired a salvo and yelled 'hurrah!' in the Tibetan tradition. A group of Yograï came up behind them. They picked a quarrel with Abdul and within seconds there was hand-to-hand fighting between Cossacks and Yograï, who were armed with matchlocks, catapults, spears and swords. The moment they opened fire, Przhevalsky responded with his high-velocity rifles. The Yograï fled, carrying their wounded and leaving four dead. That night the expedition camped in a defensive 'square' while Yograï horsemen patrolled the ridges above them. The next day they marched in battle order through a ravine which, Przhevalsky saw through his binoculars, the Yograï were ambushing. The party had almost no provisions left, and could not retreat to Tsaidam. They marched on for a mile, the Yograï watching; then they saw that Yograï on foot were blocking the exit from the ravine, while horsemen were waiting to charge from above. Przhevalsky made his men take careful aim and fire at the Yograï from 700 and 1,200 paces. The tribesmen, whose arms were no match for modern carbines, picked up their dead and wounded and vanished. The expedition came intact on to the plains and bathed in the hot mineral springs they found. Przhevalsky reflected: 'Unenviable, but extremely interesting was our position at the time. On one hand a little bunch, just twelve Europeans; on the other, a whole horde of inimical savages. One was crude physical strength, the other moral strength. Moral strength had to win, and won.'

Now he was in Tibet proper. The thermometer rose above zero, the skies cleared. But the camels were distressed, for the stony, marshy ground suited only yaks and mules. Tibetan nomads on the Tan Chu and San Chu brought mutton, butter and dried curds to sell to the Russians. Przhevalsky even found an interpreter: he had caught up with three Mongols on their way to Lhasa, one of whom was Dadai, who remembered Przhevalsky from 1872 in Tsaidam, the two others being lamas. They told Przhevalsky that there was uproar in Lhasa over his approach: Tibetan militia had been mobilized to

guard the border, from the Tang La to the first settlement, Nagchu Dzong. Przhevalsky was suspected in Lhasa of coming to preach Christianity or to kidnap the Dalai Lama. The populace were forbidden on pain of death to sell him supplies. Twelve officials were on their way to turn him back.

Sure enough, fifteen miles north of Nagchu, at the foot of Mount Pumza, Tibetan soldiers asked the expedition to halt and await directions from Lhasa. They were polite and helped the Russians find a camp site with good water and grazing. The expedition was exhausted and glad of a rest. But Przhevalsky saw his dream of reaching Lhasa, only 160 miles away, fading. To shoot his way through would only provoke a bloody demise for the whole expedition. In any case, the Mongols told him, the Lhasa track was impassable to camels and the expedition would have to hire yaks in Nagchu. The Mongols moved on; Przhevalsky was stranded without advice or interpreters. He watched the Tibetan yakherds on the Tan Chu and deplored their 'repulsive uncleanness' in morals and person. He thought them inhospitable, hypocritical in their piety and greedy in their dealings. The Mongols had only confirmed this impression, shared by most European travellers of the time with the emphatic exception of Desgodins, that the Tibetans had 'souls like soot'. The lamas were sodomites, the women whores to Przhevalsky's way of thinking. He did however find the Lhasa nobility 'as beautiful as Europeans' and thought Tibetan husbandry efficient and yak milk tasty.

After eighteen days, with Tibetan militia in front of him and vengeful Yograï behind him, guarded by just two mongrel dogs, amused only by shooting lammergeier vultures and poisoning the more wary Himalayan vultures, Przhevalsky at last had news from Lhasa. He was ordered to leave. Przhevalsky refused unless he could meet the governor of Nagchu and have the order signed by the Chinese *amban* (governor-general) in Lhasa. The officials did not know whether to fear Przhevalsky's aggressiveness or their superiors' annoyance the more. In the end the Nagchu governor, Chigmet Choi Jor, dressed in sable skins, turned up with his suite. Przhevalsky pleaded the laws of hospitality and the oneness of God; the governor implored Przhevalsky to keep the peace and go. He

was unmoved by the threat that Russians would tell the whole world of the Tibetan's unfriendliness. Eventually Przhevalsky agreed to turn back if he could have a written certificate of this order; the Tibetans then composed the following, which was read out in Tibetan, translated into Mongol and then conveyed to Przhevalsky by Irinchinov:

Tibet is a country of religion and certain people have come there from countries outside at various times. But those who do not have an established right to come, by the unanimous decision of the princes, lords and people, are refused entry and, on pain of death, are ordered to keep out . . . Now at Pong Bun Chung . . . in the Nagchu district on the 13th. of the 10th. moon, intending to come to Tibet, have appeared Nikolay Przhevalsky, his deputy Eklon, his deputy Shvyykovsky [whose name was still on Przhevalsky's passport] with ten servants and soldiers; we have carefully explained the above circumstances and they have said that if we give them a written certificate that they may not enter they will go away; otherwise they will set off tomorrow for Lhasa. Whereupon we have asked them to go away, like anyone who does not hold an established right.

To this were appended eleven signatures of leading ecclesiastical and civil figures around Nagchu. Lhasa, less than a week's journey away, was suddenly infinitely remote; but Przhevalsky's disappointment evaporated, leaving only diffidence and disgust. The Tibetans refused to bring letters sent to Lhasa for the expedition or to let a Cossack ride to Nagchu for supplies. All that Przhevalsky obtained were a few anecdotes of Lhasa he had heard from the three Mongols, and some studies of Tibetan faces, secretly drawn by Roborovsky. The Tibetans were reluctant to sell food; they believed Przhevalsky's silver was iron temporarily transmuted by sorcery, and only threats of violence induced them to part with a sheep or some *dzamba*. Luck again saved the expedition. A caravan of Tibetan traders taking religious wares, herbs and sugar north to Hsi-ning arrived at Nagchu; with them came

the three Mongols on their way home. The Mongols helped Przhevalsky buy or exchange ten horses, some *dzamba* and some cheap 'wooden' tea, *moto-tsai*. Dadai, who was the nephew of Chutungdzamba, also agreed to guide the expedition back to Tsaidam for forty liang.

As Przhevalsky left, the Tibetan militia followed at a discreet distance to make sure he was not feigning. The expedition dared not make a detour to avoid the Yograi, for their camels could not last much longer. They reached the Mur Usu without trouble; four more camels died, the thermometer fell to thirty-three degrees below zero, but the storm winds had swung round and were assisting their progress. Przhevalsky found flocks of *ulars* (giant partridges); he hid beside their roosting place and killed them as they flew in at dusk. But in winter they fed on wild garlic and he found them unpalatable.

Dadai took Przhevalsky from the Mur Usu on an easier, more westerly route with fewer passes, and they reached the shelter of Tsaidam all the sooner. They saw the New Year of 1880 in as they rested by the frozen Mur Usu. That year brought no news of Przhevalsky to Peking; information came only that the Tibetans had raised their militia against the Russians. Koyander protested: 'How can the inhabitants of Tibet, which is part of the Chinese state, send soldiers against travellers coming with the government's permission and on a pass it has issued? . . . the authorities . . . will have to take appropriate measures at once against these rebels. Otherwise it might be thought that Tibet is a completely independent country and then the nature of her neighbours' relations with her will undoubtedly change.' Koyander wrote to Petersburg, saying that English diplomats had told him Przhevalsky had been lost 'after dismissing a guide'. The Petersburg press reported Przhevalsky captive or dead. *Istorichesky vestnik* (*Historical Herald*) reported Count Széchenyi's conviction that Przhevalsky had perished and complained: 'Search parties were sent for Livingstone, Payer, Nordenschildt; but no one is even thinking of looking for Przhevalsky.'

At such a tense time, these fears were not without foun-

dition. Only the British had reason to feel pleased. If Przhevalsky had not reached Lhasa, they need not bother to do so. In 1878 a Russian mission had reached Kabul and the British, compelled to match every Russian advance towards India, in their turn sent an emissary, Major Cavagnari, who was promptly murdered by the Afghans.

Przhevalsky did in fact come near death, in the Dumbure mountains above the Mur Usu, but from a yak, not a man. He had shot his first yak of 1880 only to find that wolves had ruined the skin. He went out into the Dumbure to find more yak; it was Russian New Year's Eve (12 January 1880). Six miles from camp he put ten bullets into a yak. He went on firing; another yak collapsed to its knees and rolled down the mountain. Przhevalsky ran after it, but it leapt to its feet and stumbled off. He returned to the first yak, found the skin too poor to be worth taking and cut off the tail and stuffed it in his belt. Then he returned to the second yak, which was now lying down. It got up and charged; Przhevalsky fired his last two bullets. At fifteen paces the yak stopped and lowered its horns; Przhevalsky had only his rifle butt and a yak tail with which to fight it off. For some unaccountable reason, however, the yak raised its head and let Przhevalsky go.

Dadai took the expedition quickly over the Kuku Shili and Marco Polo ranges. But snowstorms hid what little fodder and fuel the argillaceous, flint and quartz schists provided. It was so cold that even gloved hands could not hold a chronometer. The Russian horses and Przhevalsky's Kashgarian horse, a present from Yakub Bey, starved on their rations of barley. The Tibetan horses, renowned for their toughness, were as plump as ever: they ate the dung left by the kulans and most of them would eat meat — strips of dried yak flesh — the legendary attribute of Alexander the Great's Bucephalus or Genghis Khan's charger. When Przhevalsky reached the Naijin River, which flows into Tsaidam, he found breeding herds of orongo gazelles and patches of vegetation, the legumes of the desert. The Tibetan horses had never seen such shrubs and they shied away from them; the fodder came just in time for the camels, two more of which had had to be abandoned. The next day the expedition reached a Mongol camp on the Naijin. For the

first time since leaving Nagchu Przhevalsky shaved and washed his face — he dared not undress for fear of chills.

It was good to be out of Tibet. Birds were wintering on the Naijin; Przhevalsky collected over 100 specimens. In Tsaidam he first went east to collect his supplies at Dzun-dzasak. The chieftain of Dzun-dzasak was embarrassed at Przhevalsky's return; he apologized for the idiocy of the guide he had given him. (To a later Russian visitor, V. A. Obruchev, he said that Przhevalsky had been so menacing at Dzun-dzasak that he purposely gave him the worst man available.) Dzun-dzasak was anxious to have Przhevalsky on his way to Hsi-ning, the seat of authority. The chieftain gave him two drivers and a guide to Dulan Kit, and hired out eight camels from his own herd. The guide was again an idiot, but it hardly mattered, as both he and Przhevalsky had travelled this route before.

March 1880 saw Przhevalsky at Kuku Nor; he stopped at his lakeside camp of March 1873. Salt dust covered the ice; there were no birds. Two days later two messengers came from Hsi-ning. One was to report back, the other was to stay with the expedition and hurry it on to Hsi-ning. Przhevalsky ignored the latter's directions and insisted on moving around the unexplored southern shore of the lake. The shores were lit up by the camp fires of the Tangut who, since the Tungans had been crushed, were themselves lawless, preying on the peaceable Mongols and their caravans.

At Donker crowds whistled and shouted at Przhevalsky as he was led to the very same house in which the retreating Count Széchenyi had been quartered a year before. In Hsi-ning he, Roborovsky, Abdul and three Cossacks went to meet the governor, General Ling. On his second day in Hsi-ning Przhevalsky had a formal meeting with the General. Przhevalsky found him ignorant and malevolent. It is only fair to mention the impressions of Grigori Potanin, the Russian explorer and botanist, who met Ling six years later. Potanin thought Ling intelligent and modest and concluded that Przhevalsky's 'excessive suspiciousness' had misled him: Ling acted only out of responsibility to Peking for a foreigner's life.

Przhevalsky, his case weakened by the rude interpreting of Abdul, told Ling that he would now go and explore the

sources of the Huang Ho, still a subject of conjecture and legend. Ling replied, 'I shan't let you: I have instructions from Peking to see you out of here as fast as possible.' Smiling, Przhevalsky insisted. Ling warned him of Tangut robbers, who might also plan to avenge the death of the Yograï with whom the expedition had battled. In the end Ling persuaded Przhevalsky to sign an agreement that he would prolong his explorations only three more months and would not cross to the right (south) bank of the Huang Ho. Without the slightest intention of keeping the second promise, Przhevalsky left the room. He was a little taken aback when Ling returned most of his gifts and even presented him with two-and-a-half gallons of Chinese spirits in which to preserve specimens. Ling also helped the expedition buy provisions and fourteen mules for the mountainous country between Hsi-ning and the Huang Ho. Przhevalsky had to leave much equipment behind as a guarantee of his return, but he found a Mongol caravan heading north-east and, under a Cossack's supervision, they took his bulky collections to be stored in Ting-yüan-ying, 350 miles north-east in A-la Shan.

On mules alone and in just three months, Przhevalsky had little chance of reaching the Huang Ho's sources. But the upper reaches of the river were entirely unexplored and the expedition set off eagerly through the Khara Tangut country to the river. The settled Khara Tangut, like the Tibetans, practised polyandry; this was the first record of polyandry so far north. They pitched their tents on the hillsides, warming themselves by stoves fired on sheep dung. They subsisted on the roots of silverweed (*potentilla anserina*) and the tea and *dzamba* they bought from the Chinese, while sheep and yak grazed the ground bare. Despite their 'sullen brigand temper' they were religious and filled shrines with their booty. Their Buddhism was mixed with shamanism and the shamans (witchdoctors) wore headpieces made from the hair of men who had died violent deaths.

It took only a day or two to reach Balekun Gomi from Shala Khoto. This was the last permanent settlement on the Huang Ho. Even at this altitude the river never froze completely and its islands were thickly grown with berberis, willow and a new

poplar, *Populus przewalskii*. Though the river was almost a quarter of a mile wide, its current ran so fast through canyons so deep that it was unfordable and unnavigable. The banks, often 1,500 feet above the water, were arid, which was why a river draining such a large region of mountainous country should flood so little in spring.

The precipitous country was fit only for mules, but Przhevalsky found them hard to handle. Mules were more independent and cleverer than camels. They shed their loads, they fought, lay down, held out for good fodder and, for all their sterility, behaved grossly. 'For reasons I cannot describe,' Przhevalsky prudishly complained, 'the stallions were quite unsuitable.' Perpetual neighing at night got on his nerves. He had no alternative. Only seven of his camels were alive and he had left them at Balekun Gomi in the care of the Tanguts.

The April thunder and dust storms blacked out the sun, all but the magpies fell silent. Przhevalsky set off up-river, but could find only a half-blind guide, half Tangut, half Mongol, who knew just sixty miles of the way. As the expedition moved on, the nomadic Tanguts lit bonfires as warning signals and struck camp. The expedition struggled up onto the plateau; they had to drag water up half a mile every night, but there was grazing for the mules.

Przhevalsky, Roborovsky, Kolomeytsov and a Cossack, Teleshov, began to leave the main party in the evening to sleep out. At dusk and dawn they would shoot the rare and elusive eared pheasant (*Crossoptilon auritum*), enjoying the gentle spring nights on the moss and the dawn chorus of blue magpies and thrushes. In three weeks they collected twenty-six eared pheasants. Their guide now no longer knew the way and they had to try each ravine in turn to find a pass from one tributary of the Huang Ho to another. Przhevalsky went on foot to a small lamasery in the mountains south of the Baga Gorgi where he found an abbot who helped him buy sheep. Przhevalsky cured a Tangut with doses of quinine, but neither of them would answer questions about the way south-west. The country here was wooded; hunting birds, although new species appeared, was difficult for the bodies were lost in the trees of the chasms. There was no grass; the mules were getting weak,

stumbling over marmot holes in the open, starving in the forests. Cossacks rode ahead and reported good grazing on the next tributary, the Churmyn, but the going was too dangerous. Three mules and a horse died. Przhevalsky sent a party across the river to the right bank, but they could not find a fording place or material for a raft after four days' searching. To break through the mountains on to the desolate Odon Tala, where the Huang Ho was said to rise, would have been certain death without camels or guides. Przhevalsky turned back to Balekun Gomi, into the first rains and mud of the summer monsoon.

Five of his camels were still alive. Abdul and a Cossack rode to Hsi-ning to fetch letters, while Przhevalsky waited in the rain and Eklon tried to dry out the plant specimens. When Abdul came back they set off again. This time they were going to Kuei-te and the Jahar mountains on the right bank of the Huang Ho downstream. Abdul had infuriated General Ling by telling him of Przhevalsky's intention, but Ling was too well-mannered to remonstrate; he ironically begged Przhevalsky not to go on to Szechwan and even ordered the Tangut to provide 100 men and women coolies to break down the clay walls of the gorge track and let Przhevalsky's mules down to the ferry point opposite Kuei-te. Here was the real China: intensively tilled fields; cultivated apricots in bloom; willows pollarded for timber; coracles, made of two inflated sheepskins trussed with reeds and rods, plying the river. Kuei-te was a crowded, diseased town; mainly women had survived the Tungans and they were desperately poor. Przhevalsky camped near the ferry; crowds gathered to pick up the dung from men and animals and to take the mutton bones as fertilizers for their cornfields and cherry orchards.

The Jahar mountains in the hinterland were his objective. Of all his months in Kansu, June 1880 proved the most productive botanically. The forests in the ravines beyond Kuei-te were full of rowans and berberis (*b. diaphana*); here Przhevalsky discovered the red *Rosa przewalskii* and the large, white-flowered, aromatic *Rhododendron przewalskii*, the fragrant *Daphne tangutica* and a new species of Himalayan poppy, *Mecanopsis quintuplinervia* — all of them in the alpine

zone from 11,500 to 15,000 feet. For once Przhevalsky had arrived neither too early nor too late for the brief flowering season of the wet eastern Nan Shan. One month in the Jahar mountains gave him his most beautiful, if least known, discoveries—few of them are in cultivation outside botanical gardens.

The Jahar Tangut ignored Przhevalsky and he them, staying in the alpine meadows. Here he came across the great blue redstart or *chekkan* (*Grandula coelicolor*); it was not new to science, but never had it been seen so far north. It was an exceedingly beautiful insectivore, its sky-blue body set off by black wings and tail. Przhevalsky collected twenty-five specimens. 'Sometimes one even felt sorry to shoot at such a dear, trusting creature.' The flora and fauna of these luxuriant monsoon mountains were so enthralling after the desolation of Tibet and Mongolia that Przhevalsky planned to defy General Ling and move south into the plant-hunter's paradise of Szechwan. But the track over the chasms was fit only for yaks; he contented himself by climbing Mount Jahar itself and then went down to Kuei-te.

Kuei-te was warm and dry, which was just as well since 400 species of flora had to be sorted, dried and packed. There were rumours of trouble in Lhasa over a rival Dalai Lama supported by the Tangut; a messenger came at once from Hsi-ning to get Przhevalsky away, further from Lhasa, nearer to Mongolia.

Przhevalsky refused to go direct to A-la Shan. He wanted to complete his survey of Kuku Nor by walking round the eastern shore. He dismissed the man from Hsi-ning and with the help of 100 Tangut labourers crossed the Huang Ho and clambered up the mud on to the plateau. The rain was incessant. It drowned marmots and brought the bodies to the surface; it muddied the water with loess and bogged down horses and mules. But Kuku Nor was warm enough to swim in and Przhevalsky could collect the eggs of birds he had seen here in 1873. The lake was alive with the floating grass nests of the loons, and with Indian geese and their goslings. Eight years ago the Mongols had told Przhevalsky that Kuku Nor had no insects; now he was plagued by gnats. They blinded the

Tibetan ram named Yograi, who had led the expedition's flock of sheep from Nagchu. Nobody had the heart to slaughter him and he was abandoned, a ram from Tsaidam taking over as leader.

Kuku Nor was soon fully explored. Przhevalsky gave in to the gnats and General Ling and made for home. Local Tanguts and Mongols had evidently been warned not to sell him any camels, for he did not see a single beast in July. He had little option but to conform and hire animals from stage to stage across the Nan Shan (the Ta-t'ung mountains) into Mongolia. At least he could dispense with a survey, for he would be retracing his 1873 route and needed only to check his observations with his now more sophisticated equipment.

Over a more direct route than in 1873 he made for the lamasery of Choibseng. The Ta-t'ung was as rainy as ever; the revolvers began to rust. The mountains were repopulated and fields that had lain fallow after the Tungan rebellion were now tilled. But the only change at the lamasery was the installation of water-driven prayer wheels to automate the lamas' devotions. Here Przhevalsky came across Jigjit, his Mongol guide through the Ta-t'ung in 1873; it was the first friendly reception he had had on the whole expedition. Jigjit was hired to take him on a brief botanical excursion in the southern Ta-t'ung.

Like June in the Jahar mountains, August 1880 in the forests and alpine meadows of the Ta-t'ung was prodigiously successful. Przhevalsky collected all four of his rhododendrons—*rh. anthopogonoides*, *capitatum*, *przewalskii* and *thymifolium*; he found a new species of spindle tree, *Euonymus przewalskii*, a new caryopteris, *c. tangutica*, three new species of shrubby honeysuckle—*Lonicera nervosa*, *syrigantha* and *tangutica*—new herbaceous species—gentians, delphiniums—and a new maidenhair fern, *Adiantum roborovskii*. The Kansu summer was nearly over. The plants had set seed and Przhevalsky could take home not just dead pressings and cuttings for the museum, but ripe seed for the botanical garden. These plants were already vanishing: Chinese immigrants from the crowded provinces in the east were cutting down the forests for firewood and ploughing the meadows.

Przhevalsky left for Chörtentang, the lamasery where his portrait hung. The abbot who had painted it was dead and, like Chöibsenng, Chörtentang had installed water-powered prayer wheels. But hunting was still forbidden and there were no Tangut or Mongol herdsmen: it was a naturalist's preserve. Przhevalsky had now collected plants of 897 species and was too heavily laden to look for more. He paid off Jigjit, took a last look at the sacred Mount Bajur—the last major peak he would see on this journey—and, his own guide, descended from the Nan Shan. The expedition crossed the great west road from Lan-chou to Hami with its Chinese pickets, passed through the Great Wall north of Ta-tsin and found itself in the intense heat and dust storms of the A-la Shan desert.

Even in these desolate sand-dunes Przhevalsky added to his botanical collection. A new piptanthus (related to the laburnum), *p. mongolicus*, flourished wherever the sand gave way to clay, and he found three new species of allium. Lizards scurried past 'at every step', Przhevalsky found not only the *Eremias* he had discovered in 1872, but three more new species. He was in luck—rain had wetted the sand, the going was easy and tracks of earlier caravans remained visible.

At Sogtu-khüre ('drunken temple') three men from Ting-yüan-ying came out to escort the expedition to the town. The lama Baldyn Sorji was still friendly and passed on letters sent to Przhevalsky from Peking. But much had changed. The old prince was dead and Przhevalsky was disappointed to see that his sons had turned out as degenerate as any of the Mongol feudal princes. The abbot no longer hunted foxes; he had taken to the theatre and put on plays in which, much to Przhevalsky's disgust, 'he is not ashamed of acting women's parts'. Nothing saddened Przhevalsky more than to see an adventurous and friendly boy become a tyrant or an actor. But he stayed nine days to sell his mules, which were useless for desert treks, and to hire twenty-two camels and six Mongol drivers for the six week's journey to Urga.

Once again he kept east of the carriage road and followed his old route, hiring guides for a few days at a time, since to miss a well would cost the members of the expedition their lives. It was an eventful, tiring journey, more tolerable as

the expedition passed into autumn. At last, on 19/31 October 1880, for the third time Przhevalsky greeted Shishmaryov at the Russian consulate in Urga. In touchingly banal verse, which marks the beginning and end of each of Przhevalsky's diaries, he mused:

Dreaded, the storms have passed,
The sailor has swum to shore,
But nobody's told the sailor
There would be storms no more.

The expedition disbanded at Urga. In a triumphal entry to Russia, Przhevalsky and his companions galloped to the border town of Kyakhta, their wagon and Chinese cart escorted by outriders. Lagging behind were the heavy transports with their loads of specimens of flora and fauna, and rocks from Tibet, the Nan Shan and Mongolia. Ahead lay glory, thanksgiving, lectures, banquets, writing and the snow-covered countryside of Smolensk. But, as Przhevalsky concluded in his account of this, his most fruitful expedition:

A sad, yearning feeling always comes over me as soon as the first bursts of joy on returning home have passed. The further time flies amid ordinary life, the more this yearning grows, as if something unforgettable, precious, had been abandoned in the wilderness of Asia which could not be found in Europe . . . an exceptional bliss—freedom, which may be savage but is infringed by nothing, almost absolute . . .

7

The Eagle's Nest

I sometimes feel now it is just possible that, setting off on his journeys he was not looking for something so much as running away from something . . .

NABOKOV

There were banquets and lectures in Verny (Alma-Ata), ovations in Semipalatinsk, then a fourteen-day sledge journey across Siberia to the railhead at Orenburg. Przhevalsky spent Christmas with his brothers in Moscow and the New Year with his stepfather, stepsister and Pyltsov at Otradnoye. It was a brief respite. By mid-January 1881, Przhevalsky was in Petersburg for a frenzy of celebration. Russia was elated. Przhevalsky had returned from the dead; General Skobelev had just stormed Gök Tepe and completed Russia's conquest of all the lands north of the Oxus; the British were suffering reverses in Afghanistan and in southern Africa; Tsar Aleksander II was, it was rumoured, about to announce a constitutional form of government.

The Tsar and Milyutin received Przhevalsky and, later, Eklon, Roborovsky and two of the soldiers. Members of the imperial family and the government went to Przhevalsky's lectures. He was besieged by visitors and flooded with correspondence; his loathing for Petersburg grew hysterical.

Petersburg's euphoria was cut short. On 1/13 March Sofia Perovskaya's group finally blew up not just the Tsar's servants but the Tsar himself, and thus ended a relatively liberal man and a relatively moderate era. The new Tsar, Aleksander III, would have no truck with constitutions or liberalization; he brought in a new government. Milyutin, suspect for all his patriotism as the man who had helped emancipate the serfs

and build a modern, professional army, was toppled from power in a few weeks. (His successor, Adjutant-General Vannovsky, was distinctly cooler to Przhevalsky.) Russia was plunged into a vicious decade of repression and stagnation—a time of the first progroms, of economic doldrums, hesitant foreign policies, and cultural philistinism, presided over by two reactionaries, the Tsar's former tutor Konstantin Pobedonostsev and the new Minister of the Interior, Count Dimitri Tolstoy.

The rot had set in earlier. As the American ambassador in Petersburg reported in November 1880, a country whose paper currency had fallen fifty per cent below par, with famine, a trade deficit and political discontent, was in no state to expand its empire abroad. The new Chinese envoy, Tseng Chi-tse, who had come to renegotiate the return of the Ili Valley, knew this. Despite Przhevalsky's contemptuous reports, the Russian General Staff rather feared General Tso-tung-t'ang's army. Thus Milyutin finally conceded, by the Treaty of St Petersburg at the end of February 1881, all but the west of the Ili Valley to China, giving Russia only limited indemnities and trade rights. It was China's first diplomatic success against Russia since 1689.

Despite the death of her father-in-law, the new Tsarina was so taken with Przhevalsky and his exhibition of zoological specimens in the Academy, that she invited him out to Gatchina for 'conversations' with the heir to the throne, the future Nicholas II, then a boy of thirteen. The first of these conversations—or lessons—took place in May and they forged a link in a long chain of events and influences that involved Nicholas so deeply in Asia and interested him in ruling the non-Chinese peoples of China. Przhevalsky had perhaps struck a spark that Nicholas, twenty years later, would blow up into a conflagration—the Russo-Japanese war.

The talks with Nicholas were Przhevalsky's last duties in Petersburg; he was impatient to be off. Heginger, the Riga nurseryman, was pestering him for seeds; geographers wanted information and lectures. All that Przhevalsky conceded to the public was to dictate an *Autobiographical Story to Russkaya Starina (Russian Antiquities)* on condition that it was not

printed until his death. Then he took Roborovsky and one of his N.C.O.'s, Rumyantsev, to Smolensk (Eklon had gone back to military college).

The estate at Otradnoye no longer pleased him. The railway had come; the whistles of locomotives and the new proletariat obtruded on the countryside. Otradnoye, in any case, was not his. It had passed from the Przhevalsky to the Tolpygo family. It was time to find an estate of his own; officer's pay, pensions, awards, royalties, and shares had made Przhevalsky a modestly rich man. On his return to Russia he had asked Ivan Tolpygo to put an advertisement in the *Smolensk Herald*. Tolpygo's wording was tactless, but honest: 'Colonel Przhevalsky is looking for an estate with fewer neighbours and more game and fish.'

Among the estates offered was Sloboda, in the north of the province, as far as was physically possible from a railway line, at a price of 26,000 roubles. Przhevalsky was enchanted by it: set deep in the forest, with a fine large lake (Sapsho) and a chain of islands, teeming with lynx, wild boar, foxes, hares, bears, duck and fish, it was, and is, unbelievably beautiful, the wilderness of the Siberian taiga in miniature. He bought it outright and set about making it a sportsman's paradise. He brought to it his nurse Makaryevna, his cook Arkhip, and a manager, Denisov. The villagers—for Sloboda was a village of about 100 peasants, with a parish school and even plans for a post office—were to become gamekeepers and beaters.

Sloboda had three drawbacks, which Przhevalsky set about remedying. First, the previous owner had given a lease to a distillery which stood right next to the house. Przhevalsky began persecuting the distiller, Pashetkin, and drew up plans to build a new house on the steep banks of the lake. Secondly, the village priest was obstreperous over his rights to some of the land. Przhevalsky, who went to church only at Easter and Christmas, began to hound the poor priest and make fun of him to the villagers. (Once he showed them a dead fox and shocked them by saying the difference between the hunter and the priest was that the hunter skinned only the dead, while the priest skinned the living and the dead.) Lastly, the estate included only half of Lake Sapsho and Przhevalsky would not

share its solitude with anyone. He went to the part-owner, Minchenko, agreed on a price, only to come back time and time again with the cash in his pocket to find Minchenko roaring drunk and the price upped by another 1,000 roubles.

Sloboda was delightfully neglected and Przhevalsky lived rough. He slept in the open and lived off the land. Roborovsky and Rumyantsev gave him company; he wrote letters full of awkward tenderness and solicitude to his Cossacks and, especially, to Eklon. Only Eklon gave him cause for concern; by Autumn Przhevalsky was reproaching him:

I've heard from Volka [Vsevolod Roborovsky's pet-name] that you've been under arrest in the guard-room . . . don't waste time on trifles, swot something up . . . Carriages, fast horses, beaver coats, familiarity with ladies from the demi-monde—all this, by progressive stages, can lead to an undesirable, if not lamentable, end. Your love of nature, sport, travel, all your hard work will be wasted . . . I gave you your start; it will be sad for me to see you go another road . . .

That autumn Przhevalsky made a brief trip to Petersburg. He was already thinking of a new expedition to Lhasa, and a chance to rescue Eklon from the temptations of settled life; but his main purpose was to persuade the Imperial Geographical Society to award Roborovsky and Eklon gold medals for their loyalty and work.

Eklon drifted further away. In November 1881 Przhevalsky learnt that Eklon's mother was dying, as had Yelena, of stomach cancer: he wrote a letter of commiseration, but its stoic tone did little to bring them closer: '. . . have the courage to bear the fateful blow. It is inevitable — it will come sooner or later . . . Thus for each of us it gets harder every year to believe in happiness as we imagined it in childhood and youth. But blessed is the man who *as well as the sad experience of life can keep his inner warmth to the grave* . . .' Przhevalsky soon found a new outlet for his frustrated affection. In the Sloboda distillery that gave him so much annoyance there was a young clerk, Pyotr Kozlov, who had just left school in the nearby

village of Dukhovshchina. Makaryevna, always on the look-out for someone to help her master, pointed him out to Przhevsky as a bright boy. Przhevsky walked over to the distillery; he asked the dreaming clerk what he was thinking about.

'I was thinking,' Kozlov replied, 'how much brighter those stars must shine in Tibet.'

That was enough for Przhevsky. He took the boy from the distillery to live with him, enlisted him as a volunteer in the army, bought textbooks and, with Roborovsky's help, began to train him as an assistant and an officer. Pyotr Kozlov felt an adoration for Przhevsky which lasted the whole of his long life; he was to be the most faithful and most successful of Przhevsky's disciples. He recalled in 1928: 'At the sight of that man from afar, having him close to me, something extraordinary used to happen. His figure, his movements, his voice, his aquiline head were not like other people's; the deep gaze of his strict, handsome blue eyes seemed to penetrate right into your soul.' A miracle had plucked Kozlov from obscurity. Very soon Przhevsky was 'Psheva' to him and he was 'Kizosha' to Przhevsky. It did not matter that Kozlov's brother still did the rounds of the villages, selling roast lamb to the peasants, annoying the gentry with his drunken bouts. In Pyotr Kozlov Przhevsky had found the young man who had been eluding him all his life: alert, submissive, loyal and handsome.

Sloboda gave Przhevsky the all-male family he had enjoyed with his pupils in Warsaw; no woman was allowed to stay in the house—not even Makaryevna. Old friends from Smolensk and Warsaw, his brothers Yevgeni and Vladimir, his nephews (Vladimir's and Pyltsov's sons) turned the summers into a long shooting party full of boyish humour and sporting dedication. But these visitors had families to go back to; they could not give Przhevsky the permanent male ambience he had had in Warsaw and in Central Asia. Roborovsky and Kozlov had to leave to resume their officer's training. The local peasantry seemed to Przhevsky to be rotten with drink and women. The only solution was to have his favourite Cossacks come and live with him.

Przhevsky's letters to one of his Cossacks, Panteley

Teleshov, are touching. All his shy, sometimes bullying, sometimes confused affection comes out in his concern for Teleshov, his favourite after the faithful but ageing Dondok Irinchinov. Teleshov's first extant reply, dictated to a military clerk, dates from January 1882; it thanks Przhevalsky for gifts of money and ammunition, then runs:

I will practise shooting and will try to learn to prepare animals and plants and also as you say to study reading and writing, for which I am going on 15 January to a relative who lives in the country about forty miles from where I live and there, in between studying reading and writing, I shall be shooting birds too. I have the honour of thanking you for your fatherly advice to me; I do not intend under any circumstances to get married before the next expedition.

By March 1883 Teleshov was literate and had learnt arithmetic and how to prepare specimens. He had now only to await his leader in Kyakhta for the next expedition; Przhevalsky asked only one thing of him, to stay single. Teleshov reassured him: 'I can hardly wait for you to come, I think day and night about setting off as soon as possible after blue and golden pheasants. I wasn't even thinking of marriage . . .'

Teleshov's fidelity contrasted with Eklon's betrayal. In the summer of 1883 Eklon plucked up courage to inform Przhevalsky that he was getting married and would therefore not be coming on the next expedition. Przhevalsky was in Moscow for the coronation of Aleksander III. He headed home and stopped off on neutral territory, at Otradnoye, to have it out with Eklon. There was a blazing row. Przhevalsky locked himself away from Eklon. From Moscow, Fyodor Eklon wrote a lame goodbye letter: 'When I was leaving Otradnoye I did not have any chance of saying goodbye to you, although I looked for you in the garden and the copse. Let me thank you with all my heart for everything you have done for me during our eight years' acquaintance . . .' Przhevalsky wrote Eklon out of the expedition, inventing the pretext of his father's ill health

as a reason more satisfactory than marriage. Coldly using the *vy* form of address, instead of their wonted intimate *ty*, he informed Eklon: 'The belongings you got ready for the expedition will be taken over as the expedition's baggage at the price they cost you.' Eklon disappears from history as a married lieutenant in a grenadier regiment.

Wounded, Przhevalsky returned to his nest at Sloboda. But he dreamt of wilder scenes. Winter evenings were spent writing; during 1882 Przhevalsky composed the best of his books, the account of the third Central Asian expedition *From Zaysan via Hami to Tibet and the Upper Reaches of the Yellow River*. The book was finished in January 1883 and Przhevalsky was able to set his mind to forming a new plan. The next expedition was to combine the mighty armed force of the last with the light mobility of the first Central Asian journey. The main party would establish bases on the approaches to Tibet; 'raiding parties' would cover wide areas of the Tibetan plateau and head for Lhasa. Plans had to be made carefully. Przhevalsky had the support of Semyonov-Tyan-Shansky and of the young Tsarevich. But the new government ministers were colourless men and Aleksander III and Girs were anxious not to offend European powers by too overt incursions into China.

In February 1883 Przhevalsky was in Petersburg. He stayed not in Demuth's hotel, but in slummy lodgings on Stolyarnaya, now Przhevalsky, Street, an area where nobody would notice him. He saw his book through the printers and drew up plans for the next expedition. He listed the journeys of Indian pandits who had crossed Tibet from north to south and east to west on behalf of the British; a new Russian expedition was needed to redress the balance. He proposed, as was his habit, to make his departure from the point of his last return: to begin at Kyakhta where an admirer, the merchant Lushnikov, had turned his house into a virtual headquarters for Russian explorers. The sources of the Huang Ho would be the first goal, then as much of Tibet as was possible, before the expedition returned to Russia through the oases of Kashgaria to Lake Issyk-Kul' in Russian territory. The two-year expedition would comprise twenty men and thirty-five camels and would cost

over 43,000 roubles.

The plan made its way through the ministers, and the state council, to the Tsar. He assented and ordered that Przhevalsky should be paid in silver, rather than in paper, effectively increasing the expedition's funds by fifty per cent. Przhevalsky was to have government munitions and scientific equipment, and the right to promote his Cossacks and soldiers for bravery in any armed clashes. Muted voices of criticism, however, could be heard in the general approbation. Some geographers, for instance the German Marthe, were struck on reading Przhevalsky's new book by the dissipation of energy as well as the energy itself. What was the point, they wondered, of an all-out effort to reach Lhasa, followed by a survey of part of the Huang Ho and eastern Nan Shan, when science needed a systematic coverage of one area? Przhevalsky had mapped parts of the Nan Shan, parts of the Kun Lun but had broken off both surveys to head for Lhasa or to find a lake and shoot migrating birds. A more serious complaint was that Przhevalsky would not take civilians, let alone specialists, who might fill the gaps in his own competence. His expeditions brought back meagre information on geology, languages and archaeology and, with certain exceptions like Lob Nor, native populations did not seem to be objects of anthropological interest to Przhevalsky, but sources of supply or obstacles to surmount.

On one point Przhevalsky gave way. The fourth Central Asian journey was to consolidate the results of the earlier journeys, to explore from Tsaidam to Lob Nor and complete the survey of the Kun Lun system of mountains, as well as tracing the Huang Ho to its sources. Lhasa was to be a secondary goal. But Przhevalsky refused to take on any assistants except the young men he had chosen and trained himself—Roborovsky and Kozlov. Criticism antagonized him; Petersburg revolted him. He wrote to Lushnikov in Kyakhta: 'There's no space, light or air. Stone prisons are called houses, disfigured life called civilization, foul morals called everyday tact, corruption, heartlessness, indifference, debauchery, in a word, all man's nasty instincts, true, dressed up some way or another, figure as the main factors in all strata of society from

the lowest to the highest . . .'

Spring 1883 brought him back to Sloboda. The foundations for his new house were laid and the timber for its walls was being hewn. But the distillery was still working and Przhevalsky still felt unhappy: 'There's not much to console one in our life. Ordinary people are completely debauched, drunkenness and crime are the normal state of morality, honest and sobriety are rare exceptions.' He renewed his attack on the distillery, from which he had rescued Kozlov. He told Pashetkin that his lease would be terminated. Then fate played into his hands. A neighbouring landowner, Porubin, called and complained that Pashetkin had run off with his wife. Przhevalsky, with that thunderous arrogance which either bewitched or enraged its victims, summoned Pashetkin to the house and told him not to set foot there again. Pashetkin had little choice but to leave the district with his mistress; in 1887 he was to buy an estate some miles away and remove both the distillery and Porubin's wife there. Sloboda was purged of drink and adultery.

The frantic preparations that summer were interrupted only by the breach with Eklon and a short visit to Moscow for the coronation of Aleksander III. Here Przhevalsky met the future Nicholas II again. The Tsarevich gave him a special lightweight aluminium telescope. On 9/21 August 1883, Przhevalsky, Roborovsky and the newly enlisted officer cadet Pyotr Kozlov left Moscow with Abdul, Dondok Irinchinov and some hefty grenadiers to join the Cossacks waiting for them in Kyakhta. The Russian railway system had at last crossed the Urals: it took them to Yekaterinburg (now Sverdlovsk) from where fast troikas and river boats, towing barges laden with convicts and exiles, brought them to Tomsk. More horses brought them across the atrocious roads of eastern Siberia to Kyakhta by early October. At Kyakhta there was a letter for Przhevalsky from Nicholas's tutor. The future Tsar had sent his photograph to travel with the expedition and asked for personal reports from Przhevalsky as the journey progressed. 'Don't give any thought to editing your letters; his Highness will be interested in all news written or even scratched by your hand.'

The most strange, glowing sunsets lit up the Mongolian steppes each night. Far away in the Pacific the island of Krakatoa had erupted and its volcanic flares and dust coloured the arid Gobi skies. It was, though Przhevalsky could not know it, his last departure across the Russian frontier. The journey was to encompass a strange succession of reunions with men he had met in his first, second and third Central Asian travels; it was to complete the circle of his explorations.

Przhevalsky's first aim was to do what had last been attempted by Kublai Khan's officers in 1280: to discover the source of the Huang Ho. A long trek across territory already familiar from the first and third journeys lay ahead. But only five of the twenty-one men in the expedition were old hands; a few weeks' shooting practice in Kyakhta and the nine days' trek to Urga were all the training the other sixteen received. One of them, Mikhail Protopopov, was a sixteen-year-old boy from the border town of Troitskosavsk, to whom Przhevalsky took a fancy and who was to help Roborovsky with photography.

Fifty-six fine camels and thirty sheep were waiting for them in Urga. Przhevalsky cast a longing look at the sacred forested hill, full of game, across the river from the city, and then set off into the Gobi. He read out a solemn order to his men. It began: 'The Emperor and all Russia, in fact the whole civilized world, is looking at us with trust and hope. Let us not spare strength, health or even our lives . . .' The real expedition had begun; they spent the first night camped in the Russian consulate's hay meadows, where Przhevalsky gazed at the last trees he would see until he reached Kansu.

The camels and horses were divided into six echelons. Przhevalsky rode in front with Teleshov and the Mongol guide for the day. Dondok led the first echelon, while Kozlov rode in the middle and Roborovsky in the rear with the sheep, who dwindled day by day, only the lead ram being exempt from spit and soup-cauldron. Two Kyakhta dogs loped behind. It was bitterly cold. All over Asia winter had set in early and cruelly; the Russians, the Mongols believed, had brought a new climate with them. On many nights, even in November, the mercury froze solid. But the cover of snow petered out in the arid Gobi and the skies were clear. The convoy moved

from sunrise to sunset in the short days, along a route now quite busy with caravans of rice from Ningsia Hui and pilgrims from Kansu. Przhevalsky still took the precaution of employing guides; familiarity had reconciled him to the defects of the Mongol. Now, he reflected, the 'true son of the desert' was superior to the physical degenerates of Europe, for here in the Gobi the forces of natural selection operated unhindered by medicine. But for all his Darwinism he still held that there was a universal law by which the 'morally worse' dominate every society.

The journey was uneventful until they reached the present-day frontier of Mongolia and China, the Hörh Ula. Snowstorms buried the rocks two feet deep. An intermittent northerly gale made the cold terrible. Two horses were so weak from starvation that they had to be abandoned. Each evening brought eery sunsets that altered from a whitish to a blood-red glow.

By the New Year of 1884 they were in the sand dunes of the A-la Shan. They crossed a new caravan route from Teng-k'ou to Mongolia and, two days from their first stop, Ting-yüan-ying, were intercepted by a messenger from the prince and his two brothers. The next day Przhevalsky was stopped by a drunken old man; it turned out to be a certain Myrgyn-bulyt, who had guided him in his first hunting expedition in the A-la Shan fourteen years ago. Ting-yüan-ying was full of memories: it was Przhevalsky's fifth visit. The second brother, the abbot, offered him champagne from Tientsin; the brothers had discovered alcohol and the prince drank heavily. Other things had changed. The lama Sorji had died on a journey to Peking; Mukdoi, one of Przhevalsky's guides from Ting-yüan-ying to Mongolia in 1880, had hanged himself to forestall arrest. Worst, there was a permanent European resident, Herr Gresel, who was buying tons of fine Mongol camel hair to export to Tientsin and England. Przhevalsky bought some more camels and a ton of cereals. He ventured out hunting in the A-la Shan, but had little sport. Chinese lumberjacks were felling the trees and the hunt ended in fiasco when Przhevalsky's men stalked and fired at a tame yak, mistaking it for a wild sheep.

The wet summer of 1883 had transformed the desert between Ting-yüan-ying and Kansu into pastureland. Pilgrims to the Tangut monasteries of the Ta-t'ung had made a well-worn track. There were crayfish in the pools; by the end of January the temperature began to climb above zero. At Sogtu-khüre the expedition discovered a new species of hedge-sparrow, *Prunella kozlovi*, named in honour of young Pyotr Kozlov. Here, too, was the stimulus for Kozlov's later career as an archaeologist: the local Mongols talked of treasures unearthed when new wells were sunk. Przhevalsky had resigned himself to taking geological samples, but archaeology, like history, bored him. He stopped once, for four days, to take an accurate astronomical bearing and to shoot a few black-tailed gazelles. One thing went wrong: his Mongol guide went to some nearby *gers* to celebrate the Chinese New Year and never came back. He had to find his own way through the Great Wall into Kansu.

The mountains were more and more densely settled as memories of rebellion and war faded. But the lamasery of Chörtentang was for Przhevalsky still the 'most enchanting spot in Central Asia'; he camped opposite it on the banks of the frozen Ta-t'ung Ho. Five days in the mountains had made him and Roborovsky 'as happy as children'. They waded through the snowdrifts, shooting redstarts and thrushes, while the camels and horses grazed on the pastures below. Roborovsky went out after the eared pheasant; he wandered into a mountain cave to find not a bird but a Buddhist hermit who abused him for disturbing the woods with his gun and then took off his sandal and shook the dust in the Russian's face.

The lamas of Chörtentang, however, permitted Przhevalsky to take the lives of the animals in their woods. He organized Cossacks into lines of beaters and they came home with bags of foxes, small deer and birds. Teleshov shot eleven rare Semun pheasants (*Ithaginis sinensis*). Tangut hunters came to the camp and sold Przhevalsky skins of the elusive cats of the mountains, such as the snow-leopard, which they shot with the aid of lures and ambushes. They sold the Russians a yak for meat, and Chinese peasants in the forest clearings sold

eggs and buns.

But damp forests were bad for the camels; they were fed straw and salt but still lost weight. Spring came late here and there were no flora or insects to collect. Abdul and a Cossack were sent down to Hsi-ning to ask General Ling for guides to the sources of the Huang Ho and the main expedition had to wait for them to return. Przhevalsky stayed at another familiar haunt, the lamasery of Choibseng; he had to sprinkle the ice with earth to get his camels there. Choibseng had a new abbot, but Przhevalsky was among friends. He met his once wild Tangut guide, the sports-loving Randzemba, of 1872, now a staid cleric. He met Jigjit, his Mongol guide. An abbot from a nearby lamasery came to look at him. But Przhevalsky could still find no real point of contact. Buddhism repelled him. He watched a religious procession walk past a pack of dogs that were tearing at the body of a dead child and he saw only hypocrisy and cant in the Buddhist's sublime scorn for the dignity of human flesh.

Abdul and the Cossack brought back unexpectedly affable greetings from General Ling and letters from Peking. The general said he had no guides to the sources of the Huang Ho; but he did give Przhevalsky two Tangut-speaking interpreters and sent what he must have known would exasperate him — an escort of thirty Chinese soldiers. With this unwelcome company, Przhevalsky set off on the muddy tracks of an area now thickly populated with pacified Tungans. Mud often stranded them: ' . . . struggling for about two hours to get up a hill, we were forced to return to the camp we had left. Here, as always after we left, the Chinese, dogs, crows and kites were gathering various leftovers. Seeing us coming back, all this company scattered for cover.'

They moved westwards into still-preserved forests and the going became easier. Przhevalsky thought the Tungans distinctly pro-Russian; so, perhaps, did the Chinese escort, for they started to maraud in the Tungan villages. This gave Przhevalsky the pretext he needed. He threatened to open fire on the Chinese soldiers and, hitherto impervious to his arguments, they left him. But this was not Przhevalsky's last contact with the Chinese, for he was now leaving the cultivated

zone and had to stock up on grain for the year ahead; Roborovsky, Abdul and some Cossacks rode down the mountains to buy supplies in Donker. The main party, meanwhile, moved up into the alpine meadows to graze the camels and in early April found the first flower of the journey, a gentian, *g.squarrosa*. The supplies bought in Donker went straight to Tsaidam on thirty-four hired camels under the supervision of a Cossack and one of the Hsi-ning interpreters; Dzun-dzasak in southern Tsaidam was to be the first base. The expedition followed the quieter, more devious route around the north shore of Kuku Nor. Five camels fell victims to the damp. The ground around Kuku Nor had been invaded by marmots and mole-rats; the soil over their burrows collapsed under the camels' hooves and men were thrown from their horses. Often there was a burrow every other square yard—a feast for the bears, wolves and badgers that came to dig up the marmots and mole-rats.

Kuku Nor was inhospitable. Dust and sand storms blew. The ice stayed unbroken three weeks longer than in 1873. The Tangut herdsmen, who had expelled most of the Mongols, shunned Przhevalsky and drove their great herds of yak, *hay-nak* (yak-cow cross, or *dzo*) and sheep away to safety. At Easter snow fell for five days and the expedition had to unpack winter clothes. They celebrated not with eggs but with cognac and preserves and a bouillabaisse made from Kuku Nor carp, *Schizopygopsis przewalskii*. On Easter Monday they hunted the eighteen species of bird that had so far arrived on the lake. They then left for Dulan Kit, the capital of the Kuku Nor Mongols. More camels were abandoned to the care of local nomads. At Dulan Kit the chief minister, or *tosolakchi*, remembered Przhevalsky and enabled him to move on by hiring him another twenty-three camels to take him to Tsaidam. Dondok and a Cossack rode ahead to Kurlyk, whose *beise* Przhevalsky had used so cavalierly in 1879, to buy more camels. Through dust and westerly gales, skirting the now thawed bogs of Tsaidam, Przhevalsky made his way to Dzun-dzasak, where he unloaded his animals and rested his men. The chieftain, like his neighbour in Barun-dzasak, ruled over only thirty households and could not offer any resistance: the

Russians took over two rooms of his *kherem* (clay fort) as a storehouse and established the first base for a expedition into unexplored Tibet.

The sources of the Huang Ho were reputed to lie little more than 100 miles away; but unexplored ranges, the Burkhan Budda and Shuga, barred the approaches. Przhevalsky prepared for several months away from base, leaving Dondok with six Cossacks to guard the stores. They were to take the camels into the Burkhan Budda foothills when summer brought plagues of insects to Tsaidam. The Cossacks were issued seeds to grow vegetables, and books to learn reading and writing and alleviate the tedium. The other fourteen men, with a guide from Tsaidam and one of General Ling's interpreters, set off with twenty-nine camels, fifteen horses and a flock of sheep, carrying all the food and munitions they could, for the only inhabitants of the region they hoped to penetrate were predatory Ngoloks, a nomadic tribe of the Tibetan Khampa.

8

Conflicts and Conquests

In mid-May 1884 Przhevalsky was climbing to 16,000 feet on his way to the Huang Ho. Leaving Tsaidam, he discovered an unrecorded 'banner' (*khoshun*) of Mongols in the south-east corner of the depression. The 300 *gers* of the Shan *khoshun*, thus the third largest group in Tsaidam, were apparently ruled by the Panchen Lama from southern Tibet. In the mountains, however, there was nothing but a few herds of wild yak and the odd vulture soaring over barren, ice- and snow-covered peaks. A few irises, dandelions or primulas grew around the watercourses. Then, getting used to the headaches and nausea brought on by the altitude, the expedition descended into a closed valley and climbed the next range in the double barrier that walls off Tibet from Tsaidam, before coming down to the plateau in which the Huang Ho, like the Yangtse Kiang, has its source. There was no track, only a slope of porous clay, undermined by marmots, down which horses stumbled into a half-frozen marsh.

But once they were down in the rich, boggy salt-marsh — the Odon Tala, or 'Starry Sea' — where springs bubbled up like stars through the bog, such countless herds of *kulan* (wild ass), yak and antelope appeared that Przhevalsky had to limit hunting and conserve ammunition. The animals were in moult and usable only as meat. Przhevalsky was satisfied that he had found what he sought: the springs that fed the two lakes from which the Huang Ho flows. He carefully measured the latitude by the Pole Star, but cloud and dust storms obscured the sun and he had to determine the longitude from

his log.

The Mongols and Tangut had, of course, always known of the sources of the Huang Ho. An *obo* marked the hill that overlooked the springs and every year many white animals would be brought from Hsi-ning and sacrificed to placate the spirits of the river on which so many millions of Chinese peasants depended. Przhevalsky took Roborovsky up the hill, memorizing the features of the 'Starry Sea' beneath them, with its pools and streams teeming with fish. The next day Przhevalsky set off with Teleshov and another Cossack to find access to the nearest of the lakes, Jaring Nor (Cha-ling Hu). After ten miles they hobbled the horses and settled for the day. Some bears approached; Przhevalsky and Teleshov grabbed their guns and rushed out, killing and skinning three fine bears. Retribution swiftly followed the killing of an animal sacred to Mongols and Tangut. That night it thundered and snowed. Przhevalsky awoke buried in snow, his Cossack sentries were frozen numb. The horses were distressed. They had to give up reconnaissance and stumble for five hours against a north-westerly blizzard over snow-covered burrows and bogs to camp. Their eyes ached from the dazzle for days to come. It was June at the latitude of Tunis: the camels were starving and the wild gazelles so crippled by the jagged ice that had formed that the wolves feasted. Birds dropped dead from the sky.

Przhevalsky decided to leave and go south across the hills to the basin of the Yangtse. It was heavy going across bog, yak wallows and marmot burrows. Few birds put up with the weather: the black-necked crane was sitting on eggs laid on wet grass in twenty-three degrees of frost. The flora, even in June, was limited to a few iris, spurge and clumps of *Przewalskia tangutica*. Ice cut the camels' hooves and encased the yak-cropped reeds; some camels were too weak to go on. Men had skin ailments and fevers which Przhevalsky treated with carbolic acid and quinine. Luckily the guide had a rough idea of the way. Through the damp, rarefied air, normally below freezing, they crept over a pass at nearly 15,000 feet and, after some trial and error, came down to the Yangtse Kiang, known here by its Tibetan name, Do Chu. The sun

shone as weakly as the moon through the dusty atmosphere; a few yak roamed the hills, quite safe from the tired and depressed Cossacks' guns.

For the first time Przhevalsky had penetrated the rain-sodden chasms and ridges of Tibet's eastern zone, the birth-place of so many major rivers of east and south-east Asia. The flora was richer: Chinese, Tibetan and Himalayan; the climate was worse, and the wooded mountains sheltered only a few musk deer. There were new birds, such as the Sifan partridge, but they were hard to spot in the forests. A few hundred Khampa tribesmen lived here, who guided the expedition the last few miles to the river, but refused to answer questions and warned the Russians to guard against attack, though they sold them horses, sheep and yak meat. Przhevalsky was lucky in his Chinese interpreter who had spent nine years as a boy in Tibetan captivity and spoke the language well. But no sooner had the expedition camped by the Do Chu and begun to take bearings from a rock, than a bullet struck the sand. Khampa and Russians exchanged fire. Przhevalsky moved camp to more open ground, but stayed a week to collect plants. The Tibetans' tents vanished from the opposite bank. A few days later a lama came from a nearby temple to apologize for the shots, but Przhevalsky remained wary. More lamas appeared and offered him a boat to ferry the expedition across the river. But camels could not be dragged over a river so deep and fast, and the banks were so precipitous that they could not move along them to find a better crossing point. Przhevalsky concluded that he could not risk so much for a march on Lhasa, over 400 miles to the south-west. Had Lhasa lost its appeal or was he afraid that his dream might turn out to be just another dirty Asiatic city? He would turn back to the Huang Ho and survey its two lakes instead.

The return was more dangerous than the approach. Their Tsaidam guide, having once lost his way, had been summarily dismissed. The Khampa, by tradition more bandit than herdsmen, were alerted; the expedition met them, the men all sporting sword scars, wearing only sheepskins over their naked bodies, and armed with sabres. Another Tibetan tribe, the

Ngoloks, also inhabited the mountains between the Yangtse and the Huang Ho, driven there from Szechwan by the Tungan, living out of reach of—and outlawed by—the Chinese, cut off by a schism from the Dalai Lama. Snow set in after four clear days and the expedition had a struggle to get into the mountains. The Khampa sold them some sheep, but Khampa sheep, unlike those from Tsaidam, were unruly and would not follow the caravan. Two got away; two more were shot. The rain had at least died down and the streams were easier to ford, the grass was sprouting and there was plenty of meat.

After an adventurous trek—Roborovsky had been knocked off his horse by a Khampa sheep in mid-river and nearly drowned—they were back on the 'Starry Sea'. August brought autumn snow. Slithering over bog, managing a mere ten miles a day, the expedition made for Oring Nor (O-ling Hu), the second of the two lakes from which the Huang Ho flowed; they were looking forward to a profusion of waterbirds. There were one or two strange omens. Herds of wild yak kept crossing their path, moving east to west, evidently disturbed; a track ran along the stream, the Jagyn Gol, that led to the lake. Then, reconnoitring a path through the marshes and pools, Roborovsky saw a party of travellers; he took them to be a Tangut caravan.

The following dawn the duty Cossack woke Kozlov to read the air temperature. Suddenly they heard horsemen bearing down on the camp from two sides. The Cossack fired; the others woke, seized their carbines and had taken aim by the time the horsemen were in range. It was too dark to shoot properly, but the Ngoloks (as they turned out) wheeled away, leaving two dead horses and one dead man. The Cossacks fancied they saw other bodies retrieved by the survivors, which was likely in view of the Khampa superstition that a corpse unburied would haunt the tribe. They examined the dead Ngolok, who had a sabre, a matchlock gun and fifty bullets. Then, when all was quiet and the interpreter from Hsi-ning had emerged from under a felt groundsheet, they surveyed the damage. One of Przhevsky's horses had been shot in the stomach and had to be despatched. Worse, eight of his

Khampa horses, hearing the Ngoloks' familiar cries and the pounding of hooves, had torn their tethers and fled with the attackers. This, after the death and abandonment of several camels, was a serious loss.

The Ngoloks watched from the hills; the Russians cleaned their rifles and built a fire of dung. After breakfast Przhevalsky broke camp and moved on in battle order. Soon the Russian caravan was blocked by 300 armed horsemen. But Przhevalsky's long-range carbines could outshoot any number of matchlocks, and behind the Ngoloks lay an unfordable river. The line of horsemen broke and they tried to slip by on either flank. Przhevalsky ordered his men to fire fourteen volleys and estimated that ten Ngoloks were killed or wounded. Then, victorious, he promoted every one of his men by one rank and renamed the Jagyn Gol in Russian, *Reka razboynichya*, 'Robbers' River'.

He had only seven horses and twenty-four camels, some dying. Half his men now had to dismount and much of their food was jettisoned. For a day or two they explored the shore of Oring Nor; Roborovsky and Protopopov took photographs when rain permitted. The geese were breeding; Przhevalsky shot eighty-five and the expedition shared the bodies among themselves and the scavenging bears. Then the Ngoloks reappeared. Przhevalsky decided to provoke a daylight attack. He sent the Hsi-ning interpreter, Roborovsky and four Cossacks as if to parley with them; they were to show fear and to shoot only in self-defence. Three Ngoloks met them and rode away in contempt. The trick worked; two hours later a Ngolok party tried to rustle the camels and horses from the Cossack herdsmen. Behind them several hundred armed men appeared. Przhevalsky tied up his camels and, this time, hobbled his horses. Flat ground lay between the two sides; the lake cut off the Russians' retreat. Half a mile away the Ngoloks broke into a charge, to be met with a salvo and rapid fire. Przhevalsky shot the leader's horse from under him and the Ngoloks turned away to take cover behind nearby rocks.

Przhevalsky left some men to hold his camp and took the rest to attack the Ngoloks. He killed several. The rest withdrew to a new position and, after the emboldened interpreter had

brought up fresh ammunition and water, Przhevalsky sent a party under Kozlov to storm them. More Ngoloks attacked the base camp but were driven off. Soon dusk fell and the battle ended. The Russians had lost a horse; the Ngoloks had lost perhaps thirty men. They watched the expedition the next day but held off. Other Tibetans appeared, but these turned out to be the vanguard of a 500-yak Tangut caravan from Hsi-ning to the Do Chu, with 160 armed Tangut. Some were friends of the Hsi-ning interpreter and they warned the expedition not to follow the Huang Ho downstream, for it was too deep to ford, except with yaks. Przhevalsky saw he had no choice but to return to Tsaidam.

As they left the 'Starry Sea', the black-necked cranes had laid a second clutch: Przhevalsky and Roborovsky caught twenty-four fledglings for their collection. In the mountains above the Huang Ho they rested a little. Przhevalsky's diary for 27 July/8 August reads: 'The north-westerly storms went on all night and brought, probably from Tsaidam, clouds of dust. It was very cold . . . we stopped to camp on the marsh grasses by Mt. Urundushi. From tonight our sentries will be taken off—only double watches will be kept. Today, for Teleshov's nameday, we had a feast of cognac, caviar, jam and coffee.'

They crossed the Burkhan Buddha down to their base in Tsaidam. The Cossacks were grazing their camels here in safety. Przhevalsky rested with them before going on to the *kherem* at Dzun-dzasak; he dried out the plant specimens saturated with the monsoon rain and snow, and lay and read the Cossacks' books. The only native was a lama who hung around the camp for protection and titbits; he sold Przhevalsky a third guard dog, called Dyrma. Przhevalsky sent Dyrma off with the interpreter—the first Chinese Przhevalsky had learnt to respect—Dondok and three other Cossacks across Tsaidam to get new camels. He hunted and wrote while waiting for their return.

Przhevalsky was pleased with his achievements. He had mapped the source of the Huang Ho; he had thirty fine bear skins from the sixty bears he and his men had killed; European moral primacy had been proved by killing a score or so Ngoloks. It was time for the second stage of the expedition,

westwards to the Gas oasis and Lob Nor, along the foothills of the mountains walling off Tibet, through which he might still break south to Lhasa. After a little desultory plant-hunting, he moved a few miles east to the *kherem* of Barun-dzasak. Dondok met them with thirteen camels that he had 'compulsorily purchased'.

A few days later, on the Nomokhun Gol, fifty-four camels fell ill with a fever. There was nothing, the Mongols advised, to be done except wait three weeks, starve them, smoke them, and cool them with water; a caravan of 2,000 yaks was said to be stuck near Kuku Nor with the same disease. For eighteen days Przhevalsky shot pheasants and went on bear *battues*. A Tungan messenger arrived from Hsi-ning; General Ling had sent Przhevalsky his letters and newspapers. But it was autumn, the season for travelling, and he was impatient. He hired forty-five horses so that his convalescent camels could walk unladen. Cossacks took the horses ahead, while the men trudged slowly behind with the sick camels. The first snow of September turned to heavy rain, unprecedented in Tsaidam, and the salt-clay ground became a morass. Demoiselle cranes were flying overhead on a non-stop journey to southern Tibet.

When the expedition had reached the Taijiner *khoshun* of western Tsaidam with its 500 *gers*, the camels had recovered. The Tungan from Hsi-ning got on so well with Przhevalsky that he agreed to stay on and help find sheep and guides, instead of following General Ling's instructions and going to the Do Chu to investigate the Khampa and Ngolok attacks on the Russians. Another month of travelling across easy but inhospitable desert, littered with skeletons, brought them to Lake Gas. Lake Gas was a disappointment; despite the Mongols' songs of praise, it was a ten-mile saline expanse of water, surrounded by marsh and reeds, supporting nothing but hares and wolves. Dondok, Abdul and the guide searched in vain for a human being. They found only traces of gold-diggers from Cherchen and hunters from Lob Nor, and no sign of the Russian old believers who were said to have found their way here twenty-four years before.

Przhevalsky stopped at a warm sulphurous spring, where he found his gerbil, *Brachiones przewalskii*, a few bears and huge

herds of kulan. He moved camp six miles west, where the kulan had not yet exhausted the grass and there was fuel and meat in abundance. Here his guide's competence ran out; Przhevalsky had to find the route north-west to Lob Nor that he had heard of in 1876. Dondok, the Cossack Khlebnikov, and the Mongol took two weeks' food and went north; Teleshov and another Cossack went west, only to turn back after three days with Teleshov badly gored by an orongo gazelle he had wounded. After twelve days Dondok's party came back; trying one gorge after another they had found a pass over the Altyn Tag into the valley that had been the nearest point to Tibet that Przhevalsky had reached in 1877, and they had thus 'closed the circle' of his explorations, rediscovering a route unused by Europeans since Marco Polo. The Kun Lun mountain system had now been outlined, a double, sometimes treble, chain from China to Turkestan. Przhevalsky had winter at his disposal; he did not want to visit Lob Nor until the spring migration and, despite Ney Elias's opinion, 'even a Tibetan or a yak could hardly survive a winter in the Tibetan highlands'. He now intended to explore south and west in search of routes on to the north-western Tibetan plateau.

Dondok, Abdul and six Cossacks were left in charge of the base at Gas. Przhevalsky took the rest of his men, with twenty-five camels, four horses, fifteen sheep and two months' rations, westwards up the valley that divided the Tsaidam mountains in the south from the main ridge of the Altyn Tag in the north. They moved up slowly in the teeth of a freezing gale. Przhevalsky named the valley *Dolina vetrov*, the 'Valley of Winds'. At 12,000 feet he could see the way westwards to a pass that led down to the oasis of Cherchen in Turkestan; he turned back fifty miles and broke through the mountains by a gorge that opened on to the Tibetan plateau. Barren, loess-covered rocks dominated the west and the east; he called them the Moscow and Columbus Mountains. He was now on a shingle plain, utterly desolate save for traces of secret gold workings and wormwood scrub that saved the camels from starvation. The horses staved off dehydration by licking the ice that covered the saline pools: they were too weak to go farther. Przhevalsky and Roborovsky explored a few more miles; they

came to a lake some thirty miles long which they named *Nezamerzayushcheye*, 'Icefree,' then on to a solid wall of loess in monstrous shapes, 800 feet sheer. The Tsarevich's telescope revealed only impasses and boundless snows on a ridge which Przhevalsky called *Zagadochny*, 'Mysterious,' and which the Imperial Geographical Society was to rename Przhevalsky's Range.

The cold was the worst they had experienced, the mercury froze, and the wind never let up. The air was thick with salt and loess dust. But Przhevalsky fought his way back to the pass leading to Cherchen, where he found the tracks of men and donkeys who had retreated there in the autumn. Satisfied, he led his men with the wind behind them down towards the Gas oasis. He had found a direct route from Turkestan to Tsaidam over easy gradients and, in autumn at least, practicable for yaks, camels or horses, shorter and better watered than any other route to Tsaidam, or Tibet, from Russian territory.

The Russian New Year of 1885 (13 January) was celebrated by shooting twenty-three orongo. The Cossacks took the meat and the camels straight down to base, while Przhevalsky climbed the Tsaidam ridge and broke through to the south, to the north slopes of the Columbus Mountains, into a corridor that was part of the old route from Lob Nor to Tibet, perhaps untouched since the late 1870s when 100 Turghud Mongols went to Lhasa and seven died of the rigours of the journey. Lack of food made extensive exploration impossible; Przhevalsky had to retrace his steps, living on boiled orongo meat, irritated by the nocturnal screams of his unhappy camels.

The camels recovered at Gas, but the horses had to be abandoned. After a haircut and the first wash for many weeks, the expedition was ready for the journey to Lob Nor. It was an easy pass across the 'Nameless Ridge', the first part of the Altyn Tag; they broke up ice to take through the waterless valley and second ridge that followed. Shovelling the loose earth from the limestone and marble rock, they led the camels over the main part of the Altyn Tag—the Mountains of Gold—and discovered to their astonishment the tracks of a cart, presumably the two-wheeler capable of being dismantled, that carried important lamas to and from Tibet. A

descent of 3,000 feet brought them to a spring where they stopped for grazing. Then they came down to Przhevalsky's camp of eight years ago, situated at 6,000 feet. The coals of his camp fire and the hollows where his camels had bedded down were undisturbed by the passage of time. It was early February, but the first heralds of spring—ducks and swans—were already making for Lob Nor. Dondok and Abdul followed them to reassure the ruler of Lob Nor, Kunchikan Bek, and his timid people. They returned to camp with gifts of fresh bread, and the expedition moved down to the marshes.

Lob Nor had hardly altered. It was shallower and there were fewer fish. The primitive reed-dwellers had, in some cases, been 'civilized' by exiles from Khotan. Kunchikan Bek still ruled seventy families, but he was now answerable to the Bey of Turfan and, ultimately to the dowager Wang of Hami, to whom he paid an annual tax of nine otter skins. Przhevalsky felt at home; he liked the gentle patriarchal dominion of Kunchikan Bek and his nonagenarian advisers. He observed their customs with an open-mindedness and sympathy unusual in his travels. Abdul's Uighur Turkic was understood in Lob Nor and communication was easy. Kunchikan, perhaps to his eventual ruin, made no secret of his liking for the Russians and dislike of the Chinese; he told Przhevalsky that he took poison each time he was summoned to Turfan and thus excused himself on grounds of sickness.

So sympathetic was Kunchikan Bek that he tried to forward Przhevalsky's letters via Kurla. The letters were returned, together with a threat from the Bey of Kurla:

Stop these arrangements. You have sent a parcel from the Russians to be sent to Kulja. I am sending this packet back to you. You have found a new boss. Our authorities are the Chinese and Kulja is ruled by them. As our authorities are the Chinese you are not to listen to the Russians. Twenty Russians have arrived, let it be two thousand, it doesn't matter to us. How dare you serve them of your own free will, knowing Russian plans? When you get this letter come to see me and ride non-stop and get here within seventy-two hours. Nasir Bek.

Kunchikan Bek wisely sent a messenger instead, with Przhevalsky's letters. They, but not the messenger, returned with a note from the Chinese saying that the treaty 'does not oblige us to carry Russian mail from Lob Nor'. The Chinese were particularly sensitive about Russian activity in Sinkiang (Turkestan and Dzungaria), especially since the Russians had secured a foothold there with a consulate at Kashgar. They began a more or less overt surveillance of the expedition.

Przhevalsky spent fifty days by Lob Nor. Kunchikan Bek's wife baked bread for the men and the camels were allowed to graze the foothills of the Altyn Tag. Przhevalsky watched weddings and funerals; Roborovsky was permitted to photograph the people. They were even given a pair of maral horns from an imam's grave. Early morning was spent on anthropological field work; hunting started at nine, dinner was at four and bed at eight in the evening. After the contretemps with the letters, life ran smoothly.

In March a Chinese official arrived from Keria to examine Przhevalsky's passport and tried in vain to persuade him to go straight home via Kurla and the Ili Valley. The bird migration was nearly over. In February Przhevalsky had killed 743 duck from his hide; the Tarim River had thawed and the surviving duck were leaving for safer waters. Przhevalsky was waiting for the dust to clear so that he could take exact bearings; each day the sun rose as a cloudy disc in the salt-saturated air. The nearby mountains were usually invisible; there was no rain, no dew, not even mist to settle the dust. At least the plants from the Do Chu and Huang Ho dried out well; at Lob Nor even corpses did not rot, but just became desiccated.

On 20 March/1 April 1885 the third stage of the expedition began. Przhevalsky left for a tour of the chain of oases strung between the Altyn Tag and the Takla Makan. From the miserable outpost of Charkhalyk the track led into sand-dunes up to sixty feet high — the Takla Makan, already the biggest sand desert of Central Asia, was spreading over the thin fertile strip by the mountains. The expedition reached the Cherchen River. Nothing but a few poplars grew. It was hot and the river banks were swarming with scorpions and mosquitoes.

Messengers came from Cherchen to lead Przhevalsky to a

camp about half a mile out of town. The Cherchen of ancient history had been levelled by Genghis Khan; this was an eighteenth-century town, peopled by about 3,000 Machins, reputedly the original Indo-European stock of Turkestan, but Turkic-speaking like most Turkestanis. Yakub Bey's fort lay in ruins; the town was a cluster of farmhouses set in orchards of mulberries and apples, overcrowded and, since the Chinese had recaptured it, oppressed. The *hakim* (town prefect) and *aksakal* (commercial consul; literally, whitebeard) told Przhevalsky that the Chinese had forbidden them on pain of death to sell him food or give him guides. Przhevalsky threatened to kidnap the *hakim*, who backed down at once. But the guides ran away and the expedition had to fall back on two others, one of whom was an Afghan.

Abdul fell ill and had to be left in Cherchen; they now had no interpreter for Turkic. Nevertheless they pressed on westwards, taking a road at 5,000 feet, which promised to be cooler and better watered than the direct sandy route. Their guides were useless. At one stage, horses and sheep near death, the expedition had to halt at noon and wait tensely while two Cossacks and the guide galloped ahead to fetch a barrel of water from a well twelve miles away. Przhevalsky took his men higher up, for at 10,000 feet there was perpetual ice, but the chasms and rocks proved too much for the camels and they had to climb down to the sand and the heat.

They passed a big goldmine where 500 forced labourers—tax defaulters, it appeared—worked for the Chinese. The Chinese superintendents fled from Przhevalsky's path, taking with them the newly-mined gold. Goldmining was as strictly controlled by the Chinese as it had been by Yakub Bey, who had established checkpoints in the valleys where women had to jump ditches and men swallow purgatives to reveal any gold they had secreted in their bodies. Men and donkeys still slipped past, however, from Nia and Keria into the gold-bearing mountains.

The camels were failing, and Przhevalsky left eleven in the care of a friendly Machin *aksakal*. The guides tried to escape; the Chercheni fell ill and was allowed to go, but the Afghan was kept under close scrutiny. Progress was impeded by rivers

which cut canyons often 1,000 feet deep through the foothills. The Altyn Tag, which Przhevalsky named the Russian range at this point, gave little to the naturalist. All he found were three species of bat, which he knocked out of the air with branches at Yulgun well, picking up the bodies which the toads in the well had missed. But the Machins were kindly and often agreed to be photographed, bringing presents of food and drink.

Przhevalsky went down to the oasis of Nia, rich in mulberries, vines and jujube trees, its inhabitants ravaged by syphilis. Here the expedition stayed for a week, fishing and bathing. Przhevalsky found a new species of gecko, *Teratoscincus przewalskii*, and feasted on the mulberries that the men of Nia gave him. There was something touching about Nia's equitable life; everyone shared the limited water through an elaborate system of channels and struggled to maintain their sheep or donkey on handfuls of grain and fallen leaves. News arrived that Abdul was well again and was rejoining the expedition. Przhevalsky moved on, carrying his own water, to the next oasis of Keria. Halfway he stopped for five days to give Abdul time to catch up. He stayed at a little village of eight houses; the Cossacks celebrated their six thousandth *versta* (about 4,000 miles) from Kyakhta with a harmonica concert. The fame of their music spread all through Turkestan. Every Machin village was to ask after it.

The Chinese were also interested. Rumours reached Przhevalsky that the Chinese had removed all surplus corn and camels from Keria and had demolished the mountain track to the Tibetan plateau. In any case, the Kerians felt nostalgia for Yakub Bey and the presence of a Russian officer was an inflammatory provocation. The Chinese, it was said, had mined grain stores to deter the people from joining any rebellion that Przhevalsky might encourage.

Russia had penetrated in a subtler way. The market at Keria was full of cheap Russian textiles and ironmongery, and the traders used Russian currency. Uzbeks came here freely from Russian Turkestan to trade. Despite Chinese edicts, Przhevalsky spent six days buying supplies. Abdul interpreting, he persuaded the Chinese *amban* to sell him horses.

The *amban* did Przhevalsky the honour of paying him the first visit and he let him establish a base at Keria, put the camels to grass for the two summer months and explore the mountains with hired horses and drivers. The *hakim* agreed to look after the baggage and the expedition set off for the cool mountains to the south. Five Cossacks stayed with the camels at 9,000 feet. The rest of the expedition moved south and west to look for the pass by which a pandit had come from Ladakh (in British India) to Keria in 1871. Their searches ended only in impasses of granite or argillaceous schists. Over wrecked paths, with unmanageable pack-horses (to which in any case the Cossacks were unused), Przhevalsky probed for passes farther west. The air was at last cleared by rain and he could take bearings. All that year the expedition had so far experienced only 'dry rain', when raindrops and the dust coalesced into globules of cement long before they reached the earth.

Fortunately, the mountain Machins, freer of Chinese supervision, were friendlier still. They repaired the tracks, helped the expedition over rope bridges and offered to rebel against the Chinese if Przhevalsky would lead them and arm them. On the Kurab gorge Przhevalsky came to the village of Polu where the natives, after hiding in fear, grew in a few days to love the Russians' dancing and music so much that the women wept when they moved on. The fifty families of Polu were bitter; after Yakub Bey's death the Chinese had come to shoot and drown their horses and break the points of their knives. They were reduced to peasantry. Though Moslem- and Uighur-speaking, the Poluans claimed descent from a Tibetan tribe that had fled north with its chieftain to avoid ritual murder after his appointed ten-year rule. They helped Przhevalsky penetrate the Kurab gorge which led up to Tibet. A track had existed; the pandit had come by it in 1871 and Niyaz Bek of Keria had repaired it in 1877, lest Yakub Bey's defeat force him to flee to Tibet. But the Chinese, Przhevalsky found, had blocked the ravine with boulders. He explored another seven miles, where the river was known by its Tibetan name, the Tam Chu. He found a bridge demolished by the Chinese.

Staring at the camps where the demolition workers had pulled down the last beams and cornices, Przhevalsky gave up

his last chance of breaking through to Tibet. He turned back to Polu and studied the villagers' lives. He liked them: 'They wash often and do not fear water.' They lived and kept their cattle in cool caves, excavated in the soft, easily-cemented loess; they were simple, unmercenary and extroverted. Only their frequent divorce and remarriage incurred Przhevalsky's disapproval. They were free of the syphilis and hashish that demoralized the Machins of the oases below. Przhevalsky was sorry to leave them, but he wanted to explore the mountains farther west in the vain hope of finding another pass to the south.

He moved at 11,000 feet over rain-sodden shepherds' tracks. The streams were deep, the gorges slippery and the pack-horses, now that the native drivers had returned to Keria and left them to the Cossacks, were restive. It took a month to cover eighty miles. Rain imperilled the expedition: swollen streams swept great boulders down, and horses plunged, one to its death, over the gorges. One thousand feet below, two Chinese officials on donkeys were following a parallel route, warning the Machins off the Russians. Przhevalsky could not get new drivers, though the Machin still brought him wood for his camp fires. With the onset of August, the rain could turn to snow at this height. It rained for twenty-five days continuously. Przhevalsky had enough of the gorges and went north to the plains and the great oases of Chira and Khotan. He rested in Chira's warm apricot groves and brought his diaries up to date. The horses were paid off, and the expedition waited for the camels to come across the desert from Keria. There was nowhere to bathe, but they had fruit: a few pennies bought 200 peaches or twenty pounds of grapes. In a week Roborovsky and Kozlov returned with the camels and a survey of the Keria road.

Strange fodder and insects, the bane of the Bactrian camel, had whittled Przhevalsky's caravan down to thirty-nine very poor animals. He could not hope to cross the Tien Shan with them. He wrote to the Russian consul at Kashgar asking for forty new camels to be sent from Russia to the Chinese town of Aksu. For the time being he was in no hurry, for the Takla Makan was too hot to cross until autumn. He headed in a

leisurely way for Khotan.

At Sampula, only twelve miles from Khotan, a series of incidents began. The Sampula *hakim* gave Przhevalsky a guide who led the caravan through cornfields. When the camels had wrecked three cornfields, Przhevalsky's suspicions hardened and he questioned the guide. He had been ordered to cause the maximum damage to the fields in order to discredit the Russians in the farmers' eyes. Przhevalsky pitched camp at the first suitable site and summoned the *hakim*, who appeared with his aide. Przhevalsky tied them to two trees and put an armed guard over them. Then he sent Abdul to find the owners of the corn and compensate them. The farmers were invited to come and see their humiliated *hakim*, who was released when he begged to be forgiven. Russian credit restored, Przhevalsky relaxed.

There was another confrontation in Khotan. Two Chinese soldiers tried to search the expedition's baggage. Przhevalsky drove them off and sent Abdul with two Khotan *aksakals* to the Chinese residency to complain. On their way back they were attacked and beaten by Chinese soldiers. Przhevalsky was furious. He moved his camp to a defensive site on the river bank and demanded that the soldiers be punished in his sight. There was no answer. He then ordered Roborovsky, Kozlov and ten Cossacks to put on full dress uniform and to march with bayonets fixed and 100 rounds on their belts through the town to the residency. They were to fire on anyone who attacked them. It was market day: many Khotanis openly approved and sold the Cossacks watermelons which they took to the Chinese fortress and ate on the ramparts. Przhevalsky got a response. Two Chinese officials came to apologize, but this was not enough. Roborovsky and ten Cossacks marched back to the residency and demanded to see the *amban*. There was a ceremonious apology and two days later the *amban* paid Przhevalsky a formal visit. When the expedition departed the *amban* honoured Przhevalsky by personally seeing him out of the town and having a farewell salute fired.

The sky had completely cleared for the first time in eight months. Przhevalsky took his first accurate longitudinal bearings, thus mapping Khotan definitively. He then set off north

along the left bank of the Khotan River, past the demolished forts built by Yakub Bey.

Sixty glaciers in the Kun Lun fed the Khotan Darya, but a few days out of Khotan its chief characteristic was its waterlessness. Each summer the flood from the mountains cut a new channel north to join the Tarim. The track followed the banks of the river and when the water dried up, the sandy bed. A belt of relatively green land followed the river course; an occasional shepherd grazed his flocks, tigers still prowled and gerbils burrowed treacherously under the banks. Ancient cities lay long buried. Only a few hunters ventured far from the river, in search of treasure or to snare hawks and eagles for falconry. Przhevalsky travelled without much incident; but Roborovsky was thrown from his horse and bled so badly that a cart had to be bought to carry him for a week. When the expedition moved to the dried watercourse, they discovered a tiger's footprints, but although it prowled around camp it evaded their ambushes. One boar and a few pheasants were all that Przhevalsky bagged.

Near the Tarim, which is fed by the Yarkand and Khotan rivers, two Kirghiz and an *aksakal* from Aksu rode to meet the expedition, announcing that fresh camels were waiting for them. They helped the caravan ford the Tarim with a flat-bottomed boat. Two days up the Aksu River brought them to the oasis and town of Aksu. Przhevalsky sold his exhausted camels and loaded up the forty fresh Kirghiz animals. His surveying was ended; a Russian captain had mapped the route from Aksu to Karakol in Russia eight years before.

The expedition moved briskly on to Üch Turfan; then they turned off the highway to Kashgar into the mountains towards the Bedel Pass across the Tien Shan into Russia. At one point a clay fortress jutted over the track, blocking the heavily-laden camels. The natives enthusiastically helped Przhevalsky demolish it. Sheep and horses were coming down the trail to be sold in China. On 29 October/10 November 1885 the caravan reached the Bedel Pass. Each camel had to be held by ropes on the slippery ice that covered the snow. One plunged sixty feet down the mountainside and had to be gingerly hauled back. Then they came down towards Karakol on the Issyk-Kul', jubi-

lant with excitement. The Cossacks grabbed the first Russian settler they saw and hurled the mystified man into the air with joy. Przhevalsky read out a final order to his men thanking them 'in the name of science and of the motherland' for the honourable and glorious feats of the last two years.

But he sadly wrote in his diary:

. . . the years are piling up and of course there will come a time when it will no longer be possible to endure all the work and deprivations of such journeys. Should it be my lot not to go to the depths of Asia again . . . let the living images of those unforgettable days resurrect in my imagination . . .

Once again the storms have passed,
Again the sailor's back unharmed . . .
Once again he's not been told
That the storms have now been calmed.

A few days later he was on his way to Petersburg.

9

Dreams and Fulfilment

*At length upon the lone Chorasmian shore
He paused, a wide and melancholy waste
Of putrid marshes.*

SHELLEY

As soon as Przhevalsky arrived in Petersburg in January 1886, the Tsar promoted him to major-general and gave him an audience. Gold medals came from half the geographical societies of Europe. Przhevalsky and Teleshov, whom the explorer kept by his side as long as he could, were mobbed by admirers. Lieutenant Roborovsky was accepted for the Academy of the General Staff; Pyotr Kozlov was enrolled in the Junker college; Cossacks and soldiers were showered with pensions and gratuities; Abdul was made a sergeant in the militia.

The Tsar and his ministers were interested not just in honouring the returning hero, they needed his intelligence. Once more Russia's imperial policies had brought her to the brink of war. Russian troops had opened fire on the Afghans at Panjdeh, and the British government had printed a declaration of war in readiness. Russian commercial enterprise in Korea, as well as in Turkestan, had roused Chinese resentment and Japanese antagonism. Przhevalsky was summoned to a military conference; he was asked to advise on the logistics of war in Kashgaria. Przhevalsky's advice, though applauded, was not implemented; Chinese and British feeling was appeased.

Then news came of British involvement in Tibet. In 1885

the explorer and political agent Ney Elias had deplored the India Office's failure to match Russian exploration with its own expeditions; two explorers, Carey and Dalgleish, were now on their way over the Karakoram to follow up Przhevalsky's search for a way from Turkestan to Tibet. Early in 1886, a Tibetan force suddenly invaded part of the Himalayan state of Sikkim, thus for the first time encroaching on the British empire. It took the British two years to decide to repel the Tibetans, but from 1886, Tibet, like Afghanistan, became a zone of contention between Britain and Russia. When the Russian Geographical Society took the step of renaming the Mysterious Range 'Przhevalsky's Range', it was tantamount to staking an interest, if not a claim, in Tibet.

Przhevalsky was perhaps more occupied with thoughts of his estate at Sloboda. He sent melon seeds from Khotan for Denisov, his manager, to sow. He gave him instructions: 'If there are any drunkards among the workmen and their year's contract is up, dismiss them, including Antip, who not only drinks, but is disorderly when drunk.' But he was not free to leave for the country until March. He complained to his Kyakhta friend, Lushnikov:

I am still residing in Petersburg and in unspeakable torment; lectures and official ceremonies apart, I can't even walk a hundred yards down the street — I'm immediately recognized. . . . Thank you for your letter and the congratulations. Only, what you said about a general's lady will probably not come true, I'm too old [46] and my profession isn't right for marriage. It's in Central Asia that my posterity lies . . . in the figurative sense of course: Lob Nor, Kuku Nor, Tibet etc. — these are my children.

At last he took Teleshov and two grenadiers, Nefedov and Bessonov, to Sloboda. No sooner had he arrived than he was writing to Roborovsky and Kozlov, full of paternal cares and pathos: 'Swot up from morn till night or you won't be ready in time . . . I can imagine how sad fine weather makes you feel. But you must submit to necessity . . .' 'Your spring,' he wrote to Kozlov in words that haunted him for the rest of his life, 'is

still ahead, while my autumn is approaching.' He enjoyed six weeks of peace, planting apple trees, pushing on with the building of the new house, working a little in his 'hut', refusing invitations. Charles Black of the India Office, with a remarkably friendly note in view of the international situation, sent him a map of recent journeys made by a pandit across Tibet, and asked for information in return. The British Association for the Advancement of Science and the Scottish Geographical Society pestered him, sometimes peevishly, to come or just to reply to their letters. The Russian Academy of Sciences persuaded him to drive to Smolensk and have his portrait taken for a gold medal. In mid-May, Przhevalsky's shooting was interrupted by a summons to Petersburg. He had to read a report to a military committee on the possibilities of war with China. Opposition on the committee was silenced. In his triumph Przhevalsky expanded his report into a brochure, which in his book on the fourth Central Asian journey was to become the final chapter, 'An Outline of the Present Situation in Central Asia.'

The 'Outline' is so ardent in its chauvinism and imperialism that it is no wonder that the Soviet edition of Przhevalsky's book omits it. It dismisses the eight million inhabitants of Mongolia, Tibet and Turkestan as laggards in the evolutionary process. Przhevalsky doubts that nomads can be civilized or regenerated. He blames European diplomacy for holding up the disintegration of China and advocates detaching the Moslem and Buddhist peoples of Central Asia from the Chinese empire. Przhevalsky then stresses the prestige of Russian arms and Russian administration in Turkestan; a leader and a small expeditionary force are all that is needed to overthrow the Chinese in Kashgaria. Russia, in his opinion, has wasted two centuries ingratiating herself with China. 'International law does not apply to savages', force is the only sensible policy. After accusing the missionaries of preaching the gospels only so as to cover up their trade in opium, Przhevalsky concludes by recommending that the Chinese be provoked into declaring war, regardless of the consequences in Europe. 'However bad war may be in itself, a bad peace is a bitter thing as all Europe is now experiencing.'

Fortunately for Russia, the Foreign Minister was now Girs, a tough, realistic and moderate man, who had the diplomacy to praise Przhevalsky and the sense to disregard him. Russian sinologists were appalled by Przhevalsky's total ignorance of China's culture and by his callousness. The *European Herald* (*Vestnik Yevropy*) was to respond in July and August with denunciation and refutation. Przhevalsky protested in the conservative paper *New Times* (*Novoye Vremya*); privately, he cared little, writing to Fateyev: 'What can come of it?—threshing the wind. Our views are quite opposite—they have arm-chair humanitarianism, I have the conclusions drawn from harsh, practical life. They have soap bubbles they call ideals, I have force as the only recognized criterion of right.'

In July 1886 he was again free to leave Petersburg. He was hardly back at Sloboda when, unwillingly, he sought medical advice. A diet of confectionery and game, and sedentary months in Petersburg had made him very stout; his leg swelled up and hurt. He went to Moscow to see the distinguished Dr Ostroumov—who was later to treat Chekhov for tuberculosis. Ostroumov tactfully told him he was suffering from an excess of health and ordered him to diet. Przhevalsky tried to forget his anxieties in bear-hunting and hare-coursing. At Sloboda he had sown oats in the fields solely to entice the bears out of the woods and nearer the house.

Kozlov spent only ten days and Roborovsky just a month with Przhevalsky that summer. Teleshov had left for his native Transbaykalia. The grenadiers Nefedov and Bessonov stayed on; so, for a while, did Yegorov, one of the expedition's N.C.O.'s. Przhevalsky wrote long, frequent letters to Teleshov, asking after the other Cossacks, and particularly after young Mikhail Protopopov, who had returned to Kyakhta. He felt the lack of a focus for his affections. On a neighbouring estate he discovered a boy, Kostya Voyevodsky, who had lost his father. Przhevalsky made himself a second father to Kostya and put him down for cadet college in Petersburg the following autumn. Makaryevna still ran the household with her usual vigour and devotion, so much so that she dislocated her shoulder and Przhevalsky sent her under Yegorov's escort to Moscow for treatment.

By autumn the house was nearly finished. A room upstairs was set aside for Teleshov. Przhevalsky courted his favourite Cossack by letter: 'How are things at home? I can tell in advance: at first happy and fine; then you got fed up. The family was kind and attentive at first. Then they asked for money. You didn't give them any—they got huffy and reproachful. You're not thinking of marrying? Look out, be careful with that sort of business. You can't undo mistakes . . .'

Teleshov was hesitant about settling in Sloboda. He moved to Kyakhta and became a butler for Lushnikov. Przhevalsky lured him with descriptions of sport and promises of action in future wars and future expeditions; he told him how much the servant girls, Liza and Aleksandra, in his Petersburg rooms admired Teleshov; he sent him medals and photographs.

Friendship and reverence still surrounded Przhevalsky. Many Warsaw friends—Fateyev and Feldman for instance—were now important military figures in Moscow and Petersburg and, when they were free, would come to stay with him. Kozlov and Roborovsky wrote with news of their examinations and expressed their gratitude. Przhevalsky spent night after night in the open, to the dismay of his driver, camped by the lake, shooting duck, fishing, lying in wait for bears. He had bought new pointers and hounds. This was his idyll. He evaded all invitations, even from Sofia, his sister-in-law in Moscow. He wrote to her:

I've got very used to Sloboda, I'm quite happy to be alone; the sport is excellent, the area wild. In a word, all I require is to hand. I do my best with the diet, I bathe twice daily. As for the swelling on my leg, only the desert will cure it, as happened on my last expedition. Like a free bird in a cage I too cannot get on with 'civilization' where everyone is first and foremost a slave to social life. The open spaces of the desert—that's what I dream of day and night. Give me mountains of gold and I still wouldn't sell my wild freedom . . . Thank you again for your attentiveness. *At times even a wild animal likes kindness.*'

The distillery was now closed; Pashetkin had removed it and he was restored to Przhevalsky's favour as a useful business man. But Pashetkin continued to run the village pub; the drunken peasantry upset Przhevalsky. He wrote to his half-brother, Nikolay Tolpygo, who was then building the railway from the Caspian Sea to Samarkand:

You're lucky to be in Asia where European civilization has not yet penetrated—it's a great thing in itself, but quite unfit for our wild places and its ideas are quite inapplicable to our Russian savages . . . The peasants, as everywhere, are drunks and idlers; it gets worse every year. Where will it all end? The Cossack Teleshov very shrewdly remarked to me once: 'we were looking for savages in Asia but this is where they live'.

It was time to be off to Asia again; the pendulum of revolution in Przhevalsky's soul had swung. He went to Petersburg, hoping that in Stolyarnaya Street there would be no distractions, for he had to finish the account of the fourth Central Asian journey before he could plan the fifth. Here his only relaxation was to meet Kostya Voyevodsky at weekends and during school holidays. He ordered himself a giant-calibre rifle from Tula (Russia's famous town of gunsmiths); he kept writing to Teleshov:

Give my regards to Misha [Mikhail Protopopov]; thank him for his letter; write to him asking whether he'd like to become a soldier. Won't he be coming to Petersburg? Give my regards to the Cossacks: praise Solovikov for not marrying. If you follow his example and *don't get married, that will make me very pleased*. As soon as I get the rifles from Tula I'll send you the one I promised. I've ordered the picture magazine *Nov'* [*Virgin Soil*] for you for the New Year . . .

After a month's work Przhevalsky presented his collection of birds to the Academy of Sciences and returned to Sloboda for five days at Christmas. He went back to Petersburg for the

annual general meeting of the Academy and sat through a long account and a eulogy of his work by the secretary. 'There's a nice obituary all ready for me,' was his comment. Przhevalsky had to remain in Petersburg: the Academy of Sciences had arranged a spectacular display of Przhevalsky's zoological specimens and he had to show the Tsar around, while Roborovsky took the Tsarina and Kozlov the Tsarevich Nicholas. The catalogue of mammals—and the scientific work—was handed over to a self-taught Cossack zoologist, Polyakov, to whom fell the honour of first describing and naming Przhevalsky's horse from the skull and skin Przhevalsky had brought from Zaysansk.

A month later, in time for the 1887 spring migration, Przhevalsky was back at Sloboda, by Lake Sapsho, with his grenadiers, Nefedov and Bessonov. He spent the long evenings in his three-roomed 'hut', writing. The days were spent superintending the plasterers in the new house, shooting snipe, planting cherry and plum trees. But both book and house were moving 'at tortoise pace'. Przhevalsky's driver, Zakhar, took to drink with the coming of spring and the long nights spent waiting in the open while his master fished or shot. Przhevalsky got rid of him. Other servants turned out to be idlers or crooked; they too were dismissed. The estate was nevertheless slowly taking shape. Przhevalsky described it to Nikolay Tolpygo: 'The view from the house over the lake and forests is splendid, there's a spring right by the porch . . . I've ordered furniture to be made in Petersburg for the Sloboda house, it's cost 1,800 roubles with delivery. Only don't think I now wish to settle down — no, I think that's a long way off yet.'

Przhevalsky looked after his peasants in a patriarchal way. His farm labourers were paid about forty roubles a year and had a sack of flour and other provisions every month. The poor received gifts of flour at Christmas and Easter. The parish schoolchildren were often taken away from classes and hired as beaters at twenty kopecks a day each. The neighbouring gentry and the priest received scant respect. Przhevalsky's dispute over land rights with the clergy became so acrimonious that the local arbitrator was called in. The arbitrator refused to adjudicate: with the church on one hand and a major-

general on the other, he decided the disputants were too high-ranking for his powers.

Przhevsky invited his brothers Vladimir and Yevgeni and his nephews, Vladimir junior and Kolya Pyltsov, to come and shoot. But he was scathing about any guest who missed a bird or spoilt the sport. He took no trouble to conceal his contempt for his city brothers, particularly Vladimir. One peasant, Gromov, whom Przhevsky used as a huntsman and game-keeper, recalled Przhevsky summing up his brother as a second-rate defence lawyer who 'just has a fat pocket. That's all he can boast about.'

Not until August could Kozlov, Roborovsky and young Kostya Voyevodsky leave their colleges and stay at Sloboda. When they came they were overwhelmed with hospitality. Przhevsky weighed his guests at the beginning and the end of their stay, and woe betide them if they did not put on weight. These three protégés gave Przhevsky more joy than his brothers, nephews and army colleagues. Kozlov's letters from college show his dedication, written, unlike Roborovsky's, in the polite *vy* form; he signed himself 'your Kizosha', and told his 'Psheva' of his affection: 'I see in you a father in the full sense of this great word.' 'You,' he wrote to Przhevsky, 'are a man to whom people must bow down and say, "You're a genius! Seek your own judgment."' The family reunion was clouded only by the death of Roborovsky's sister.

But Teleshov would not come. In February Przhevsky wrote, 'Upstairs there is a room for you *which you can move into whenever you want.*' He offered him twenty-five roubles a month to come and work for him. He ordered a three-piece suit for Teleshov's birthday, but did not send it to Siberia, hoping that Teleshov would come to Sloboda to fetch it. In July 1887 the house was finished. Teleshov's room remained empty. Przhevsky ordered him a new rifle and gave graphic accounts of the field sports in Sloboda. With each letter he begged Teleshov not to marry. Summer drew to a close and the rainy autumn halted the sport. In September, no longer hoping to see Teleshov that year, he sent him the three-piece suit.

While it rained Przhevsky was able to get on with his book;

the new expedition was simultaneously taking shape in his mind. Letters came from the Tsar, Tsarina and Tsarevich, enquiring when he was going to glorify Russia again in Tibet. After a day spent writing in his 'hut', Przhevalsky would move into his new house; it was chilly, for not all the stoves worked and the inner walls needed more timber cladding. But it was an impressive building: six rooms, with a mezzanine, all wood, furnished in the solid style Przhevalsky had ordered. As visitors came into the hall, they were greeted by a stuffed Tibetan bear. Bilderling's portrait of Przhevalsky hung above it, showing the hunter returning laden with game. The walls of the drawing room were lined with signed portraits of Tsarevich Nicholas and his brother, Grand Duke George. Red pheasants sat in glass cases in the dining room; the study contained a large glass case, full of hunting guns. A door led from the study to a bedroom where Przhevalsky had an iron bedstead and a mattress made of hair from the tails of the wild yak he had shot. Upstairs were two bedrooms and the library, full of textbooks on ornithology and zoology, the accounts of rival explorers and unbound sets of sporting magazines such as *Nature and Field Sports (Priroda i Okhota)*. The garden was full of fruit trees. There were clumps of medicinal rhubarb from Kansu and greenhouses where melons from Khotan grew. Ivy clambered all over the 'hut', and eventually Przhevalsky had nightingales singing to him from the leafy bower while he worked.

The nearer he brought Sloboda to perfection as a sportsman's heaven, the more his thoughts turned towards the new expedition. Przhevalsky wrote to Fateyev in November: 'I'm thinking of taking another trip to Tibet to have a look at the Dalai Lama. It needs only twenty to thirty sharpshooters and I'll guarantee I'll get to Lhasa. Let sinologists with their Chinese documents and weepy sermons of peace try to make the journey.' News came of Potanin's return from China, after three years' exploration of Kansu and Szechwan, having made spectacular botanical discoveries. Przhevalsky had little time for civilians, even an ex-Cossak like Potanin. But his appetite was not only whetted, but perturbed by news of British explorers. Carey and Dalgleish had followed up his explorations of

the Kun Lun and mapped the northern barriers to Tibet with great precision. True, Dalgleish was murdered by an Afghan as he was returning to India, but the British—who were soon to attack the Tibetan army in Sikkim—had made a bold inroad into a potential Russian sphere of influence.

The 'family' reassembled for Christmas, together with Aleksandra, Przhevalsky's half-sister, and her son, Kolya Pyltsov. The latest book was all but complete. Kozlov had passed his officer's examinations with distinction and, although he had to wait for a vacancy to be commissioned, everyone was buoyant. They celebrated the New Year of 1888 by killing three wolves. At the end of February Przhevalsky once more went to Petersburg. His book had to be seen through the press, and his new expedition had to win the assent of the Imperial Geographical Society, the Tsar and his ministers. The book was published by the Academy of Sciences with funds donated by the Tsarevich Nicholas. The new expedition, Przhevalsky proposed, would retrace the route of the last, from Karakol in Russia through Kashgaria to the Gas oasis and then—with or without a Chinese passport—force its way south to Lhasa. If the Tibetans gave way gracefully, Przhevalsky intended to explore the eastern, river-gorge zone of Tibet around Chamdo. If the Tibetans remained adamant, he would return westwards through Ladakh.

But there were embarrassments. The Geographical Society discreetly insisted that Przhevalsky's expertise, broad though it was, did not quite match the expense of the expedition. They dared not make him take on a civilian scientist. Instead, as tactfully as they could, they arranged for Przhevalsky to meet the geologist Mushketov for lessons in geology. A witness has described the confusion of Mushketov and the ill-suppressed impatience of Przhevalsky during their first 'lesson'. The great teacher was, as is often the case, the worst of pupils. They compromised and Mushketov offered to write a treatise on glaciers for Przhevalsky.

While in Petersburg, Przhevalsky came to realize that his companion through all four Central Asian journeys, Dondok Irinchinov, would not be coming this time. Dondok was ageing and, after a few months' pondering, decided to remain a

camel-herd. Przhevalsky commended his wisdom, but this was a bitter blow. In the General Staff committee room Przhevalsky had an ominous encounter. He met Lieutenant Artamonov who had a reputation as a palmist. He studied Przhevalsky's hand and said: 'You think in images, you never forget friends, but your life will be short.' The prophecy darkened Przhevalsky's mood; he talked it over with Fateyev.

He sensed the angel of death hanging over Makaryevna, who was now succumbing to a kidney disease. Przhevalsky wrote to Denisov, trying to soften the blow of his imminent departure for Asia: 'Put it as gently as possible to Makaryevna that I am going for two years. Assure her, and this is quite right, that war could break out here during this time, so that I shall be safer in the deserts of Asia. We must just arrange for Makaryevna not to be lonely. I'll spend whatever is necessary. Let her send for a companion or bring in one of her relatives—I don't mind what, as long as my beloved old woman can live peacefully . . .'

Petersburg imprisoned Przhevalsky for the spring of 1888. The arrangements for the new expedition dragged on. The Russian envoy in Peking, Kumani, was having great difficulty in securing Chinese consent to another attempt on Lhasa, with such a large and heavily-armed escort for an ostensibly scientific expedition. Kumani was dealing with no less a negotiator than Tseng Chi-tse, who had wrested the Ili Valley from the 'tiger's mouth' seven years ago. Tseng granted a passport in the end, but his letters to Kumani have a polite, stinging irony:

In a word, this time, despite the unwavering desire of the learned traveller [Przhevalsky] to penetrate from Khotan [to Lhasa] it is positively difficult to guarantee that he will not meet with dangers. Therefore the Chinese government disowns responsibility for any incidents.

In any case, foreign travellers are not allowed to have armed escorts. But in your Excellency's letter of 14 April it was said that there will be two officers, one interpreter and a team of twenty-four men with Mr Przhevalsky . . . It is not actually quite clear to us whether the Russian

officer Przhevalsky is taking soldiers or servants with him. If they are soldiers, the ministry would find it difficult to give their consent. If they are servants, then a score seems too many, for when there are a lot of people it arouses astonishment and can very easily lead to unpleasant affairs . . . Why is it necessary to take servants in such numbers and thus awaken suspicions in observers? It seems to us more correct to limit the number to sixteen, the number of servants in Przhevalsky's last journey. From a lengthy stay in China, your Excellency has no doubt become convinced that it is hard to go against the morals of the Chinese people and local customs.

Przhevalsky had his passport; though he had told the Tsarevich he would go regardless, he was now less defiant—in fact, as he said, he was spiritually weak though physically strong. He went to Sloboda for a month's stay before setting off for Lhasa. Kozlov and Roborovsky were waiting for him, as well as his grenadiers; Teleshov at last came from Siberia to join the élite of the expedition.

Makaryevna was dying; but Przhevalsky could not put back the day of his departure. He gave her a copy of his newly-published book and inscribed it to 'my dearly beloved nanny'. The last month at Sloboda, a sunny, hot July, took away Przhevalsky's urge to shoot; he sat down and wrote 'Instructions to the Manager of the Village of Sloboda.' They are long, detailed lists of major and minor works to be done on the estate, but they are not without their telling points:

I entrust the management of the household and the cattle to Makaryevna; all the rest to you. I ask you to act by mutual agreement in cases of joint arrangements . . .

Hunting and fishing in my possessions is *absolutely* forbidden for anyone, no matter who; only angling is allowed. In the newly acquired part of Lake Sapsho even angling is forbidden, as is boating anywhere on Lake Sapsho, with the exception of the Sloboda school-teachers . . .

Outsiders, no matter who, are not permitted to stay in

my house even for a day . . .

The priest and the clergy are not permitted to graze cattle in my paddocks.

In all dealings with the peasants no currying of favour is allowed; always sacrifice money interest to the advantage of authority; but always act justly and honestly . . .

In autumn bind all fruit trees with straw.

Every two months send a detailed report of incomings and outgoings to Yevgeni Mikhaylovich [Przhevalsky's brother]; once a year go to Moscow for directions on more serious business questions . . .

Makaryevna's salary is to be paid from 1 January 1888 . . . at 5 roubles a month. In addition . . . issue Makaryevna every year a pension of 25 roubles . . .

Avoid cutting our woods, rather buy timber anywhere else if needed.

Keep a strict watch that peasants do not soak hemp anywhere in my waters.

. . . I ask you to write to me nothing but the truth while I am away, keeping back none of the misadventures that may befall Sloboda . . .

5/17 August 1888 dawned. Peasants and neighbours milled around the house to take their leave of Przhevalsky. He slipped away into the garden, spent a little time in his 'hut', and then went back to say goodbye to Makaryevna who was too distraught to say more than, 'For the last time!' as they tearfully embraced. There was an equally emotional scene as Przhevalsky said goodbye to Denisov and then kissed the men and children who stood outside. Next he took a red pencil and wrote on a wooden pillar of the porch, '*5 August 1888. Good-bye, Sloboda. N. Przhevalsky*', and made Kozlov, Roborovsky, Teleshov and Nefedov sign their names below.

Distressed and irritable, he made his way to his unsprung carriage, which was harnessed to a troika of horses. He picked at the overhanging branch of an oak, tore off two acorns as a talisman and put them in his knapsack. The expeditionaries then moved off. As they drove away, Przhevalsky became angry when his companions talked of what they would do

when they returned; he reminded them that their lives would be hanging by a thread many times in the two years ahead.

First of all Przhevalsky had to take his men to Petersburg; he was to present a copy of his recent book to the Tsar. The Tsar, Przhevalsky said, 'saw me off as if I were a relative.' His next parting was from his foster son, Kostya Voyevodsky. He 'burst into tears like a woman' at the farewell. He entrusted Kostya's education and maintenance to his friend Feldman, who was to buy Kostya a rifle if he passed his 1889 examinations, give him his pocket money and 'in case of idleness or, worse, failing his exams, to thrash and thrash again.' Przhevalsky's lodging on Stolyarnaya Street, reports Dubrovin, his friend, colleague and future biographer, looked more like a barn, the rooms piled high with equipment for some twenty-seven men over two years. The first chapter of Przhevalsky's *From Kyakhta to the Sources of the Yellow River* described 'How to Travel in Central Asia'; the lodgings were a demonstration. There was a medical cabinet with quinine, opium solution, castor oil, flowers of sulphur (also useful for making explosive bullets), carbolic, ipecacuanha, American toothache drops, gutta-percha and medicinal tar. There were 'beads for the natives'—picture postcards of actresses, kaleidoscopes and so on, and there was an armoury. As in his first journey, so in his fifth over Central Asia, Przhevalsky held that the best guides were money, rifles and whips.

On 18/30 August the baggage and men were ready to move to Moscow on the first stage of the journey. The departure was meant to be secret, but crowds were waiting at the station. Przhevalsky's friends ringed him like a bodyguard and they fought their way to the train. As it moved off, he shouted out to the ornithologist Pleske, 'If I don't come back, I hand the work on the birds to you.' A day or two after his arrival in Moscow he received a telegram from Denisov. Makaryevna was dead. Przhevalsky telegraphed back; he wanted Makaryevna buried in the best plot in the churchyard. But, he wrote next day, 'instead of the copious priest's memorial service, just give the poor peasants (but only the very poorest) a hundred roubles in remembrance. I enclose the money. Put a wooden fence round Makaryevna's grave and erect a wooden cross.

Next year plant flowers on the grave. When I come I'll make a wall. Or perhaps I'll be lying next to her myself some time . . . Set aside for me the cup and saucer Makaryevna drank tea from.'

He did not want to depress his spirits further by going to her funeral. A day or two later, taking leave of his brothers, he left by train for Nizhni Novgorod (Gorky) and the next day transferred his men (he had taken on three more grenadiers in Moscow) to a Volga steamer, the *Field-Marshal Suvorov*. It took them 1,300 miles, travelling at fifteen knots, down the Volga to Astrakhan. Even in the first-class section Przhevalsky could not get away from passengers. It was hot and he was tense.

At Astrakhan the expedition boarded another steamer which took them to the mouth of the Volga where the *Grand Duke Konstantin* was waiting to take them over the Caspian Sea to Baku. Przhevalsky and Kozlov were stricken with seasickness for two days. From Baku they took the boat across the Caspian to Turkmenia, at Uzun Ada. It was September, but baking hot. In the evening they left by train over the newly built Transcaspian railway—the first railway in Central Asia, stretching nearly 1,000 miles to Samarkand and about to be extended to Tashkent. Przhevalsky was particularly interested in it, his half-brother Nikolay Tolpygo was one of the construction engineers. The railway enabled Russia to bring armies by boat and train from Moscow to the borders of Afghanistan in a matter of days, whereas the British needed weeks to move from their capital to the periphery of their empire. Przhevalsky's last diary records: 'As though in a fairy-tale you bowl along in your carriage over sand dunes or desolate shingle plains . . . A bridge spans the Amu Darya [Oxus] which, though it creaks and sways as the carriages go over it, still takes the train safely from Turkmenia to the realm of Bukhara [an Emirate under Russian "protection"] . . .' Sand-dunes blew over the track; men were constantly sweeping away the sand or trying to consolidate it by tipping clay.

Przhevalsky stayed four days in Samarkand as Nikolay Tolpygo's guest. They feasted on fruit and went to see Tamerlane's tomb. From Samarkand it took just two days in a mail

coach for the men, and a week on carts for the baggage to reach Tashkent, the "capital" of Russian Central Asia, already a fine European city opposite the Uzbek quarter. Nikolay Tolpygo came with them, but as he had only five days' leave he soon had to say goodbye. He was puzzled by Przhevalsky's insistence on *adieu*, not *goodbye*. In Tashkent Przhevalsky had seven battalions of infantry drawn up for his inspection. He picked out forty likely lads for the expedition and then cut the number down to ten. One of the soldiers chosen, Menukhov, thought it an unnerving experience. There was no saluting, Przhevalsky seemed to 'stare right through you'. There were only four questions: 'Surname? Do you smoke? Do you drink spirits? Marksmanship?' If the answers to the last three questions were 'no, no' and 'first-class', Przhevalsky would then say, 'Put his name down, Roborovsky.'

Four days' journey brought Przhevalsky and his party of now eighteen men to Pishpek (Frunze). Here they camped outside the town in felt *gers*. There were enough men; more were to join the expedition at Karakol from Transbaykalia. But Przhevalsky found the Kirghiz unwilling to show him their best animals. It took three days to find thirty-eight 'good' animals and one 'excellent'. Przhevalsky took Roborovsky and two grenadiers north to Verny (Alma Ata) to buy more camels and choose some Cossacks. Verny was still rumbling and jolting after a recent earthquake. Przhevalsky camped in the governor's garden while negotiations went on for the purchase of Chinese silver. He was very annoyed that the money had not yet come through from Petersburg. All he could buy was twenty-eight pounds of silver, nearly a ton of sugar, seven hundredweight of tea, some rope, apples and pears, all of which he sent straight to Karakol.

The nearer the expedition came to its proper departure, the more melancholy Przhevalsky grew. He complained to Roborovsky that if he did survive it, he would have to face the unhappiness of a settled life without challenge or strength. Old age and corpulence depressed him. He said he wanted to die during the expedition in the arms of his men, 'his family'.

Eliminating all Cossacks who were married, who drank, who had lived in towns or worked for a wage, Przhevalsky

filled his vacancies. He still needed eighty camels. The Kirghiz were ordered to present their camels at all the post stations between Verny and Pishpek. Of 500 camels lined up, only seven passed muster. Przhevalsky had learnt all he could from his Mongol guides and drivers; he was an exacting connoisseur of camels—as well he might be in view of the demands he made on them.

The day after his return to Pishpek, Przhevalsky felt an urge to shoot. Near Pishpek flows the River Chu, through reedy marshes full of game and, in those days, tigers. That afternoon he took his gun 'Lyan', Roborovsky and one of the Tashkent soldiers, Menukhov, to carry the game. They rode twelve miles out of Pishpek and shot until dusk. Przhevalsky noted with wry satisfaction in his diary next day: 'In the evening and morning I killed fifteen, Roborovsky one.' It was unseasonably hot; feeling unusually sensitive, Przhevalsky found it oppressive. The evening's shooting made him thirsty. Menukhov heard him ask Roborovsky, 'You've got a bowl, let me have a drink from the stream.' Roborovsky warned him not to; Przhevalsky took no notice and drank. The River Chu was an undrained river; the previous winter Kirghiz nomads had camped here and had been decimated by typhoid, as Przhevalsky must have known.

Przhevalsky rode back to camp and, the next afternoon, to Pishpek, feeling not quite right. His last diary entry runs: 'My itch has started up again thanks to the heat and being thrown about in a *tarantas* (unsprung wagon). I have twenty-three soldiers and Cossacks in my platoon; I need only two more.' He spent the evening normally; he drank two bottles of his special cordial, made of sweetened tea and pumpkin squash.

Three days' ride took the expedition on to Karakol on the southern shores of the bleak but sheltered Issyk-Kul'. Przhevalsky was acting strangely. He told Roborovsky he envied him his health. He could not settle on any quarters, but rejected one building after another as too damp, too dark or too small. He moved out of town and sent Roborovsky and Teleshov to look for a camp site near the mountains. They found a gorge with a stream of fresh water flowing into the lake. Przhevalsky supervised the erection of the four *gers* and

helped set up the kitchen.

No sooner was he in his *ger* than he complained of illness; he would not let anyone call a doctor. Rain set in and turned to snow. Przhevalsky half reclined on a felt groundsheet, taking his own temperature and pulse. He asked a visiting staff-captain if there was typhoid about. On the morning of 16/28 October he was feverish and tired; but he struggled out of the *ger* to see, sitting on the hillside opposite him, a black vulture. He fetched his Lancaster Express and shot it dead. A Kirghiz picked up the body and brought it to him. Przhevalsky stretched out the bird's wings, studied them and went back to the *ger*.

At last he agreed to see a doctor. He felt thirsty, his legs and neck ached, and he was vomiting. His heartbeats became irregular, his skin was jaundiced. It was cold, but Przhevalsky refused to have a fire; the bright flames and the suffocating smoke in the *ger* were intolerable. He lay there drinking cold tea and pumpkin squash.

The doctor cajoled Przhevalsky into agreeing to move to the hospital. A ward of the Karakol military hospital was hastily cleared out and whitewashed. The *gers* were set up in the hospital yard and the camels tethered outside.

By now Przhevalsky was bleeding from the nose, short of breath and all but delirious. He recovered in hospital long enough to take chicken soup and wine, even to eat a cutlet. He composed a telegram demanding more camels. Then the disease took the upper hand. At midnight the doctor massaged him with spirits of camphor. Przhevalsky began to lapse into unconsciousness. In intervals of lucidity he started to give orders. He was not, he said, afraid of death; merely in a hurry. He was anxious to be buried in his expedition clothes in a simple coffin on the shores of Issyk-Kul' just above the water-line. Roborovsky was to photograph him with his Lancaster in the coffin and he would then inherit the gun; Kozlov was bequeathed the Purdy shotgun. Sloboda was to go to his brother Vladimir or, if he refused to accept it, to their brother Yevgeni and his daughter. The doctor persuaded Przhevalsky that he would not die yet and he fell silent again.

The next night he lay semi-conscious, his head covered by

his right hand, as if crying. He spoke, asking Menukhov to turn him over. Menukhov called Roborovsky and Kozlov to help. Suddenly Przhevalsky stood bolt upright, looked about and said, 'Well, now I'll lie down.' A minute later he was dead.

The Cossacks would not let outsiders in. They laid him out themselves. They searched the shores of the lake until they found a steep bank by the water. They dug for two days through the hard ground. The military command made a wooden coffin and an iron outer coffin. The ladies of Karakol wove a wreath of artificial flowers; the soldiers made a garland of fir boughs.

Roborovsky telegraphed the authorities for instructions. A week later permission to bury Przhevalsky arrived. Half the population of Karakol and many Kirghiz followed the gun-carriage the seven miles to the graveside, which overlooked the blue, ice-free waters of Issyk-Kul' and was dominated by the eternal snows of the Tien Shan.

Russia's two greatest explorers died in 1888: Miklukho-Maklay, the gentle artist and anthropologist, obscurely in a workhouse; and Przhevalsky, the ruthless conquistador and misanthropic scientist, at the zenith of his fame, as he wished, in the arms of his men. The telegraph took the news to the press of the world. Przhevalsky was mourned by the Russian court, the army, by scientists and hero-worshippers all over the world, and, above all, by his Warsaw and Smolensk friends. He was too adamant a chauvinist for educated opinion in Russia, let alone Europe, to love him; but the pathos of his passing caught men's imagination. Though Przhevalsky was dead, what he had begun was too dynamic to stop. The expedition, Petersburg decided, must go on. They made economies in men and camels. Captain Pevtsov, a highly-respected explorer of Mongolia and Turkestan, a skilled surveyor and geodesist, was sent for and put in charge. Finally, the authorities removed southern Tibet from the programme and, not antagonizing Chinese or British, instructed Pevtsov to explore only the northern approaches to Tibet.

Pevtsov led Roborovsky, Kozlov and the expedition in 1889 through Yarkand and the oases south of the Takla Makan. They systematically explored the steep valleys leading up to

the plateau. The Cossacks could not get used to this gentle leader. Menukhov was convinced that if Przhevalsky had been with them they would have reached Lhasa. In the event, the only excitement was the discovery of a tiger, which Teleshov wounded and another Cossack killed.

This was Pevtsov's last expedition; Przhevalsky's disciples were to go on to greater things. In 1892 the Imperial Geographical Society prepared a two-pronged approach to Tibet. While Potanin travelled from Peking and got as far as Pa-t'ang on the Yangtse Kiang, the border between Chamdo and Szechwan, Roborovsky, with Kozlov second-in-command, left Karakol, where they had a requiem mass sung beside Przhevalsky's grave, to penetrate deep into the Tien Shan and cross the dreaded Kum Tag desert east of Lob Nor. Both expeditions were tragic. In 1893 Potanin's wife died not far from Chung-king. In January 1895, after climbing too many high passes, his heart and brain starved of oxygen, Roborovsky was struck down with paralysis. His expedition had achieved much: Roborovsky was the first European to reach the Great Yulduz; he discovered the Lükchun depression, a hole in the Central Asian plateau which went down to 154 feet below sea level; he and Kozlov mapped over 100,000 square miles, often splitting into wide-ranging reconnaissance parties; Roborovsky revealed the Turfan inscriptions which were to open up the closed book of ancient Turkestan's history. Now, crying with distress at his own uselessness, often unconscious, Roborovsky was half carried, half dragged to Russia by two strong grenadiers. He was awarded the Konstantin Medal and managed to write an account of his travels, but he was doomed to live another fifteen years, more and more a vegetable, nursed by his already afflicted family until he died in 1910. Long before he died he handed to Kozlov the gun, 'Lyan', that Przhevalsky had left him. Alone of Przhevalsky's followers, Kozlov was to carry on the exploits of his leader and, at least in part, realized the dream which Przhevalsky seven times failed to bring about—of seeing Lhasa and the Dalai Lama.

Przhevalsky's fame was undiminished in Russia. In 1893 Aleksander III declared that Karakol should be named

Przhevalsk. (In 1921 Lenin deferred to Kirghiz national feeling and changed it back to Karakol; in 1939 Stalin, who had a vivid appreciation of his Tsarist imperial heritage, renamed it Przhevalsk to celebrate the centenary of the explorer's birth.) Przhevalsky's friend Bilderling was commissioned to design a monument over the grave. In 1893 it was erected—a bronze eagle on a great stone plinth looking at the mountains, with a simple bas-relief copied from the Geographical Society's gold medal of Przhevalsky.

A neo-classical facade has now entombed the stark granite and bronze. A dozen biographers have turned Przhevalsky into a model of heroism, patriotism and zeal as petrified as his mausoleum. In 1952 a film was made, showing Przhevalsky as a friend of revolutionary Koreans and Chinese, fighting to victory over a conspiracy of reactionary geographers, lamas and agents of Benjamin Disraeli. To understand Przhevalsky, we have to remove the myths in which his posterity has encased him; we have to cope with the awe, revulsion and commiseration he inspired, as did his contemporaries.

In the conservative newspaper, *Novoye Vremya* (*New Times*), that had once mocked Przhevalsky, Anton Chekhov published anonymously an almost deifying obituary:

One Przhevalsky or one Stanley is worth a dozen polytechnics and a hundred good books. Their loyalty to an idea, their noble ambition, whose basis is the honour of country and science, their stubbornness, their urge, undaunted by any privations, dangers or temptations of personal happiness, to reach the goal they have set, their wealth of knowledge and their love of work, their acclimatization to heat, hunger, homesickness, enervating fevers, their fanatical belief in Christian civilization and science make them in the eyes of the people heroes who personify a higher moral force. No wonder that every schoolboy knows of Przhevalsky, Miklukho-Maklay and Livingstone, no wonder that along their routes peoples make up legends about them . . .

. . . In our sick times, when European societies are in thrall to idleness, apathy and doubt, when everywhere in

a strange combination dislike of life and fear of death dominate, when even the best people sit with their arms folded, justifying their idleness and their corruption by the lack of a definite goal in life, heroes are as vital as the sun . . . People like Przhevalsky are especially precious because the sense of their life, their exploits, goals and moral physiognomy are intelligible even to a child. It has always been true that the nearer a man is to truth, the simpler and more comprehensive he is. We can understand why Przhevalsky spent the best years of his life in Central Asia, the sense of those dangers and privations which he underwent, the whole horror of his death far from home and his last wish—to continue his task after death, to enliven the desert with his grave . . . Reading his biography, none will ask, 'Why?', 'What for?', 'Where's the sense?' But everyone will say: 'He's right.'

Chekhov followed Przhevalsky's footsteps eighteen months later, across Siberia to the penal island of Sakhalin: the hero-worship that briefly distorted his vision vanished there. On his return he wrote *The Duel*, a story in which one protagonist, von Koren, utters sentiments very like Przhevalsky's and leaves us in no doubt that Chekhov rejected the ruthless neo-Darwinism implicit in Przhevalsky's outlook.

Chekhov was not the last writer to fall under Przhevalsky's spell. Forty years later, Vladimir Nabokov gives the hero of *The Gift* an explorer-father, aloof, single-minded, who roams Central Asia after butterflies and disdains to take notice of the sordid towns or people—a character who bears the imprint of Przhevalsky.

The aftermath at Przhevalsky's estate, Sloboda, is a sadder tale. Of Przhevalsky's 'family' only the grenadier Nefedov returned to settle in Sloboda. He married Sonya, the beautiful daughter of the village joiner, but died a few years later of tuberculosis. During the Second World War, in fighting between the Germans and partisans, Przhevalsky's house burnt down to the foundations. In 1964 the Smolensk authorities built an asphalt road from the town of Demidov to Sloboda; they renamed the village Przhevalskoye and put up a small

museum of Przhevalskiana there. But Sloboda is not altogether spoilt. Beyond is the wilderness. Virgin forests stretch for miles, still full of lynx and wolves.

Przhevsky left an enormous scientific heritage. In 1889 the Academy of Sciences published material from his botanical collections; over the years before the revolution his collections of mammals, birds, reptiles and fish were also studied and the results published. But masses of botanical material still await attention. Przhevsky had brought back 16,000 specimens of some 1,700 species. Western Europe has seen only a few of his discoveries—three Himalayan poppies, *Mecanopsis punicea*, *quintuplinerva* and *integrifolia*; three honeysuckles, *Lonicera nervosa*, *syrigantha* and *tangutica*; two alliums, a gentian, a geranium and a daphne. But our ideas of plant distribution have been transformed by Przhevsky's revelations of Himalayan species in Kansu; the specimens of alpine flora he collected in the Nan Shan and Tibet may yet hold surprises for scientists. But Przhevsky collected relatively little ripe seed: most of his plants are dried, herbarium specimens, a few perhaps never to be seen alive again.

As for zoology, Przhevsky's discovery of wild camels has still not led to agreement among scientists whether it is a genuine wild progenitor of the Bactrian camel, or just a feral race descended from escapees. The wild horse *Equus przewalskii*, however, revolutionized ideas about the origin of the horse: it is now thought to be one of four wild species which have contributed to the domestic horse. Roborovsky and Kozlov brought back a second specimen in 1895. Shishmaryov obtained a skin in the western Mongolian town of Kobdo (Hovd). Finally, in 1902, live specimens were caught and sent to the wildlife breeding stud on the Ukrainian steppes, Askania Nova, then the property of the Falz-Fein family. From five Falz-Fein mares derive most of the Przhevsky horses now in captivity. A few more were captured in the twentieth century. They still exist in the wild; a Hungarian team of zoologists studied them in 1966. But their habitat has dwindled to a few thousand arid square miles in an area so remote and unsupervised that extinction in the wild is but a matter of time. There may soon be more examples of *Equus*

przewalskii in Prague Zoo than in the Dzungar-Mongolian borderlands.

Equus przewalskii is perhaps Przhevalsky's chief claim to fame in the West. But at the end of the nineteenth century Przhevalsky seemed to have made a greater mark on imperial politics. British intelligence in India grew more alarmed about Russian influence in Tibet once they had dealt with a Tibetan incursion in Sikkim; the Tibetans were now presumably anti-British and, if they were ever armed with modern weapons by the Russians, would threaten the peace of British India. Anxiety, fed by rumour, swelled to paranoia. In the 1890s it became obvious that the tutor to the Dalai Lama, now in his twenties, was a man of enormous influence and authority. Imagine British alarm when it was confirmed that the tutor, Ngaku-wang Dorje, was born Dorjiyev, a Buryat Mongol, in Russian territory of Russian citizenship. He had studied in Urga and come to the powerful Drepung monastery of Lhasa in the 1880s. Rumours in the Indian press and disseminated by anti-Russian writers such as Wilhelm Filchner put two and two together; they assumed that Przhevalsky's journey from Urga to Tibet in 1884 coincided with Dorjiyev's; they made two and two equal five by claiming that Przhevalsky had recruited Dorjiyev for Russian intelligence.

Some British historians even today take these rumours on trust. One supports the theory with evidence that a photograph in Przhevalsky's *From Kyakhta to the Sources of the Yellow River* includes a man who is not mentioned in the text and who bears a strong facial resemblance to Dorjiyev. A careful search of the book reveals no such thing. All the Cossacks, Buryat or Russian, in the photograph are named in the text. There was, tantalizingly, a Banya Dorjeyev among them, but this proves nothing. Dorjeyev is a common Buryat name, and Przhevalsky's last diary shows that Banya Dorjeyev was waiting for him in Karakol, not Lhasa, in 1888.

The world of intelligence officers, then as now, revolved on the fantastic conceit that they and their opponents were men of Machiavellian ingenuity. In India Lord Curzon had the scepticism to discount the rumours of Dorjiyev's involvement with Przhevalsky. There was no evidence. The only known

photograph of Dorjiyev, nicely reproduced in Peter Fleming's *Bayonets to Lhasa*, was taken long after Przhevalsky's death and bears not the slightest resemblance to any of his Cossacks. It was only natural for Dorjiyev to lean towards Russia; he was a Buryat Mongol—the first to rise to any eminence in Lhasa—with a knowledge of a European power which was unrivalled in Tibet. It needs no conspiracy to explain why Dorjiyev encouraged the Tibetan government to offset the threat from Britain by contacts with Russia.

If Dorjiyev was really in Lhasa by 1886, it took him many years to persuade the Tibetan civil and ecclesiastical hierarchies to break the practice of many centuries and make overtures to a government neither Buddhist nor Chinese. True, the Tsar since 1894, Nicholas II, had a sympathy for Buddhism which, rumour added, amounted to an inner conversion. True, Tibetan legend foretold that the founder of the Yellow Hat Sect, Tsong Khapa, would be reincarnated in a city far to the north-west, not incompatible with Petersburg. Dorjiyev made his way unobtrusively to Petersburg in 1898 and got in touch with government officials as well as with the Buryat court doctor, Jamsaran Badmayev. But his ostensible mission on this first visit was purely to collect funds from Buddhist Kalmyks and Buryats.

The Indian press caught wind of Dorjiyev's movements and seethed. In 1898 the *Simla News* claimed that a secretary of Przhevalsky's called Baranov was to visit Lhasa in 1899; perhaps they had heard of the Imperial Geographical Society's plan to send Kozlov on a new expedition and Kozlov ('Goat') in some strange permutation became Baranov ('Sheep'). Lord Curzon still preferred to think the Tibetans more pro-British than pro-Russian and refused to counter Russian moves. But in 1900, brazenly travelling via Darjeeling and Calcutta, Dorjiyev left Tibet on an official visit. He reappeared in the Crimea and was solemnly received by Nicholas II as the Dalai Lama's ambassador. Letters were exchanged and, it was said, the Dalai Lama was even going to visit Russia and had sent his throne on ahead. For the first time the Russian press, the *St Petersburg Gazette*, substantiated these Russian-Tibetan contacts.

Pyotr Kozlov, now captain, was at that moment on the greatest of his expeditions, the first he unquestionably led, from Mongolia to Tibet. He arrived at Chörtentang in Kansu to gaze at the portrait of Przhevalsky painted by the abbot. He made his way south to the Do Chu, the upper Yangtse; from here he sent the Imperial Geographical Society's greetings to the Dalai Lama. Then he headed south over ridges and gorges to Chamdo. The expedition was attacked by Ngoloks; in the best traditions of Przhevalsky, Kozlov killed a great number of them and fought his way through to Chamdo, before returning in 1901 to Chörtentang. It was a Homeric journey which led, some years later, to a magnificent book, Kozlov's *Mongolia and the Kham Country*. For British intelligence it was the last straw. It helped to tip the balance, so that Indian and British authorities turned a blind eye to legality and allowed Francis Younghusband to shoot his way as humanely as he could to Lhasa in 1904 and force the Tibetans to observe some of the niceties of diplomatic relations.

The thirteenth Dalai Lama was, in the end, to be won over by Sir Charles Bell, the British envoy to Lhasa. But for some years the Younghusband expedition played into Russia's hands. The rumours circulating in Simla and Whitehall proved unfounded. Stories of Cossacks escorting caravans of modern arms from Russia to Lhasa under a mysterious Colonel Orlov could not have been true, for the Tibetans had only the most primitive matchlocks and cannon to resist Younghusband's men. When he got to Lhasa, Younghusband found not the slightest trace of any Russian ever having been to Lhasa or having sent a single gun there.

The British in Lhasa found neither Dorjiyev nor another Buryat, Tserempil, supposed to use the Russian name of Bogdanovich. They did not find the Dalai Lama either. In July 1904, accompanied by Dorjiyev, a doctor, two ministers and eight guards, the Dalai Lama fled incognito. When he reached Nagchu Dzong he threw off his disguise and rode in triumph the 1,500 miles to Urga in Mongolia. The Russian consulate in Urga telegraphed Petersburg; captain Pyotr Kozlov was sent as fast as the Trans-Siberian Railway could carry him to Transbaykalia. Here he collected Panteley

Teleshov and the two of them made haste for Urga.

At 3 p.m. on 1/14 July 1905, seventeen years after Przhevalsky's death, his two closest companions, Kozlov and Teleshov, were introduced to the Dalai Lama. Dorjiyev was not present; the conversation had to be relayed through two interpreters. They exchanged presents and white scarves in the Mongol and Tibetan tradition. The Dalai Lama thanked Kozlov for his greetings from the Do Chu and expressed his 'sadness' at the British invasion of Lhasa. It was a satisfying moment for Russia. For Kozlov it was 'the happiest day of my life', the spring that Przhevalsky had predicted for him. The Dalai Lama was interested in building a telegraph line from Lhasa to the Russian frontier; he studied the map of Kozlov's Kham expedition and declared, 'Lhasa is open to you.' Kozlov was allowed to photograph the Tibetan ministers and an artist was permitted to sketch the Dalai Lama.

Przhevalsky's dream of 'having a look at the Dalai Lama' had vicariously come true. In 1907, Kozlov set off on a new expedition to Amdo, the Tibetan-speaking country south of Kuku Nor. But for the moment archaeological interests came to the fore and he did not make for Lhasa; successful excavations were to lead him to exhume the lost Mongol city of Khara Khoto. In 1913, however, he prepared to take up the Dalai Lama's invitation; the First World War put a stop to the expedition. Revolution came and created the Soviet Union and nominally independent Mongolian People's Republic. Kozlov was sent in 1924 on a secret mission to Urga. Few knew that in Urga an important Tibetan lama, Galsan, was waiting to escort Kozlov to Lhasa. The Dalai Lama had personally inscribed a silk pass, which was cut into two interlocking pieces. Galsan handed one half to Kozlov; the other half was kept by the Dalai Lama's frontier guards at Nagchu Dzong. But this time Kozlov went no further than Gashun Nor in Mongolia, near the dead city of Khara Khoto. It is not clear why. Soviet historians are possibly right when they blame the British for putting diplomatic pressure on both Tibetans and the Soviet Union and for having the expedition recalled. Kozlov had to console himself with extensive wanderings in central Mongolia, more excavations at Khara Khoto and the

discovery of a new genus of jerboa, *Salpingotus kozlovi*. He lived until 1935. He planned to retire to Issyk-Kul' and die near Przhevalsky's grave. Death came too soon.

No Russian officer, in fact, is recorded as having reached Lhasa; the only exceptions are two White Russian refugees in the late 1940s—Nedbailov, who escaped repatriation from Dehra Dun in India to the Soviet Union by fleeing to Sikkim, and who worked briefly as an electrical mechanic in Lhasa; Vasilyev who fled with the American consul from Sinkiang in 1948 and stayed in Lhasa to recover from gunshot wounds inflicted by Tibetan soldiers. Przhevalsky's dream of Lhasa never came to pass; the Cossacks who rode to Lhasa did so only in the nightmares of intelligence officers.

The Central Asia which Przhevalsky mapped and yearned to conquer has changed irrevocably. Tibet is an autonomous region of the Chinese People's Republic; lorries ply between Hsi-ning and Lhasa; coal and oil leave Tsaidam by rail; atom bombs are tested over Lob Nor; the 'friendship' railway links the Tien Shan to Peking (though it never reached the Russian border); the nomads of Mongolia live on state farms; lamas have been shot and lamaseries pulled down; the historic oases of Turkestan are known by their Chinese names today; there are few tigers left on the Ussuri and the Tarim. Many of the geographical mysteries have been solved, and the political vacuum is filled. Above all, for better if not for worse, today's explorers and zoologists are not Przhevalskys. If he was one of the first explorer-scientists, he was also one of the last explorer-conquistadors, an obstreperous breed that now has, like *Equus przewalskii*, two options: cage bars or extinction.

The Przhevalsky horse is none the less beautiful for its intractable nature and its vicious temper. We must steel ourselves to accept the violence of natures like Przhevalsky's, his distorted vision, his intolerance and his lust for war; these attributes are inseparable from the spirit of the frontiersman, in science as in history. They are not lovely or humane, they are animal and human, and we would be wrong to dismiss them. There is a streak of Przhevalsky in all who have scorned the multitude and turned to the wilderness.

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