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Optimal Choices for a Mars Colony of a Million Immigrants: The Unwavering Traditional Chinese Spine, Enduring Shoulder-Carrying Capability, Strong Labor Will, and Land Reclamation Spirit

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Abstract

In contemporary society, there is a prevailing view that traditional practices such as shoulder-carrying are archaic, yet it becomes evident that the abandonment of these traditions has left modern populations ill-prepared for self-rescue efforts. Historically, Chinese individuals were accustomed to carrying heavy loads with tools like hoes and shoulder poles throughout their lifetimes, demonstrating remarkable physical endurance. Today, many lack this capability, leading to a surge in spine and back issues among the youth who cannot carry weights or perform strenuous tasks without mechanical assistance or reliance on older generations. This dependency highlights the importance of preserving and valuing traditional burden-bearing skills. Furthermore, as humanity embarks on its journey to conquer the solar system, aiming to return to the Moon and eventually settle Mars, the selection of suitable candidates for Mars colonies becomes paramount. The author posits that the inheritors of China's agricultural society's shoulder-carrying tradition represent an ideal choice for Mars pioneers. These individuals possess not only a resilient spinal column but also an unyielding capacity for burden bearing and survival, coupled with strong disease resistance, self-healing

capabilities, and a penchant for construction and agriculture. Their robust fertility rates further contribute to the sustainability of future settlements. The author underscores the potential value of reviving and recognizing traditional Chinese shoulder-carrying culture as we look towards settling new frontiers.

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(Attached is a case of a patient who, despite multiple chest and waist injuries, consistently exhibits resilience and shoulder-carrying capability)

Foreword

Since 1980, China has undergone a remarkable transformation, transitioning from a traditional agricultural society to an industrialized one in just half a century, and subsequently progressing at a rapid clip towards a globalized and digitalized society.

According to a report on May 9, 2024, the National Bureau of Statistics of China recently released its 16th annual *Migrant Worker Monitoring Survey Report* (hereinafter referred to as the “Survey Report”). The report presents a panoramic big picture of the nearly 300 million migrant workers in 2023.

In 2023, the total number of migrant workers nationwide reached 29.753 million, a 0.6% rise, or an increase of 1.91 million compared to the previous year. Specifically, the number of local migrant workers stood at 120.95 million, a 2.2% decrease or a drop of 2.77 million from the previous year; outbound migrant workers totaled 176.58 million, a 2.7% increase or a gain of 4.68 million from the previous year.

In order to accurately reflect the scale, flow, and distribution of rural migrant workers throughout the country, the National Bureau of Statistics established a comprehensive monitoring system for rural migrant workers in 2008, which operates in the originating locations of these workers. Covering rural areas in all 31 provinces (autonomous regions, and municipalities directly under the Central Government), the survey includes a representative sample of 8,613 districts within 1,730 counties. Besides, the survey is conducted quarterly through household interviews.

Combing the data from previous years' Survey Reports, China Business Network (CBN) found that over the past 16 years, the migrant labor force has grown by over 70 million people; however, with the increase in the average age of migrant workers, there has been a significant decrease in the proportion of those aged 40 and younger. Specifically, the average

age of migrant workers has climbed from 34 years in 2008 to 43.1 years in 2023, marking an increase of more than 9 years.

In 2008, there were a total of about 225 million migrant workers, and the share of migrant workers aged 40 and under was 70%, totaling 158 million. Compared with 2008, the proportion of rural migrant workers aged 40 and under decreased by 25.4 percentage points to 44.6% in 2023. In 2023, there were a total of about 298 million migrant workers. By this measurement, there would be 133 million rural migrant workers aged 40 and under in 2023, a decrease of more than 25 million from 2008.

Driven by structural changes in the rural population, a surge in non-agricultural labor participation among rural workers of all ages - particularly those over 50 - and an increasing trend of rural migrants shifting to local areas, the average age of rural migrant workers has been climbing steadily. Notably, the proportion of rural migrant workers aged 50 and above has grown even more rapidly. According to past survey reports, the percentage of rural migrant workers aged 50 and over has jumped from 12.1% in 2010 to 30.6% in 2023. Experts have analyzed this trend, attributing it to two key factors: Firstly, the aging of China's population is progressively prominent, and this demographic shift is mirrored in the rural migrant worker community. Secondly, as urbanization progresses and rural education levels rise, the status of some children of rural migrants has transformed, thereby contributing to an increased proportion of older individuals within the migrant worker demographic [1].

As a participant and witness to three distinct types of social history, the author has observed profound transformations in the mentalities and physical well-being of the Chinese people. According to the author, Chinese migrant workers can be demarcated in 1980. Traditional migrant workers are those who were nurtured under the traditional shoulder-carrying culture, or in an agricultural milieu and later transitioned into an industrialized society. In contrast, modern migrant workers, also referred to as the "new-generation peasants," have emerged from an industrialized backdrop. There is a clear difference between the two groups, evident in their physical appearance, mental resilience, and physical fitness. Modern society is rapidly entering the fourth social form: artificial intelligence society, it is said that in the future world after a hundred years, people do not need to do anything, people's physical quality and structure will deteriorate faster, people become mollusks, limbs and body degradation only a big head in.

Since 2017, the author has delved into the study of the successors of shoulder-carrying in traditional agricultural society at the Physical Examination Center, aiming to uncover the traditional backbone and contemporary status of these last carriers in China's agricultural landscape. The focus is on examining their shoulder-carrying successors, tracing its evolution from an agricultural society to an industrialized, globalized, and information-driven one, as well as investigating their historical and present-day experiences with low back pain. Looking ahead, over the next decade or so, China's traditional migrant workers aged 50 and above are expected to withdraw gradually, leading to a significant decline in the migrant workforce. Many jobs that require hard work and physical strength will be unavailable.

On April 15, 2024, the author encountered a particularly illustrative case at the physical examination center, which is representative of the shoulder-carrying successors of agricultural civilization in agricultural society. This patient, born in 1949 in an agrarian society, has suffered a total of six injuries, the first two without medical intervention. From 2009

onwards, he endured four injuries and sought treatment at Taizhou Hospital. Fortunately, his auxiliary examination records have been well-preserved. A review of his medical history and these examinations reveals that he underwent three significant lumbar spine examinations, which provided valuable insights. Despite recovering from three serious spinal injuries through conservative methods, he has retained his shoulder-carrying ability and is free from lingering lumbar pain. This case underscores the remarkable self-healing capabilities of the traditional Chinese spine, especially within the context of an agricultural society.

1. Medical History and Information

The First Case: The patient, surnamed Zhou, male, born in 1949 with a low education background, resides in the mountainous region of Youxi Town, Linhai, Taizhou City. This area, known as the "Jiangnan Grand Canyon", is a place where the inhabitants labor diligently from dawn to dusk. They brave thorns, poisonous insects, and wild beasts, scaling the lofty peaks. Unlike those who prefer the urban bustle, they are fondly referred to as "mountain people" and are seen as the epitome of rustic country life, living a serene existence rooted in a "natural economy". From ancient times to the present, they have been recognized as the healthiest people. As a saying goes, "I've cleared this mountain and planted these trees. If you traverse this path, just leave money to purchase your passage." In ancient times, this place was plagued with bandits, a phenomenon depicted vividly in renowned movies and TV dramas such as *The Story of Banditry in Wulong Mountain* and *The Story of Banditry in Western Hunan*, mirroring the tumultuous conditions of the mountainous region. Numerous leaders of the New Chinese Revolution also hailed from these mountains. Standing at a majestic 700 meters above sea level, this place boasts breathtaking scenery, yet suffers from inconvenient transportation and isolation from the outside world. Its inhabitants lead a primal lifestyle, breathing fresh air and raising their descendants. He oversees a forest where terraces offer fertile ground for farming. He cultivates crops, raises pigs and bees, cuts and gathers firewood. Additionally, he carries trees, bamboo, as well as food items such as prunes and fruits, and sells them beyond the mountains. As an accomplished craftsman, he excels in building houses, roads, and furniture, often traversing 20 kilometers while carrying loads of up to 75 kilograms. Standing at approximately 170cm, the patient was raised in the Chinese culture of physical labor. He participated in teamwork at a young age and endured hardships, lacking adequate food and clothing. His diet consisted mainly of basic fare like rice, pickles, and sweet potatoes. During the devastating three-year famine of the 1960s, when he was just 11, he even learned to carry loads of up to 30 kilograms. He once carried 100 kilograms of trees for an entire day, showing his remarkable resilience, health, and cheerfulness. If ill, he relied on traditional Chinese medicine for healing. Recent medical examinations reveal that he has a high blood sugar level, but all other indicators are within the normal range. Alone in the desolate forest, he can fend for himself with ease, much like the renowned novel *Robinson Crusoe*. It was said that he could shoulder a maximum weight of 150 kilograms in his youth.



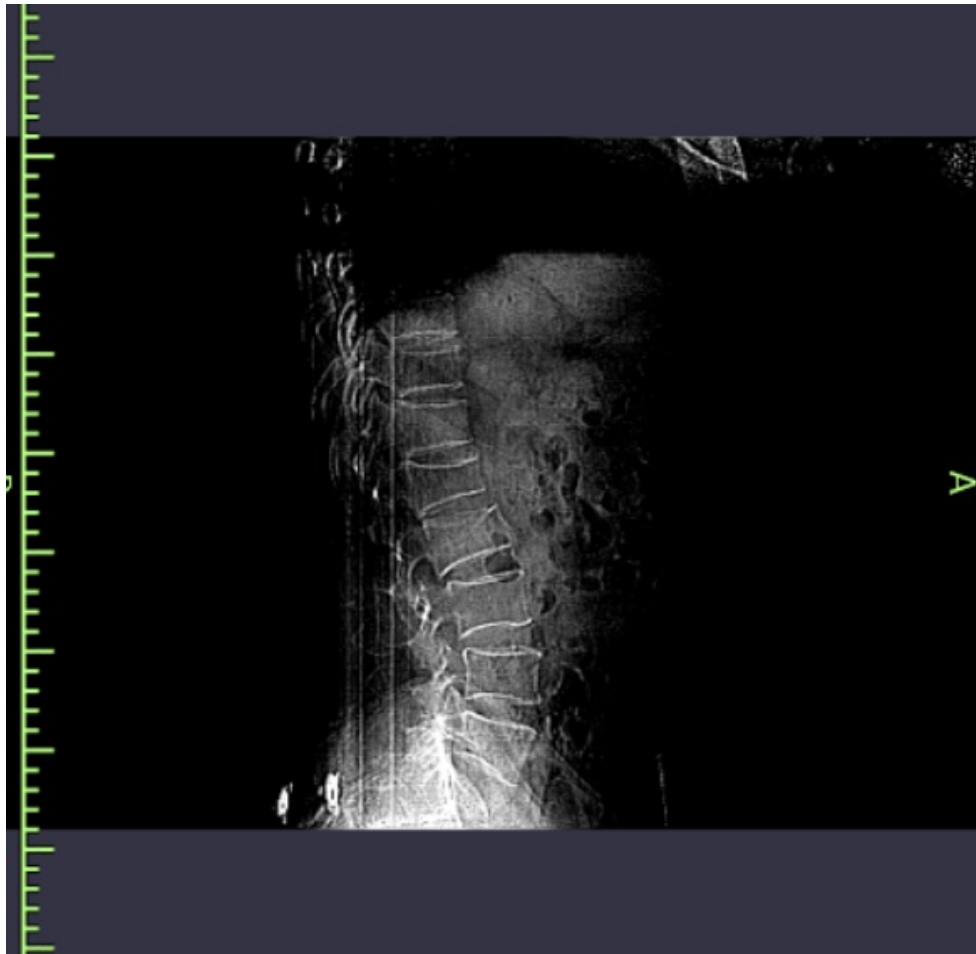
2024 Linhai Youxi Elite Sprint Triathlon Trail Running Course Map

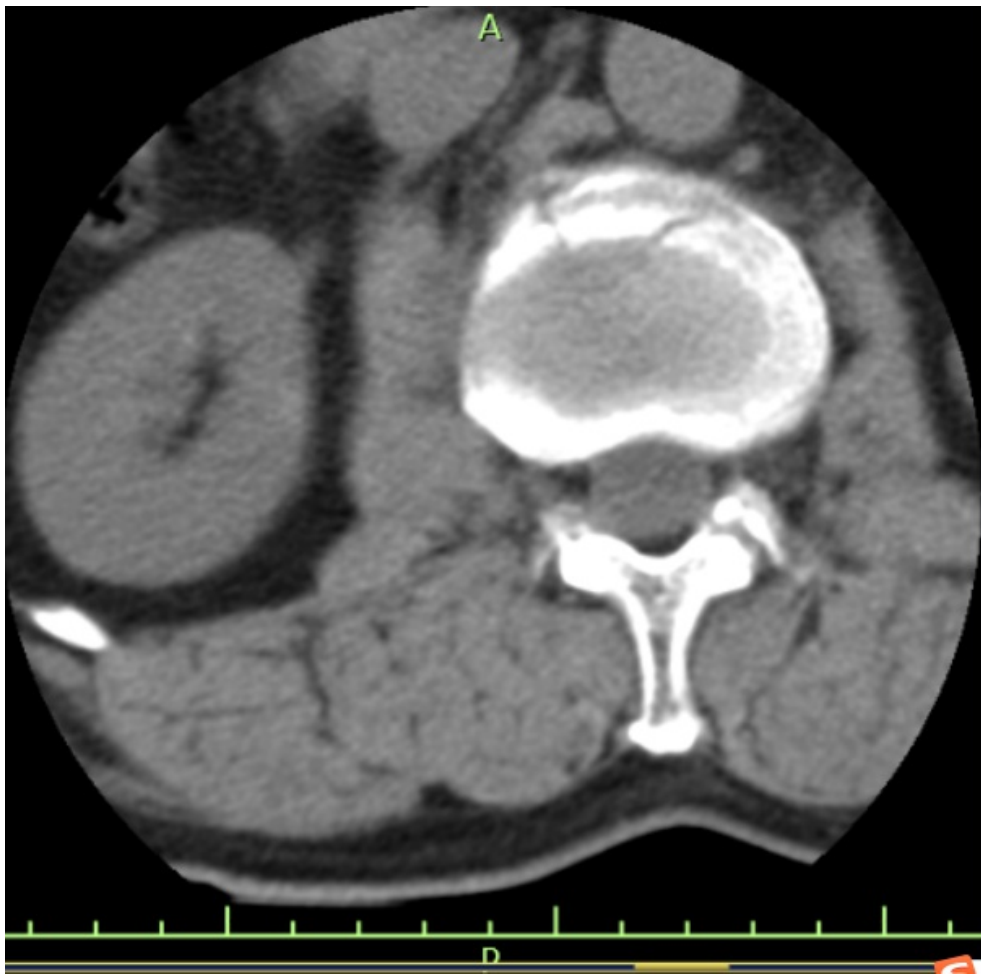
First Time: At age 20, while guarding the production team's trees, he sustained an injury to his right back while confronting tree thieves. This resulted in a 20-centimeter wound on his right shoulder blade. As the wound became infected, the doctor surgically drained it and administered treatment. However, due to a shortage of medication, the wound healed naturally without any further medication.

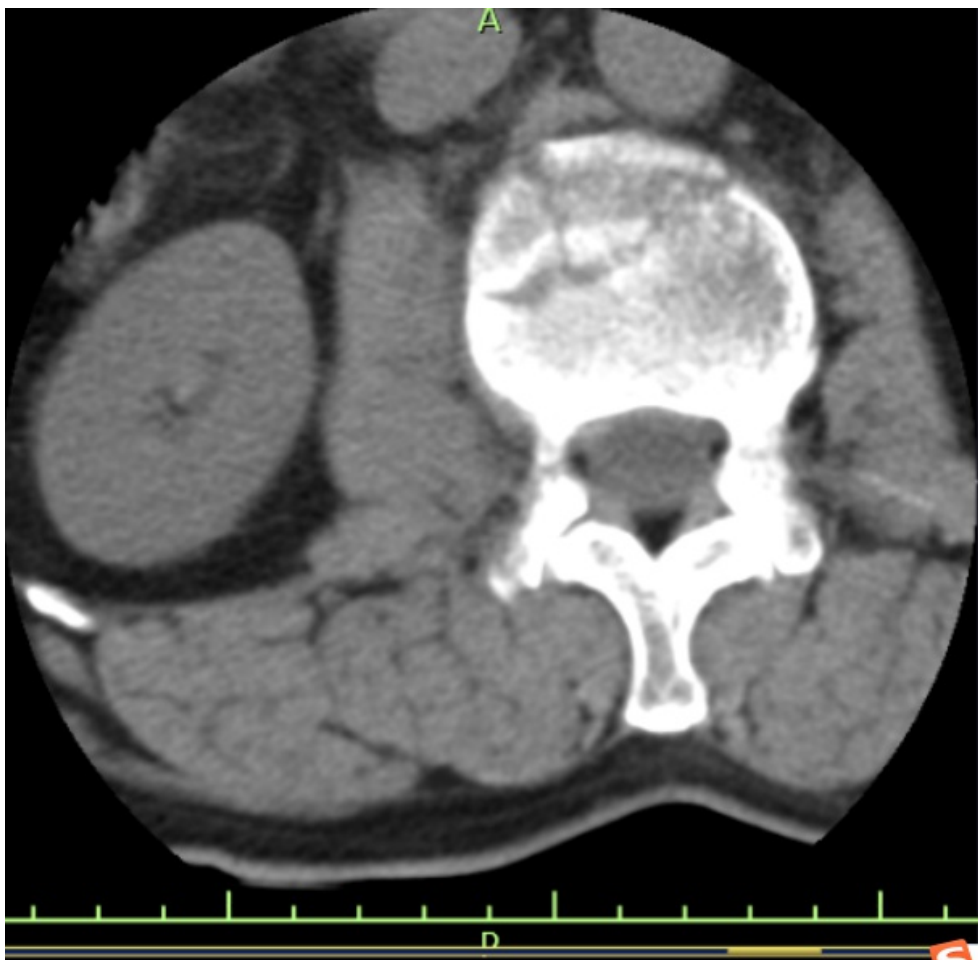


Second Time: In 1989, when he was 40, while carrying 75 kilograms of trees, he accidentally collided with a wall and fell backward, landing on his buttocks. This led to chest and waist injuries, along with discomfort. Despite the pain, he chose not to visit the hospital. Instead, he rested for two weeks, consuming brown sugar, aged wine, and traditional Chinese herbs. Six months later, once the pain subsided, he resumed his labor, maintaining his ability to carry heavy loads of over 50 kilograms with no lumbar pain.

Third Time: In 2009, the patient sustained another fall, landing on his buttocks, resulting in a diagnosis of L2 compression fracture and L1 vertebral wedge degeneration upon admission to the hospital. Notably, L1 was identified as an old fracture stemming from an injury in 1989, while L2 represented a new injury. After six months of rest and conservative treatment, the patient experienced a recovery of shoulder-carrying ability.





**诊断印象**

L1椎体变扁，椎体约被压缩1/2，L2椎体变扁，椎体前缘骨折，局部骨片略向前突出，椎管内未见异常密度影，所见椎体未见滑移征象。

诊断结论

L2椎体压缩性骨折
L1椎体楔形变

Diagnostic Impression in 2009: The L1 vertebral body was flattened, exhibiting approximately 1/2 compression. Additionally, the L2 vertebral body displayed flattening and a fractured anterior margin, with slight protrusion of localized bone fragments. Abnormal density shadows were observed within the spinal canal, though no signs of vertebral body

slippage were evident.

Diagnosis Result: L2 vertebral body compression fracture, along with L1 vertebral wedge degeneration.

Fourth Time: In 2011, while picking prunes from a tree standing approximately seven to eight meters tall (with its trunk severed), the 60-year-old patient fell. When he landed on his buttocks, more than two meters from the ground, he immediately experienced pain and discomfort in his chest and waist. He promptly sought medical attention at Taizhou Hospital. The diagnosis revealed thoracic and abdominal injuries along with L2 vertebral wedge degeneration. Without surgery, the patient regained his shoulder-carrying ability after undergoing two months of targeted symptomatic treatment.



诊断印象	<p>左肘关节构成骨骨皮质连续，未见骨折线影，左肘关节面光整，关节间隙清晰，未见变窄或增宽，周围软组织未见异常密度影。</p> <p>腰2椎体呈楔形变，上缘皮质毛糙不连续，椎体密度略增高，后部未见后移，相应椎管未见明显变窄，相邻椎间隙未见变窄，椎旁未见软组织肿块形成；部分椎体边缘骨质层样增生，余椎体未见楔形变。</p> <p>骨盆形态规则，诸构成骨质完整，骨皮质连续，两侧髋关节结构正常，关节面光整，关节间隙未见狭窄。</p>
诊断结论	<p>左肘关节组成骨未见异常。</p> <p>腰2椎体楔形变。</p> <p>骨盆平片未见异常。</p>

Diagnostic Impression in 2011: The left elbow joint exhibited an intact osteocortex with no visible fracture line shadows. The joint surface was glossy, and the joint space was clear, exhibiting neither narrowing nor widening. The surrounding soft tissues were devoid of any abnormal density shadows.

L2 vertebrae showed evidence of wedge degeneration. The upper edge of the cortex appeared rough and discontinuous, while the vertebral body density was slightly elevated. The posterior aspect did not show any posterior displacement, and the corresponding vertebral canal did not exhibit significant narrowing. The adjacent intervertebral space remained unaltered, and no soft-tissue mass was observed in the paravertebral region. Some edges of the vertebral body displayed lipoidal bony hyperplasia, while the remaining portions did not exhibit wedge-shaped changes.

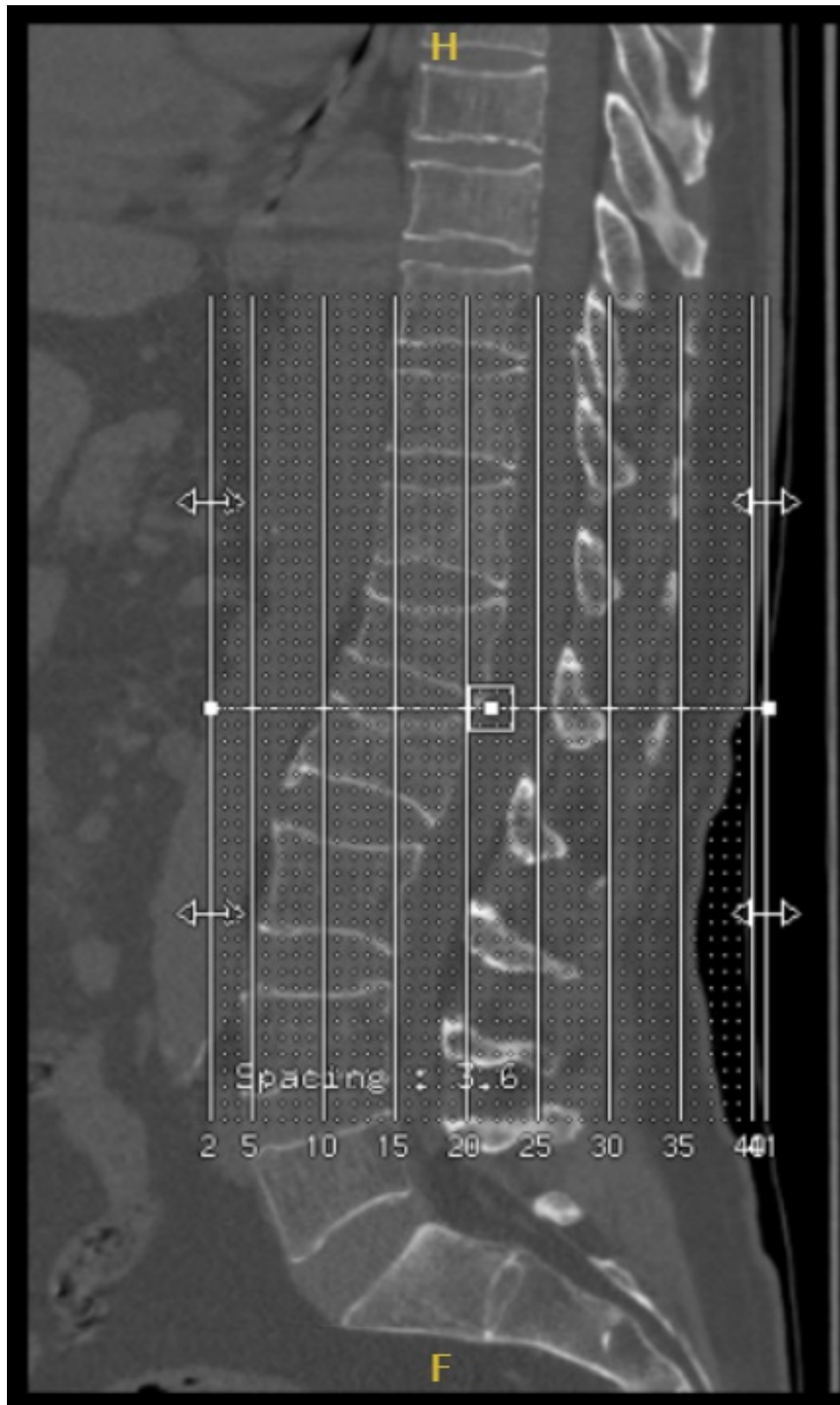
The pelvis had a regular morphology, with complete bone composition and a continuous bone cortex. Both hip joints were structurally normal, featuring smooth joint surfaces and no narrowing of the joint space.

Diagnostic Result: The constituent bones of the left elbow joint were found to be without any abnormalities. L2 vertebra displayed wedge degeneration, while the pelvic radiographs were devoid of any abnormalities.

Fifth Time: The patient sustained multiple traumatic injuries to his entire body and trauma to his left calf from a car accident in 2019. He was subsequently diagnosed with a fracture of the left fibula, which, fortunately, healed completely after six months of recovery. Despite the extensive injuries, he regained his shoulder-carrying ability.



Sixth Time: In 2020, the patient was involved in a motorcycle scooter accident, sustaining injuries to the thoracolumbar region and his left foot. Following emergency medical attention at the hospital, he was diagnosed with a thoracolumbar injury along with dislocation of the first and second toes on his left foot and a fracture of the third toe. After undergoing treatment for one month, he successfully recovered his shoulder-carrying ability, returned home, and resumed his labor.





Diagnosis Report in 2020: The distal phalanges of the first to third toes, as well as the distal phalanx of the second middle phalanx on the left foot, sustained fractures.

腰椎曲度存在，序列佳，胸12-腰2椎体变扁，胸12椎体前缘皮质欠连续，胸12-腰5椎体边缘见唇样骨质增生，椎间隙未变窄，小关节骨质增生、硬化，关节间隙变窄，椎旁软组织未见肿胀。

胸12-腰2椎体变扁，胸12椎体压缩骨折可疑，建议MR检查；
胸12-腰5退行性变。

Diagnostic Impression: Lumbar curvature is evident with a good vertebral sequence. The T12-L2 vertebrae are flattened, and there is a suspected cortical discontinuity at the anterior margin of the T12 vertebra. Lip-like osteophytes are observed at the margins of the T12-L5 vertebrae. Vertebral spacing remains unchanged, while small joints exhibit osteophytes, sclerosis, and a narrowed articular space. No swelling is noted in the paravertebral soft tissues.

Diagnostic Result: The T12-L2 vertebrae are flattened, raising suspicion of a T12 vertebral compression fracture. An MR examination is recommended for further evaluation. Degenerative changes are present in the T12-L5 vertebrae.

Patient Standing Images: Standing, lying back, and forward-bending positions





Result: The patient is healthy, experiencing no back pain and able to carry 50 kilograms effortlessly. Without any chronic illnesses, his eyes are bright, his hearing sharp, his thinking clear, and his physical fitness is good, surpassing even that of modern youth. Now financially wealthy, his children have grown up and relocated to the foothills. However, he persists in working on the mountain with heavy loads, despite his family's opposition. It's ingrained in this generation to labor even in their twilight years. Their muscles and sinews ache when they refrain from working, as labor serves as both their physical exercise and sole joy in life. This summer, he began planting ginger in the high mountains. He has fourth-generation heirs, yet his children, born in the era of industrialization, globalization, and digitization, are a stark contrast. Unable to shoulder heavy loads or work in the fields, they struggle with survival skills in such environments. Furthermore, they are afflicted with various diseases like cervical and lumbar spondylosis.

Second Case: On May 1, 2024, the author, climbing to the 600-meter-high temple situated in the hinterland of Linhai, Zhejiang Province, happened to meet a 75-year-old peasant named Zhao. Born in 1949, Zhao had two children and had led a life of diligent farming. The investigation revealed that Zhao was a stellar worker in the production team during his youth, renowned for his resilience and perseverance. It was said that he could shoulder a maximum weight of 250 kilograms and continued to do so daily until he turned 60. Even today, he can still carry 50 kilograms on his shoulders. At the age of 16, Zhao fell from a height of 3 meters onto a green stone slab, landing on his hip and sustaining a spinal injury. Despite experiencing severe pain in his chest and back, he refrained from seeking medical attention and instead opted to

rest at home for six months, doing lighter tasks. Once the pain in his lower back relieved, he resumed his heavy labor. Zhao hardly ever visited a hospital and never suffered from backaches. It was only a year ago, when he underwent a chest CT scan for lung nodules, that an old thoracic spine fracture was detected. Here are images of the patient in a standing, lying back, and forward-bending position.

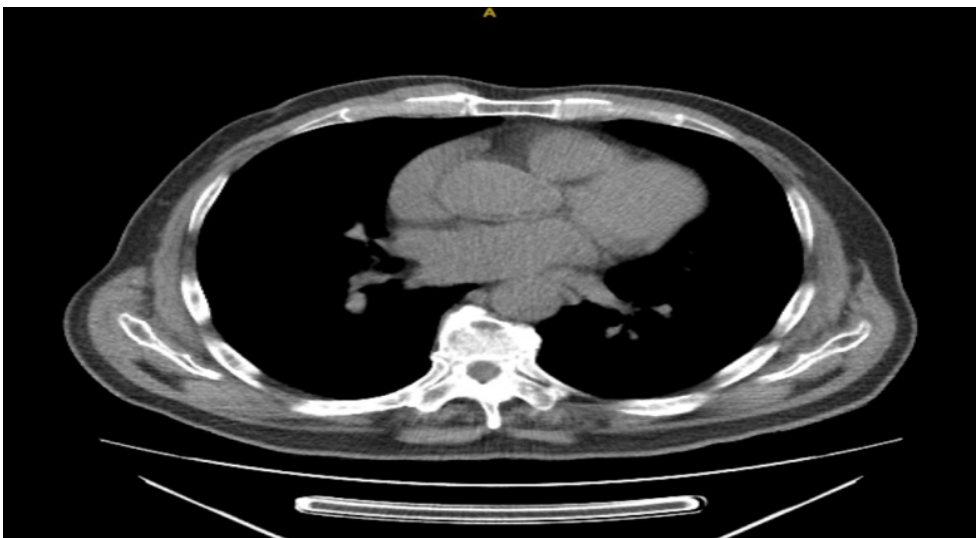








The wound on his left index finger, sustained from a knife injury when he was just 10 years old, naturally healed on its own in two months with the application of pressure from a dish towel.



An old fracture of his thoracic vertebra was discovered by chance during a chest CT examination in 2023.

Third Case: The investigation conducted at the physical examination center showed an interesting history of lumbar injury in a patient.

A male patient from Chengguan District, Linhai County, born in 1956, had no prior history of shoulder-carrying activities. He served in the military and was once a dentist. In 1996, at 40 years old, he attempted to strengthen his muscles by spreading his legs apart, bending over, and lifting a 150-kilogram stone pillar with both hands. Due to excessive exertion, his spine suddenly recoiled backward, resulting in a loud "grunt" and severe pain in the lumbar region. After two weeks of bed rest, the pain subsided, and he did not seek medical attention. However, 12 years later, on November 13, 2012, he began experiencing sudden and inexplicable low back pain. An X-ray revealed an old compression fracture in his lumbar spine, which was deemed a remnant of the previous injury. After two weeks of bed rest, his condition improved. For the

next 15 years, he experienced lumbar pain annually, with two to three episodes per year, all of which subsided after two weeks of rest. The shadow of lumbar spondylolisthesis loomed over him, even when he coughed.





The patient's standing position. He showed how he broke his back. Over the past decade, he has endured several painful episodes of low back pain annually.



On November 13, 2012, the patient suffered from a recurrence of low back pain with no obvious trigger, and the X-ray examination showed an old compression fracture of L1.



Figure 1.

What challenges will Alyssa Carson encounter if she travels to Mars in 2033?

Currently, Alyssa is undergoing rigorous training for her mission. Though only 18, she'll turn 30 by the time she embarks on this historic journey.

During these years, Alyssa must forego the possibility of falling in love, getting married, or having children, as her life will be wholly dedicated to the pursuit of human colonization on Mars.

As the first human to journey to Mars, even if Alyssa's mission is successful, she may never return. And even if she does make it back to Earth, she will never be able to fully experience the life of an ordinary person again. ^[1]



Figure 2.

"You want to wake up in the morning and think the future is going to be great - and that's what being a spacefaring civilization is all about. It's about believing in the future and thinking that the future will be better than the past, and I can't think of anything more exciting than going out there and being among the stars." - Elon Musk





Figure 3. Comparison of traditional shoulder-carrying successors and modern sportsmen

If a person is envisioned as a wall, the heel of the foot serves as its foundation, with a red line tracing behind them. From the back of the modern upper body, we can distinctly observe how the entire center of gravity shifts back to the heel, beyond that red line. This phenomenon is aptly described as, "A garden bursting with spring hues cannot be concealed, a red apricot blossoms beyond the wall." Imagine the sensation of a sharp knife piercing the lumbar vertebrae, with the upper body protruding like a balcony from this segment. Fortunately, the abdominal muscles at the front strive valiantly to prevent the spine from collapsing backward, which is the principle of being able to train eight-pack abs. The concepts of biomechanics and ergonomics, in essence, are grounded in basic mechanics. If pressed to elaborate on the distinction between the spine of a shoulder-carrying person and a modern person, I could articulate it swiftly. After all, "Truth often speaks in simplicity, while falsehood requires layers of deception to conceal its falsity."

吴彦祖一身肌肉扛不动沙子 遭工地大妈无情嘲讽



《漂亮的房子》

天人合一 

吴彦祖一身肌肉扛不动沙子，遭工地大妈无情嘲讽！ #漂亮的房子 #吴彦祖 #工地 #综艺搞笑片段 #鹅厂踏春观影季



Figure 4.

In a variety show called “Beautiful House,” the muscular Daniel Wu was unable to carry the sandbag and was mercilessly mocked by a female construction worker!





Figure 5.

From a Chinese agricultural perspective, the traditional method of raising children, which involved carrying them on the back, has shifted to carrying them in arms. This change has led to many individuals altering the structure of their lumbar spine, resulting in the aftermath of lumbar spondylosis. Children are often introduced to a sitting posture prematurely, causing deformities in the lumbar spine that can lead to cervical and lumbar diseases later in life. The low birth rate in modern China heavily relies on the generation born in the 1950s and 1960s who have endured hardships in agricultural society and possess practical experience. They support the younger generations by encouraging marriages, promoting childbirth, and sacrificing for their offspring's upbringing. Behind every newborn in China stands an elderly individual providing care and support. Without this generation, the birth rate of Chinese newborns would face an even steeper decline.



In his book *Low Back Disorders: Evidence-Based Prevention and Rehabilitation*, McGill emphasizes that "most traditional spinal extensor training relies heavily on high loads generated by self-loading and shear forces. The Swallow Fly, commonly known as the 'Superman' movement, involves the exerciser lying prone while simultaneously lifting their arms and legs off the bed, subjecting the hyperextended spine to over 6,000N of stress."

In 1981, America's National Institute for Occupational Safety and Health (NIOSH) established guidelines for lumbar spine loading, specifying a safe limit for repeated lumbar spine loading at 3,400N and a safer threshold for rehabilitation at 3,000N or below. However, the Swallow Fly exercise subjects the lumbar spine to a loading value of 6,000N, which is not conducive to rehabilitation but rather poses a risk of re-injury. Isn't the modern approach to Western sports meant to avoid exercises like the Swallow Fly?



Figure 7.

The author compares the globally established spine model with diverse clients, spanning various races and social backgrounds, who visit for medical examinations. After much contemplation, the author deduced that this standardized spine model predominantly represents Westerners with blonde hair and blue eyes. In simpler terms, Orientals have adopted the Western spine as their benchmark, effectively westernizing the Chinese spine. The author first introduced the concept of a 'Westernized spine'. A scholar from DXY, a leading digital healthcare technology platform in China, asked the question, "The inquiry posed here is profoundly significant. The Western norm defines a typical spine shape, but how did this standard originate? How many anatomical dissections were conducted? How were they executed? These details remain unknown. Increasingly, young individuals are plagued by cervical and lumbar spine issues. Reflecting on this is never futile. I believe this could also be approached through a mechanical lens."



Figure 8. *Silas Marner*



Figure 9. *Madame Bovary*



Figure 10. *The Undead Chinese*

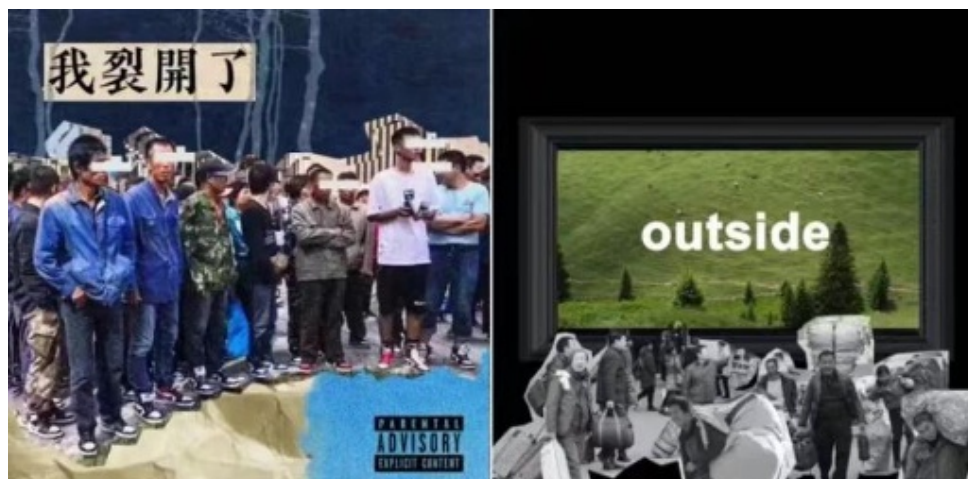


Figure 11.



Great Henan Rap Song - *The Factory*



Figure 12.

During an exchange with Chinese historian Gao Chengyuan in 2022 on the subject of the shoulder pole, French scholar SABBAN showed a snapshot of a truck advertisement. In a subsequent email, he remarked that the emblem depicted a man with a shoulder pole carrying water. In France, such poles were historically utilized by porters to transport water from springs, wells, or fountains when needed. Interestingly, SABBAN noted that traditional societies often rely on similar

implements for their "laborious tasks". (Photo by SABBAN)



Figure 13. The French scholar, " Françoise SABBAN Academic Partner" (first from the left), and the Chinese historian, Gao Chengyuan (second from the right), are both members of the Academic Committee of the Asian Food Studies Forum. Ever since the inception of their annual correspondence titled "The Year of the Horse", they have consistently exchanged ideas annually. However, following the death of Mr. Xie Henai, (Jacques Gernet 1921-2018), the field of Sinology in France experienced a significant decline. (Photo by Gao Chengyuan)



Figure 14.

In China, whenever a child is born, an elderly family member needs to offer support and assistance.



Figure 15. Chinese Vegetable Patch Culture



Figure 16. The caption reads: dismantling walls, tearing them down, digging trenches, chiseling floors, carrying heavy loads, disposing of garbage, and engaging in electrical, carpentry, masonry, and painting work. These are laborious manual tasks in China, and unfortunately, fewer and fewer individuals are pursuing these professions, with the average age of practitioners steadily increasing.



Figure 17.

Recruitment Details:

Special Cleaners & Cleaning Staff: We are seeking both male and female candidates, with no age limit, up to 65 years old. If applicants are in good health, age requirements may be adjusted accordingly. Offering a salary range of 2,600-4,000 yuan per month, along with five social insurance benefits, year-end bonuses, high-temperature subsidies, and holiday benefits.

Clerks & Reserve Management Personnel: We are seeking both male and female candidates, with an age limit of 45 years old. Applicants must possess a college degree or higher and proficiency in computer skills. Applicants must be willing to accept business trips or work in other locations. We provide five social insurance benefits, year-end bonuses, high-temperature subsidies, and holiday benefits. Salary is negotiable.

For special cleaners and cleaning staff, it has been difficult to find young employees.



如果你觉得这个很励志，
说明你毫无人性！

Figure 18.

If you feel inspirational, you have no humanity. Rising to a moral height, this concept has been deeply rooted in people's hearts, so Chinese shoulder-carrying culture research has become a forbidden area, and no one has dared to touch it in recent centuries.



Figure 19.

Every time I see an old man with a hunchback, I will ask clearly, "How old are you now? When does the hunchback start? Have you been to the hospital? Do you often have low back pain? Can you still carry heavy things on your shoulders? How much weight can you carry when you're young? Are there any difficulties in life?" In the history of China, no one ever asked them.

Background: Liang Yong'an, a post-50s professor of literature at Fudan University, said that China is in an era of transition and that China is now in a special society where three civilizations can be seen superimposed together. The grandparents' generation lived through an enduring agricultural society spanning thousands of years, while the parents' generation grew up in an industrialized world, leaving their homes to toil in low-tier jobs within the modern labor division, often on assembly lines. Now, the new generation, comprising those born after the 1990s, grows up in a globalized, digital society with a

vastly different information landscape. These three generations might seem inconspicuous to each other in other places, but in our country, they coexist. In other words, we are privileged to observe the evolution of these three civilizations. The economy is merely a facade; it's the culture beneath it, in all its facets, that truly matters. Young people have an unprecedented perspective on history, but what will become of this newfound awareness? The intricate depths of each individual's heart are diverse, yet these complexities often give rise to contradictions and conflicts, transforming our inner worlds into veritable "battlegrounds". Today, we feel even more anxious than Emma. Although Emma Bovary's family belonged to the comfortable peasant class with a modest amount of wealth, they didn't occupy a particularly affluent social stratum. Her mother passed away young, and her father enrolled her in a school within a church convent, where she learned opera, poetry, and etiquette for elegant balls. This education ultimately detached her from the cultural milieu and civilized upbringing of her father's generation. To a certain extent, she longed for a new culture, art, and lifestyle. As a result, she was spiritually ahead of her time, both consciously and culturally. However, the question remains: Where does her reality lie? How does one transform what one has absorbed and contemplated into a lived experience? In fact, all young people grapple with this issue. It's a question that we've been taught to ponder from childhood through adulthood. Our upbringing has immersed us in a new, pluralistic culture within the context of globalization. From multiple perspectives, it seems that each statement holds some truth. The argument that we inhabit a fragmented world is legitimate, as is the assertion that we coexist in a vast melting pot or amidst violent clashes. This is indeed a problem in and of itself. Viewing it from today's lens, Emma Bovary lived in a far simpler era compared to our current complex world. Despite the contemporary façade of modern attire, many individuals' mindsets remain stuck in a peasant-like mindset. This is particularly evident in love. When discussing love, how many of us truly experience the emotion of being in love? In reality, the focal point of most discussions has shifted towards marriage. Consider the People's Square in Shanghai, where countless marriage requirements lists are posted. This illustrates that even in the city and amidst high-end industries, our spiritual realm is still profoundly influenced by the agricultural civilization. This is especially prominent among the current generation of individuals in their thirties and forties, or even among the younger generation in their early twenties, whose parents likely belonged to the last generation of the agricultural society. From a cultural perspective, these youths confront the challenge of transformation. The subsequent generation, particularly the post-00s and the Z-era, grew up in the digital era. They are the first generation of truly modern Chinese. Consequently, life poses unique challenges for this cohort. They lack the experiences of their predecessors to emulate, and they are uncertain about the kind of thinking, emotions, behavior, values, and societal norms they should establish. So, how do we analyze these cultural phenomena? In this transitional era, it is evident that the outside world is evolving at a rapid pace, whereas our inner changes are lagging behind.

In 1851, when Flaubert was nearing thirty, he embarked on writing the lengthy novel, *Madame Bovary*. After over four years of diligent refinement, he ultimately completed the masterpiece. Tragically, prior to its official publication, he faced a summons from the court for allegations of "indecent and blasphemy." However, following his legal defense, he was acquitted, and his reputation flourished. The protagonist of the novel, Emma Bovary, is married to a man who deeply loves her, yet she yearns for romantic and legendary love. She betrays her husband twice, accumulates substantial debts, and ultimately has no choice but to take her own life by poison. Emma's tragic fate is deeply saddening, yet it serves as a

stark reminder: often, we seek happiness in the wrong places, not realizing that it lies within. [2] The literary and historical significance of *Madame Bovary* lies in its depiction of quintessential characters during a period of social transition.

During their transition from agrarian to industrialized societies, numerous developed countries witnessed a period where both systems coexisted. This was particularly evident in the Enclosure Movement in the United Kingdom, a significant "agricultural revolution" in modern British history. Over centuries, peasants and serfs were displaced from manor lands, and the new aristocracy capitalized on these lands by raising sheep for higher profits. Consequently, the Enclosure Movement was colloquially known as the "sheep eating people" movement. However, from a modernization standpoint, this movement marked the dismantling of the natural economy and the emergence of the commodity economy. It not only supplied a vast amount of inexpensive labor and raw materials to fuel industrialization but also laid the groundwork for the modernization of British agriculture. The Enclosure Movement, spanning from the early 13th century to the mid-19th century, was a slow and gradual process, lasting approximately 500 to 600 years. In stark contrast, China's industrialization occurred remarkably swiftly, taking less than 50 years. The rapidity of this transformation was akin to a storm, bringing about profound social changes. As the novel *Silas Marner* begins:

"In the early years of the nineteenth century, strange-looking little men were often seen on the country roads, usually with a heavy bag on their shoulders. They were linen-weavers, taking the linen they had woven to the women in the villages. Unlike the strong, healthy country people, they were small and thin, with tired white faces, bent backs, and round shoulders. They were often shortsighted too, because they had to look so closely at their work. To the villagers, the weavers looked almost foreign, and quite frightening. Where did they come from? Was it the devil who sent them? Who were their parents? How could you trust a man if you didn't know his father or mother? Country people used to be very suspicious of all strangers and travellers. They were also suspicious of clever people, people who could do something they themselves had not learnt to do. That is why the linen-weavers, who often moved from towns to live and work in the country, were considered strangers all their lives by their neighbours, and were sometimes very lonely as a result."

Silas Marner, authored by George Eliot

On one hand, critical realist literature celebrates the kind-hearted nature of the working class, and on the other, it underscores the importance of resolving social issues through reforms, rather than resorting to violent revolutions. In *Silas Marner*, the protagonist, falsely accused and robbed of his hard-earned wealth, loses his job and faith. Despite this, he maintains a gentle and optimistic outlook, refusing to succumb to violence or decadence. Instead, he finds profound love and companionship in his daughter, Eppie. In essence, Silas Marner embodies the plight of those affected by the shift from agriculture to industrialization. Similarly, in the Italian journalist's writings, the *Undead Chinese* personifies the contemporary equivalent of Silas Marner. In today's industrialized, globalized, and digitalized society, many individuals share the same physical traits and health concerns as the Silas Marner of the past.

"But perhaps you'll never be punished, since there is no God who takes care of the good and punishes the bad, only a

God of lies." This profound quote is extracted from George Eliot's *Silas Marner*, a masterpiece by one of the most influential novelists of 19th-century English literature. In the story, Marner, the protagonist, is betrayed by his closest friend, robbed of his fiancée, and plunged into despair. Left with no other option, he relocates to the countryside, but there too, he is despised and struggles to survive as a solitary townsman. Only a young blonde girl offers him redemption.

Yet, Marner was just an ordinary linen weaver; why was he so widely condemned? The inquiry into this question unmasks the harsh realities of 19th-century British society. Amidst the onslaught of capitalism, the natural economy of the British countryside crumbled, and artisans like Marner found themselves on the decline. People became hostile towards those like Marner, who cling solely to God and disregard truth. Even upon Marner's arrival in the village, he was still subjected to immense malice, spending fifteen solitary years with only gold coins to occupy his thoughts. Despite this, the arrogant and domineering squire continues to bully the weak Marner, stealing his sole source of survival. When Marner discovers the theft of his coins, he ventures into the village for help, gradually establishing contact with the villagers. Over time, people's misunderstandings of Marner begin to fade. Later, he even takes it upon himself to adopt a little girl who stumbles into his home. Undoubtedly, this is a shock, but for Marner, it is a profound redemption. He ceases to be obsessed with gold coins and instead treats the little girl as his world. As a result, the villagers change their perspective on him and treat him sincerely.

The author of this novel utilizes a writing style that juxtaposes good and evil in characterizing the individuals, exalting the former while belittling the latter, profoundly moving us. In the conclusion, little Eppie declares, "I'll never regret it, and I won't yearn for riches if it means being separated from those I know and love." This statement underscores the significance of virtue, devaluing gold coins. It underscores the profound truth that sincerity is the most assured path to success.

As a post-1970s doctor, the author belongs to the so-called "second-generation doctors," having been born into an agricultural society. His education was grounded in agricultural civilization, shaping not only his profound understanding but also a robust body adept at enduring hardships. From an early age, he grew up in a hospital environment, surrounded by the familiar sights and smells of fruits and vegetables. Back then, many doctors were peasants' descendants who were immersed in farming from a tender age and later altered their destiny by enlisting in the military or pursuing further education. Even after becoming doctors, they still ventured to the countryside to cultivate the land, retaining the simple and rustic essence of peasants. Without mentioning their medical profession, they appeared and behaved more like peasants, earning them the humorous nickname "peasant doctors." Behind this moniker lies their adherence to a straightforward and pragmatic approach to life. The author spent his childhood and teenage years in a hospital dormitory. During his free time, he would frequent the outpatient clinic, observing doctors treating illnesses and engaging in discussions about medical cases and preventative healthcare. This experience allowed him to learn valuable lessons on health in a timely manner. My next-door neighbor, the head of the orthopedic department, provided me with the opportunity to gain early familiarity with various medical conditions, particularly in orthopedics. The doctors hoped that the next generation, nurtured within the hospital environment, would one day succeed them. Since childhood, I've been acutely aware of the living conditions and health issues facing people in farming communities. We viewed hardworking peasants as paragons of good health, while bourgeois ladies, landlords, and wealthy children and scholars were often

perceived as symbols of ill health. In China, a traditional set of health standards and lifestyle habits exists, allowing us to readily identify who truly embodies robust well-being. The author can assure that he is deeply familiar with this traditional framework of health and living habits.

When I attended medical school from 1988 to 1991, the eight students in my dormitory all came from rural areas in the economically backward county. In that agricultural society, the streets were deserted once night fell. Accustomed to an early to bed and early to rise lifestyle, we students from the countryside always went to bed at 9:30 on time, with good habits and a healthy body. In sharp contrast, some students from more economically developed counties and cities in the next dormitory usually went to bed after 12 o'clock in the middle of the night, or even went out for entertainment the whole night and did not return, with no regularity in their lives. When we met them in the daytime, we could often see that they were pale and tired, often drowsy in class, and unhealthy. The dormitory roommates often discussed the merits of a reversed day-night lifestyle, arguing that, while resembling that of night cities in developed foreign countries, it could potentially boost consumption, economic growth, and job creation, seemingly indicating progress towards a modern, civilized society. However, the author profoundly appreciates the value of enjoying three hearty meals during the day and a restful sleep at night. The irregularity of a nocturnal lifestyle undoubtedly poses a threat to physical well-being. China boasts its own traditional health practices, and the author fears that if these habits are readily discarded, the national health may suffer in the pursuit of a modern, civilized society. These were the perplexing thoughts that occupied the author's mind during that period. In a Surgery class, when discussing lumbar disc herniation, the instructor mentioned that the precise causes of this condition remain uncertain, even suggesting that something as innocuous as coughing could sometimes trigger an episode. Since graduating from medical school in 1991, the author embarked on a career as a physician, primarily within the surgical system. At that time, China was in the midst of a profound transformation from an agricultural society to an industrialized one. As a member of the last generation to witness this historical shift, the author was deeply immersed in observing the evolving characteristics of diseases, living conditions, and the varying physical fitness of three generations across different social contexts. A striking change has been the notable alteration in the spinal health of the Chinese people. As traditional health norms and beneficial living habits gave way to Western standards, the spinal condition underwent significant modifications. In 2017, the author joined the Physical Examination Center at the Zhejiang Taizhou Hospital, seizing the opportunity to conduct an in-depth study on the spinal variations, physical fitness, and health status of individuals from agricultural, industrial, and modern societies. This research also explored the cultural transformations that underpinned these changes. Based on these observations and findings, the author promptly introduced the concept of "Chinese shoulder-carrying culture".

According to Wen Rumin, a professor at Peking University, after 40 years, "Lu Xun, Hu Shi, Qian Xuan Tong, etc., behaved radically during the New Culture Movement, putting forward ideas that seem absurd now, such as abolishing Chinese characters, and even the so-called Total Westernization. In fact, they intended to shake up the sleeping consciousness of the Chinese people so that they could get rid of the control of authoritarianism and move towards modernization. They contributed to the inheritance of Chinese culture, and their intentions should be understood. He also believed that Lu Xun had the deepest understanding of the Chinese people and traditional culture, the first person in history to do so. The May Fourth Movement, which took place in Beijing on May 4, 1919, was a patriotic movement that

involved young students, the general public, citizens, industrialists, and businessmen through demonstrations, petitions, strikes, violent confrontations with the government, and other forms of patriotism, as well as the Chinese people's complete patriotic movement against imperialism and feudalism; therefore, it is also known as the "May Fourth Thunderstorm."

Since the incident of the anonymous letter, Lu Xun had the idea of abandoning medicine and turning to literature. The incident began when he scored well on a morning anatomy exam, causing some students to suspect that Mr. Fujino might have leaked the exam answers to him. Subsequently, an officer of the student union inspected his lecture notes, followed by an anonymous letter delivered by the letter carrier. This series of events eventually prompted Lu Xun's decision to abandon medicine and become a writer, which exploded after the incident of watching a movie. He once watched a movie in which a Chinese man was executed for "working as a detective for the Russians," and the crowd of spectators was "also a group of Chinese." This scene had a great impact on Lu Xun and made him realize that merely having a sound body could not save the people from ignorance and weakness. He believed that even a physically fit nation, if spiritually bound, could only become meaningless material for public display and spectators. Therefore, he was convinced that the most urgent task was to change the spirit of the people, and in his opinion, the effective way to change the spirit was through literature and art. Thus, Lu Xun began to advocate the Literary Arts Movement, believing that it was essential to awaken the people's consciousness through literature and art. Obviously, the stimulation he received from watching that movie became the direct cause of Lu Xun's "abandoning medicine and turning to literature." *Mr. Fujino*, the ninth essay in Lu Xun's collection of essays *Dawn Blossoms Plucked at Dusk* is a record of this experience and reflection.

Born in 1881, Mr. Lu Xun was deeply aware of the meaninglessness of having a strong body without an advanced mindset. He believed that what was really vital was ideological awakening and change. As a result of such a concept, Chinese scholars have been deeply misled, focusing too much on ideological change and neglecting the importance of physical health. This is the main reason why the influence of the Chinese "shoulder-carrying culture" on the physical fitness of the nation has been neglected. Although Mr. Lu Xun lived in an agricultural society, he did not see the actual impact of this culture on the physical fitness of the nation. He studied Western medicine in Japan and often mentioned his medical background, which may be able to shock people on certain occasions, but in reality, he was still far from being a doctor who really knew medicine and cured diseases. In this field, he could only be regarded as an amateur, or rather, he knew nothing about medicine at all.

During my middle school years, I encountered a highly educated Chinese language teacher, a true embodiment of traditional refinement. He liked smoking. One day, he was admitted to the hospital with chest discomfort. The doctor diagnosed him with coronary heart disease, medically known as coronary atherosclerotic cardiopathy. Yet, he was displeased and even enraged. Without a specialized complaint center back then, he deemed the diagnosis hasty and took it upon himself to share his medical experience with our class, cautioning us not to trust doctors. This occurrence created a profound stir among the students, including myself. Having grown up in a hospital environment, I possessed a certain level of medical knowledge. These doctors were not just familiar neighbors but also figures I deeply respected and admired. In those days, it was commonplace to trust and respect doctors and teachers, whose words and actions often

directly influenced public perception of the medical profession. However, this cultured teacher's mindset appeared excessively emotional, lacking the necessary rationality.

For over a century, the radical, one-sided, and narrow-minded views held by Mr. Lu Xun on the physical health of the Chinese people and on Chinese medicine's approach to health are still influencing the thinking of Chinese scholars. A succession of views similar to Mr. Lu Xun's has led to a chronic lack of research on the physical health implications of the Chinese shoulder-carrying culture, which has played a major role in China's conception of health for millennial years. Today, the true standard of physical fitness has been replaced by the so-called Western scientific standard of health. Under this standard, our traditional concept of health has gradually disappeared.

Many Chinese sociologists have a profound knowledge of traditional culture. If Lu Xun was the first to criticize traditional medicine, the author would be the first to know the Chinese shoulder-carrying culture in agricultural society, a concept first proposed by the author who was also a pioneer in combining Chinese shoulder-carrying culture with medicine. Moreover, the author is dedicated to exploring how the Chinese shoulder-carrying culture affects people's physical fitness and health, aiming to unveil its mystery. The study of the Chinese shoulder-carrying culture is not only related to human health but also to the future of mankind.

2. Discussion

Zhang Weiyang, a post-50s Chinese economist, once observed, "Theories can often become shackles, and knowledge itself, in some instances, can render individuals oblivious. As an economist, I am deeply familiar with this. Once a theory is embraced, humans tend to consider it the absolute truth, disregarding alternative perspectives. This one-sided acceptance of theories can ultimately guide us astray." Using the Western theory of exercise as a case in point, the author argues that it has resulted in numerous individuals sustaining repetitive injuries during physical exertion, yet the popularity of this approach remains unabated. Owing to a lack of comprehension and awareness, many have abandoned the traditional Chinese shoulder-carrying culture and embraced Western sporting styles, potentially increasing the risk of sports-related injuries.

The participant observation method originated from fieldwork, and British anthropologist Bronislaw Malinowski was the first researcher to live with the research object for a long time and record the whole process of data collection, which established the status of the participant observation method in the academic field. Participant observation means that the researcher participates in the daily activities of the research object and obtains more real data through direct senses and experiences from a third perspective in its work, life, and various interactions with the outside world. The participant observation method is especially suitable for studying the social and cultural background of human life, studying the development process of events, the relationship and combination between people and events, and the time continuity and pattern of events from the perspective of insiders rather than outsiders. Participant observation is an important part of case study and qualitative research, as well as an important method of social investigation and research.

Field investigation of educational anthropology refers to the process in which researchers integrate themselves into the

study of national life and obtain first-hand information. Applying this method to the study of ethnic community education will help to deepen the understanding of the members of specific ethnic communities and their natural social environment, and explore the most suitable educational model for these ethnic communities. Using the field investigation method in the study of ethnic community education can be determined according to the field investigation object selection, selection, further understanding of the survey into the field, and, according to their specific situations, determine the basic research method. After the completion of field work in the ethnic community, the first-hand data obtained at the various stages of the field investigation is classified, collated, and analyzed, and the investigation report is written after theoretical improvement. Researchers should be able to build a trusted field relationship to ensure the smooth progress of fieldwork^[3].

Participant observation originated from fieldwork. Bronisław Malinowski, a British anthropologist, was the first researcher to live with his subjects for an extended period and document the entire process of collecting data, thus establishing participant observation as an academic method. (Origin and Establishment)

Participant observation involves the researcher participating in the daily activities of the research subject, including their work, life, and interactions with the outside world. Through direct sensory experiences and third-person perspectives, the researcher obtains more authentic information. (Meaning)

The advantage of participant observation is that the researcher can have a more intuitive experience and understanding of the research subject's behavior, as they are both a participant and an observer. (Advantages)

Participant observation is particularly applicable for studying the social and cultural background of human life, as well as examining the development process of events, the relationship and combination of people and events, and the temporal coherence and patterns of events from an insider's perspective rather than an outsider's. (Application)

Participant observation is a key component of case studies and qualitative research, as well as a crucial method in social research studies. (Importance)

This paper focuses on studying the Chinese shoulder-carrying culture through the participant observation method.

Li Qiang, a renowned Chinese sociologist who passed away on December 12, 2023, was an important founder of the discipline of sociology in China in the new era. He was a leading researcher in the fields of social stratification and mobility, urbanization and urban studies, and social governance. Prof. Li Qiang was one of the first sociologists in China to preside over and conduct a national large-sample survey, making outstanding contributions to the development of quantitative sociology in China. South Korean sociologist Han Sang-jin praised Prof. Li Qiang as a model of participatory intellectuals. Sociology studies various aspects of people's lives, including urban and rural areas, education, healthcare, marriage and family, transportation, environment, and more. The beauty of sociology lies in its ability to uncover the laws behind complex phenomena and identify commonalities across them. As researchers, it is essential to have the skills to describe macro-level phenomena without getting lost in the details. Sociology is considered one of the most interdisciplinary fields, with over 150 branches such as urban sociology, rural sociology, sports sociology, medical sociology, and more. For example, for automobile students interested in interdisciplinary research, there is a discipline

called "sociology of automobiles." When a substance enters society, it must interact with the surrounding social environment. Therefore, sociological research encompasses various aspects of human life. Comrade Li Qiang belonged to the generation that "went to the mountainous areas and the countryside." From the age of 18 to 27, during the most energetic period of his life, he spent time in grassroots rural areas. This life experience resonates with his work in sociological research. If you're just a kid growing up in the city, how can you know the whole society of China? In sociological terms, when you immerse yourself in the lowest level of society, it is referred to as "participant observation", which is a fundamental research tool in the field. To truly understand a subject, it is not sufficient to merely sit in an office with figures from the statistics bureau and maintain a detached perspective. If you wish to study peasants, have you ever lived among them? Without firsthand experience, what value does your discussion of peasants hold? Therefore, "participant observation" is quite straightforward: spend several years living in a village.

Qiao Xiaochun, a post-50s professor at Peking University, underscores the necessity for academic research to delve deeper into reality, lest it yield bizarre theories and invite criticism. Alarmingly, some scholars studying rural areas know less about its realities than peasants themselves. For such individuals, silence would be advisable. Academia is not a tool for profit-seeking; such pursuits will only erode people's respect for the academic community.

China's adjustments to the population policy, especially the timing of the two-child policy, sparked debate. Historically, families were assumed to want multiple children, leading to government intervention and family planning policies. This was based on the belief that fertility intentions were so high they needed to be restrained. However, a wiser approach would have been to observe natural fertility trends first. If fertility remained stable, the policy could have been relaxed. But when the policy finally allowed two children, we faced a paradox: fertility declined rapidly despite the relaxation. This caused social anxiety. Earlier, families eager to expand were restricted; now, when many are reluctant, the policy encourages them. Ultimately, these issues stem from inadequate social science research and policymaking. With more rigorous research, perhaps these adjustments could have been avoided.

Typical heir to the Chinese shoulder-carrying culture. The traditional spine influenced by the Chinese shoulder-carrying culture has a miraculous ability to recover its function^[4]. Over the past six years, the author has gathered numerous videos and photographs of this spine-like wonder during outdoor exercises in rural areas. The author, born after 1970, witnessed this phenomenon as a child, which sparked deep thinking. In China, people with shoulder-carrying abilities are becoming increasingly rare, usually those over the age of 65. Because of long-term hard labor, their spines deteriorate rapidly in old age, yet their working ability, especially shoulder-carrying capacity, has not been lost. Even if there is little opportunity for heavy labor, the younger generation also faces the problem of rapid spinal degeneration. This problem has not been overlooked and neglected. As a result, the authors conducted an extensive investigation to address this concern. This is a typical case of a shoulder-bearer who suffered from sudden lumbar spondylosis and was successfully treated conservatively without compromising his load-bearing ability and labour capacity.

China is in dire need of genuine social medicine experts. During this period of social transition, shifts in people's lifestyles and ideologies inevitably result in alterations to their physical health. Notably, the demise of the traditional Chinese shoulder-picking culture has been a significant catalyst for these changes. Unfortunately, Chinese social medicine

scientists missed the prime opportunity to study this culture. Nowadays, there are scarcely any successors interested in exploring the shoulder-carrying tradition, and most of them are aged and frail, lacking a younger generation to carry on their legacy. Despite the imminent extinction of the Chinese shoulder-carrying culture, these elderly individuals persist in this labor-intensive practice until their final breath. However, their efforts are often misunderstood and discriminated against by the younger generation. It is anticipated that in the next 5 to 10 years, this culture may vanish entirely. Meanwhile, the younger generation frequently experiences neck and back pain due to a lack of physical activity, yet they are powerless to address these issues. These problems are primarily attributed to inadequate research in Chinese social medicine.

A case concerns a shoulder-carrying heir from an agricultural society, sustaining six spinal injuries leading to fractures of vertebrae L1, L2, and L3. Despite no surgery, he endured no back or leg pain and continued shoulder-carrying labor into old age. Similarly, a 16-year-old boy, who fractured his thoracic vertebrae in a fall, recovered naturally and later became a renowned shoulder-carrying worker. Such spinal injuries were common in China's agrarian society, with many patients recovering without surgery. However, no one linked these cases to the Chinese shoulder-carrying culture, unaware that it represents a unique spine differing from traditional medicine concepts. As a physician experienced with shoulder-carrying work, the author understands the connection between the culture and related diseases. Studying their connection, especially for spinal issues, led to a book exploring the association between the culture and diseases. The findings are surprising and have attracted significant attention. In this era, the author observes a striking phenomenon: the more primal lifestyles of impoverished societies and the Chinese shoulder-carrying tradition breed greater physical resilience. However, the modern, industrialized, globalized, and digitized lifestyles, along with daily habits and misguided concepts, are gradually eroding the inherent health of those who once belonged to the agricultural era, rendering them less physically robust. A comparative analysis of individuals in three distinct social forms indicates that those in agricultural societies exhibit superior physical fitness. Nevertheless, propelled by economic incentives, hospitals are witnessing an influx of patients, resulting in their overcrowding and expansion. The rapid economic growth has spurred the flourishing of various trades and industries, leading to an overall increase in people's income levels. However, the underlying issues behind this trend have yet to be fully grasped by doctors and patients alike. There exists a disconnect in the study of the intricate relationship between medicine and society, lacking a robust interconnection. Medical research concerning diseases in individuals from three diverse social and cultural contexts is artificially fragmented and segregated, devoid of continuity. What we truly lack are dedicated professionals committed to the study of social medicine, a challenge that is prevalent globally.

At present, the Chinese shoulder-carrying culture has been collectively abandoned by society, and the past way of life has been neglected. If we were to witness hunchbacked elderly individuals engaging in shoulder-carrying labor in modern times, people may assume that they possess a traditional work ethic and have no other option but to engage in such labor due to their burdens in life. Additionally, people may believe that their traditional Chinese spine is no different from that of modern individuals. However, this could not be further from the truth. Many also view heavy shoulder labor in agricultural societies as a symbol of backwardness and superstition, leading them to believe that the elimination of such labor is a sign of social progress and an inevitable result of choice. At the same time, there is a social trend of looking down upon

farming labor. In recent times, rural people have made it a priority to send their children to school. However, schools with a Westernized education system demand chest-thumping, which is not the norm in traditional Chinese culture. Parents work tirelessly in the fields, braving harsh weather conditions, yet they are viewed as negative examples by modern educators in China. "Behold, your parents toil in straw shoes and even suffer from hunchbacks due to their low status and meager earnings. Therefore, you must study diligently. If you gain college admission, you can escape the fields, wear leather shoes, and lead a better life." The parents of the current generation, who are also peasants, have come to accept that they do not wish their children to continue in their footsteps. They invest all resources in their children's education and no longer expect them to endure the strenuous labor of shoulder-carrying. This has resulted in a lack of research on Chinese shoulder-carrying culture, leading to a cultural interruption. It is said that in the classical sense, China ceased its fine culture after the Battle of Yashan and after the fall of the Ming Dynasty. The author believes it is also a great loss that there is no longer a Chinese shoulder-carrying culture after the reform and opening up. In essence, the Chinese shoulder-carrying culture is beneficial for strengthening the body, spine, and willpower. It can also help prevent mental illnesses and internal conflicts, improve immunity, and stimulate wisdom. Additionally, it can prevent perinephritis of the shoulder and Alzheimer's disease [5].

2.1.

In foreign agricultural societies, while there exists a tradition of shoulder-carrying labor, it hasn't evolved into a distinct cultural phenomenon akin to China's shoulder-carrying culture. This often hinders their comprehension of the significance of this culture and its heirs. Over the years, local Chinese scholars' research on the shoulder-carrying culture has been scarce and incomplete, resulting in a superficial understanding and numerous misconceptions among scholars both domestically and internationally about the portrayal of Chinese shoulder-carrying heirs abroad. In reality, Chinese traditional peasants differ significantly from foreign ones in various aspects. The author often ponders how the Italian journalist who penned "Undead Chinese" would have perceived the Chinese shoulder-carrying culture if he had delved deeper into it.

Anahit Khudaverdyan

(National Academy of Sciences of Armenia) Review of: "Research on the Existence of Chinese Load-bearing bow of Spine – Report on 2 Cases of Standing full spine radiographs of Typical Traditional Chinese Spine and several very interesting photos worth studying"

The study is very interesting. The title is long. I suggest changing the title. Literature should be included in the introduction. In fact, there is no comparative material. Do other cultures not have such traditions? I often saw this tradition in Russian villages.

In his article titled "The Carrying Pole: The Unexamined Artifacts of China", Chinese literary historian Gao Chengyuan recounts a scenario where a netizen posted an image of a man balancing two clay pots on a stone carving from ancient Egypt, inquiring if there were analogous tools to the carrying pole in the West. To validate this, Gao Chengyuan sought

the expertise of Françoise SABBAN, a scholar from the Institut des Hautes Etudes en Sciences Sociales (IESESS) in France. SABBAN responded, highlighting the French equivalent, "palanche," a Latin term that was predominantly used in mountainous regions of France and Switzerland. Upon further research, Gao Chengyuan discovered that in "Aesop's Fables - The Girl Who Carried the Milk," the protagonist "carried her milk in a pail on her head." Wikipedia clarifies that "carrying pole" is described as "also known as a shoulder pole or milkmaid's yoke." This revelation indicates that the Western world was more acquainted with the term "yoke," often associated with animal traction such as oxen and donkeys. Childe, an authority on ancient history, firmly maintains that the utilization of animals like oxen and donkeys liberated humans from arduous manual labor. Conversely, the Chinese ancestors were not afforded such a luxury. They lived in the arid Loess region, where the model of "complementary agriculture and animal husbandry" was unsuitable. The scarcity of grazing land meant there were no animals available for labor, forcing farming tasks to rely solely on two people pulling a plow together to finish the work. ^[6]

In *Silas Marner* and *Undead Chinese*, *Silas Marner* portrays pure craftsmen through the lens of Western industrial society. The *Undead Chinese* means a group of individuals who once worked in agriculture, inheriting the Chinese shoulder-carrying traditions. Observed from the perspective of Western industrialization, these Chinese immigrants work in Western society, with their behavior, ideas, and values attracting particular attention. Back in their homeland, these people used to cultivate farmland, often with limited educational backgrounds. They were deeply influenced by the Chinese shoulder-carrying culture from childhood, as their ancestors were peasants who labored diligently. Since their youth, they have been part of production teams, and their adult lives remain intertwined with the physical labor of carrying heavy burdens on their shoulders. Even after the reform and opening up policies were implemented, introducing the responsibility system of land contracting to households, these people still find themselves tied to fieldwork. A year of hard labor often brings little financial reward, and a lifetime of toil seems to offer little hope of changing their destiny. However, working in an industrialized society like Italy significantly enhances their lives. The work is easier, living conditions are vastly improved, and their income rises remarkably compared to the hardships of an agricultural society. In such a context, even arduous work offers hope and promise, allowing them to accrue funds for retirement in China within a few years. Moreover, they aspire to earn money hard to support their elderly family members and children in China. Despite this, foreign countries pose challenges due to language and cultural barriers, making integration difficult. Ultimately, they yearn to fulfill the traditional Chinese ideal of "returning to roots", earning money quickly to return home.

The first book comment, a domestic scholar's commentary on *Undead Chinese*, explores the merits and demerits of the heir of Chinese shoulder-carrying culture.

The book, portrayed by Raffaele Oriani (Italian) and Riccardo Staglianò (Italian), translated by Deng Jinghong, and published by the Social Science Literature Publishing House in October 2011, was originally intended for Italian readers. The two journalists employ data, field surveys, and interviews as evidence to debunk misconceptions about Chinese immigrants in the West and offer an objective portrayal of their reality. The Chinese edition enables a broader audience to grasp the challenges faced by Chinese expatriates from a European lens—their relentless hard work, savings maximization, and aspiration to become self-employed. The book primarily comprises follow-up interviews with Chinese individuals, alongside a summary of Italian perspectives on Chinese culture, to comprehend how Chinese people view and

interpret these outlooks. Notably, the book highlights numerous commendable qualities of the Chinese people, including hard work, perseverance, patience, patriotism, and national pride—traits that are crucial for societal adaptation. However, we can also delve into other aspects beyond these.

1. Good use of rules and deficiencies: The West has relatively perfect laws and regulations, and the Chinese can adapt very quickly, so we will go on strike to fight for legitimate rights and interests. There is seldom deficiency in Western law, but no matter how perfect and harsh the laws are, they are still implemented by people. The Chinese understood this point thousands of years ago. Therefore, some may conduct illegitimate behaviors to pursue high returns.
2. Pathological craving for money: This may have to do with the time or place. It is mentioned and not emphasized in the book. People who went abroad probably had a foreign dream, and mostly related to money. Perhaps this gave a general impression to foreigners. In order to live a normal life, those Chinese with few capital will of course work harder to earn more money.
3. Paradoxical Chinese: Foreigners don't understand us, and we probably understand ourselves partially. We can either work tirelessly to earn money, or we can gamble for money. We can either unite to get more, or we can fight internally to get more.
4. A group of Chinese is a society, and in a semi-closed Chinese society, the Chinese will present both good and bad sides, such as tolerance and hostility towards fellow countrymen, the continuation of traditional Chinese socialization, and cautious tolerance of foreign cultures.

The second book comment: The two Chinese scholars' controversy over the shortcomings of *Undead Chinese* is proof of the fact that Chinese society has made the transition from an agrarian society to an industrialized, globalized, and digitalized society. A hundred years later, China is a very different country and has changed dramatically. Shoulder-carrying is disappearing in our country, and so are "Undead Chinese" abroad. In contrast to the thoughts and actions of their predecessors a century ago, the new generation of Chinese people differs greatly from modern and traditional people, and this is mainly due to the disappearance of the Chinese shoulder-carrying culture.

A web article reads: "I happened to watch an early episode of the program *Logical Thinking*, which is presented by Mr. Luo Zhenyu, a post-70s veteran Chinese media personality, titled *The Excluded Chinese*. In this program, Mr. Luo Zhenyu, in order to promote the book *Undead Chinese* written by two Italian journalists, started from the *Chinese Exclusion Act* in the United States, and then came to the conclusion that the purpose and behavioral state of the Chinese people who worked abroad had not changed significantly in the past 100 years, and that some of their behavioral patterns might have led to the discrimination of white people in the West. Mr. Luo compared the first generation of Chinese immigrants with the Chinese workers who went to the United States a hundred years ago, pointing out that the two groups are similar in many ways, such as working hard all year round, seldom buying real estate and commodities, living like "ants", and participating in fewer local social activities. These behaviors had led to misunderstanding, complaints, and even fear among the locals. The subtitle of the book, "They work, earn a living, change Italy, and they frighten the locals," has also attracted attention. The book tries to present the contribution of Chinese immigrants to Italian society and the resulting social impact. Mr. Luo, however, draws a rather narrow conclusion, arguing that there has been no substantial

deviation in the behavioral patterns of Chinese immigrants from those of the Chinese laborers who migrated to America a century ago.

The Chinese have imprinted their influence on virtually every corner of the globe, and we can take pride in our resilience wherever we settle. However, some may perceive our adaptability as stemming from perceived inferiority. While it's true that some of our traditional practices may appear outdated in modern society, I want to underscore that these traditions are racial treasures honed over millennia. In this way, we derive joy from competing with nature and other peoples.

The first-generation immigrants behaved and thought similarly to Chinese workers who migrated to the United States a century ago. This was primarily due to their shared backgrounds: poverty, limited education, and a common goal — to earn money and return home. They lacked a sense of belonging to their new country.

Yet, with time, their perspectives shifted. Some started working fewer hours, relishing weekends, and spending holidays with their families. Second-generation immigrants, especially, have made strides to learn the local culture and strive for integration, despite the numerous challenges and discrimination they encounter.

The growing population of Christians and local Buddhists in China suggests that individuals are starting to prioritize the spiritual realm and the ultimate purpose of life, even while striving for a materialistic existence.

These shifts are indeed noteworthy. This book, targeted for Italians, holds its value in its objective portrayal of Chinese life and work, without any malice or accusation towards them. It aims to assist Italians in getting a rational understanding of this group.

In the book, the Chinese have won a good reputation for their diligent efforts and compliance, which also showcases how they've enabled Italians to upgrade their industries by purchasing lower-tier shops and workshops. Moreover, the Chinese rescued the stone industry in Cuneo and the sofa industry in Matera when locals were reluctant to work in these sectors.

Despite their significant contributions to economic growth and job creation abroad, the Chinese community still faces disrespect and blame in Italian society. The author observes a profound conflict and misunderstanding between the two civilizations, with the Chinese feeling "you refuse to understand us," while Italians might think, "we strive to understand, but a divide persists." The diligent efforts and contributions of overseas Chinese, together with the financial boon brought by domestic Chinese tourists, have not earned the respect they merit. This underscores the book's assertion that money alone does not earn respect. Deng Jinghong, the translator of this book, echoes this sentiment in the foreword, emphasizing that economic success is not a guarantee of respect.

It is, therefore, imperative for the Chinese community to introspect and potentially adjust its values, worldviews, and life perspectives. Mr. Luo, by comparing the past century's history, urges the Chinese to display their friendliness, integration aspirations, and a welcoming spirit towards the world. This is crucial for enhancing our global image.

Mr. Luo may have been too insistent in expressing his own views, thus ignoring the social changes of the hundred years and the importance of cooperation between different civilization systems to cope with and eliminate conflicts. Chinese people need to be more active in removing misunderstandings from the outside world, while others need to make efforts

to understand and recognize Chinese people and their culture in a comprehensive and in-depth manner [\[7\]](#).

It is worth noting that in *Undead Chinese*, Italian journalists and some Chinese and foreign scholars do not seem to have truly grasped the essence of “Chinese shoulder-carrying culture”.

2.2.

Chinese civilization has endured 5,000 years of ups and downs and has always been resilient, and its vitality is truly depicted in the saying that “Chinese people cannot die, and Chinese cultural heritage cannot be extinguished”. Whether it is the dark period in history or the heavy pressure from the outside world, Chinese civilization has never been destroyed, but has become more and more resilient. In the eyes of Italian journalists, Chinese people are always so populous, hardworking, and busy, which is the source of the continuity of Chinese civilization. However, it is worth pondering that although the Chinese civilization as a whole still exists, one of its most important cultural elements, the Chinese shoulder-carrying culture, is on the verge of extinction. Richard Nixon, in his book *1999: Victory Without War*, stated, “When China’s young people no longer believe in its traditional culture, Americans will have won without a fight.” This warning reminds us that the Chinese shoulder-carrying culture is the cornerstone of true Chinese civilization.

Over the past hundred years, scholars at home and abroad have continuously explored the behaviors and thoughts of the so-called “Undead Chinese” or “Ugly Chinese”; they have been keen on exploring the strengths and weaknesses of Eastern and Western cultures, and judging which country is more advanced, backward, or civilized. However, these labeled “Undead Chinese” are in fact the older generation, i.e., those born before 1970 and grew up in an agricultural society. They carry the tradition of the shoulder-carrying culture. Since the 1980s, when China entered a new era of industrialization, globalization, and digitalization, the shoulder-carrying culture has gradually disappeared, and this group of people from the agricultural society is gradually withdrawing from the stage of history. Nowadays, in China, those who still hold on to the tradition of shoulder-carrying will also disappear in the near future. The new generation of “Undead Chinese” has embraced more Western culture and values, and it is pointless to argue about this topic, as it has long since become outdated.

Settle the cattle and sheep on that hillside. Apu, it's been a long time. How are you? Your kind and warm face remains unchanged. Are you practicing the art of rapping? This is a video released by CCTV Culture and Tourism Channel, titled *Missing from Apu*. It's a song penned by Nomi, a Yi ethnicity singer from Daliangshan, Sichuan Province, dedicated to his grandfather. It's a heartfelt composition filled with emotions. Nomi comes from Meigu County in Liangshan Yi Autonomous Prefecture, Sichuan Province, embodying the authentic spirit of a "modern" youth. His grandfather belonged to a traditional farming culture, immersed in a predominantly agricultural society. However, by the time of Apu's generation, the society had ushered in the era of globalization and information technology, leading to a gradual fading of traditional Chinese culture from the public eye. Initially, it underwent sinicization, followed by westernization, even to the point where English phrases were sprinkled within conversations. The trend of "American Boys" flourished on the internet, adopting American street slang such as "damn" and "you know what I'm saying!" (“am saying” is homophonic to "m3") as sentence endings or breaks, a popular style within the hip-hop industry. Nomi's frequent use of "bro" and "m3" on air, sometimes

interspersed three or four times within a sentence, is truly captivating. The song is actually a nostalgic tribute to the generation that inherits the traditional farming culture in China's fading agrarian society. It is not only the ethnic minorities who are undergoing westernization, but the Han Chinese are also facing such changes.

The rap song *Factory* by a renowned Henan rap artist powerfully portrays the devastating impact of factories on their surroundings. "Smog blankets the night sky, and villages are consumed by industry's might. Rivers from my youth, once pure and clear, now bear the weight of wealth and sickness, a dismal sight. Trapped with no escape, some are left behind, but I found a way to break free from this bind. Here, stories go unheard, with no one to listen, as fate is faced alone in this bleak territory. Love for this place doesn't reside within me; I was merely born here, not by choice or by design. Urged to chase city dreams and move away, my mother chooses to stay, her age advancing yet she remains resolute, not expecting me to follow suit. Online criticism of peasants, a common sight, makes my mother blame herself for not providing a better life. But it's not that simple, Mom; the issue's complex, and I must follow my heart's direction. My family's here, and leaving isn't an easy decision. The fault doesn't lie with peasants; society's to blame, and we must confront it with courage, not shame. On the verge of losing faith, I seek the strength to carry on. My consciousness, inherent since birth, feels like a nail that traps and confines, silent and unseen in this troubled state of mind. Those who remain, their souls feel the lonely strain, waiting in silence for a change that may never come again."

Just as the lyric says, "Love for this place doesn't reside within me; I was merely born here", and "my mother chooses to stay, her age advancing yet she remains resolute, not expecting me to follow suit". Many in Henan, especially the youth, aspire to leave, driven by the province's limited resources. With a population of 100 million and just one "211" university, coupled with a poor job market and environmental degradation from factories, as highlighted in the song, young people seek greener conditions. This song is said to be a heartfelt tribute to the peasants.

Just as the lyric says, "Online criticism of peasants, a common sight, makes my mother blame herself for not providing a better life" and "The fault doesn't lie with peasants", Henan, a major agricultural province in China, boasts a population of 100 million, with 40 million residing in rural areas and 25 million working as migrant workers. These migrant workers are typically faced with two options: factories or construction sites. The song titled *Factory* captures the lives of those migrant workers toiling in factories.

This Henanese rapper, coming from a rural town in Jiaozuo City, has used photographs of migrant workers in his song covers and penned lyrics that resonate deeply with the countryside and its peasants. He declares, "For the sake of this world, I used to stand up against its injustices. However, I am proud of my peasant roots, without any disrespect intended. I am proud of who I am." ^[8]

The First Affiliated Hospital of Zhengzhou University in Henan Province was nicknamed "the first hospital of the universe" by netizens for no other reason than this: a word, big!Why?

2.3.

The traditional Chinese culture of the vegetable patch was gradually formed under the influence of the Chinese shoulder-

carrying culture, which embodies the characteristics of the times. However, in modern society, this culture has not been passed on, the Chinese shoulder-carrying culture has a particularly limited impact on the younger generation, and modern people seldom get involved in vegetable gardening. The traditional Chinese culture of the vegetable patch is closely related to the Chinese shoulder-carrying culture. Traditional vegetable patches were handed down from the old generation, but the heirs are not good at physical exercise. Being able to grow vegetables and work is the most distinctive feature cultivated by the Chinese shoulder-carrying culture, a unique and effective lifelong exercise for people in the agricultural society without causing any harm to the body. This refers specifically to traditional vegetable patches, not modern ones, reminiscent of Zhang Qing, the "vegetable gardener" from the Water Margin tales.

An online article discusses why China's "shoulder-carrying people" love to grow vegetables, which carries a deep Chinese culture of vegetable patches. Ever since I rented the plot of land in the old lady's garden that was originally intended for a swimming pool, I have turned it into a vegetable patch.

Despite my inexperience, I plant dozens of seeds annually, yet only a handful thrive. Interestingly, the leeks and ginger from my Chinese friends flourish remarkably. However, this isn't a testament to my green thumb; these are perennial plants that thrive naturally year after year, unrelated to my gardening ability.

My domestic, vegetable-savvy peers (a university professor and the Minjiang scholars good at planting vegetables) have long chastised me for this "waste of land." Yet, my foreign neighbors often appreciate and recognize my efforts. Perhaps, to them, my leeks, in contrast to their manicured lawns, appear particularly lush and inviting.

Foreigners rarely cultivate vegetables in their gardens.

Many foreigners excel at taking care of their gardens, making them bloom to their fullest potential.

Yet, there are also numerous foreigners with neglected gardens. Take my neighbors, for instance, a husband and wife who are practicing physicians and professors at a university medical school. Despite their financial stability, their garden is in worse shape than mine. They're not overly busy, and even if they were, they could hire someone to take care of it. I suspect they're more inclined towards nature and environmentalism.

Regardless of whether a garden is lush or barren, foreigners hardly grow vegetables. I only came across one family on a walk who had sporadically planted a few plants, but I suspect they were flowers.

Chinese people, however, have a profound desire to cultivate vegetables!

When Robin Li, Baidu's founder, lived in the United States, he delighted in his vegetable garden every day. His wife, exasperated by his vegetable obsession, once threatened to pull them all up, an act that led to the birth of China's Baidu.

Many officials and dignitaries envision their ideal retirement life as returning home to grow vegetables.

A foreigner once inquired, "Why do Chinese people love growing vegetables so much?"

How can I explain? How can foreigners comprehend our Chinese affection for vegetable gardens? I had to reply, half-

jokingly, "To avoid buying vegetables in the supermarket." (Note the addition of the period after "supermarket")

Economically speaking, growing vegetables, especially for someone like me, would cost more than just buying them from the supermarket for two months. Not to mention the cost of watering and taking care of the patch.

The profound bond between the Chinese people and the vegetable patch can be summarized:

Firstly, stemming from an agricultural heritage, the Chinese civilization holds an enduring affection for the soil;

Secondly, Chinese culture has long advocated virtues like diligence, thrift, self-reliance, and a close connection with nature.

Thirdly, for Chinese scholars, the vegetable garden serves as a haven of retreat. From Zhang Liang, who retreated after his triumphs, to Tao Yuanming, who planted chrysanthemums in the Southern Mountains, they chose to reside in patches where vegetable cultivation was a way of life, embodying the philosophy of "maintaining kindness in poverty; lending a helping hand in prosperity." Through vegetable cultivating, these scholars nurtured themselves and grasped the true essence of life. As for whether Tao Yuanming would have dedicated himself solely to tending his vegetable garden, it's not the point. After all, "the grass is filled with beans and seedlings," indicating that his gardening skills were akin to mine. Of course, I am no Tao Yuanming, and I refrain from discussing matters of state. When I cultivate vegetables, I also tend to the flowers and plants flanking the garden. Otherwise, my neighbors might complain about it.

Yesterday, I was pondering whether it was time for me to consider starting a business when my wife pulled the leeks and ginger out of my vegetable garden? ^[9] The author of this online article does not understand Chinese shoulder-carrying culture, let alone Chinese vegetable patch culture. Vegetable gardening is a technical skill that needs to be cultivated from an early age and is an inheritance of cultural traditions.

The second article provides an in-depth explanation of the differences between Chinese and American cultures of vegetable gardening and flower gardening. Recently, I came across an article stating that Chinese people in the United States tend to cultivate vegetables in their backyards, whereas native Americans often prefer flowers and grass. Opinions on this trend vary. Some believe that growing vegetables in one's backyard is a purely personal choice, and others have no authority to interfere. Given that the United Kingdom and the United States pride themselves on respecting private rights, why can't they embrace the practice of Chinese people growing vegetables in their own backyards?

Why do Chinese Americans prefer to grow vegetables in their own backyards? It should be noted that the traditional Chinese civilization is a farming civilization different from Western civilization, and the agriculture-based production methods have nurtured the Chinese people's unique way of treating the land. In the eyes of the Chinese, land represents food and clothing that feeds us, and owning land means having food to eat (and not starving). The land can grow the crops we need—that's a basic understanding of the land. Therefore, after seeing (owning) land, the first reaction of Chinese people is to plant something edible, rather than planting flowers and grasses with only ornamental value. However, behavior with a cause is not the same as justified behavior, and the comprehensibility of the behavior does not confer justification on the behavior itself. Chinese Americans who grow vegetables in their own backyards appear to be

doing so as a private matter, but they are not. The crux of the matter lies in the fact that the act of planting vegetables in one's own backyard has what is known as “externality” in economics, which can also be said to involve the public sphere in philosophy, political science, and jurisprudence.

Firstly, we should acknowledge that flowers and grass are undoubtedly more conducive to enhancing the ornamental aesthetics of a community than growing vegetables. Therefore, planting flowers and grass in a backyard (often unfenced) rather than vegetables (fenced) will significantly contribute to beautifying the overall community environment. This positive externality should be encouraged and affirmed. Concurrently, a visually appealing community environment also augments the value and desirability of the entire neighborhood, ultimately benefiting every household within it. Additionally, Americans choosing to plant flowers and grass in their backyards are taking a more cost-effective approach. On one hand, growing vegetables is not more economical than purchasing them from a grocery store. Vegetable cultivation requires substantial time and management costs, including soil preparation, fertilization, watering, and pest control. For working professionals, such a burden is often impractical. Conversely, vegetables in American supermarkets are reasonably priced, diverse, and of good quality. On the other hand, compared to vegetable cultivation, the time and costs associated with growing flowers and plants are significantly lower.

Let's examine the practice of Chinese Americans cultivating vegetables in their backyards. This practice lacks positive externalities and might even yield negative ones. In contrast to gardens, vegetable patches do not effectively beautify the environment, or with limited beautifying effect. Vegetable gardening primarily caters to individual needs, offering no additional benefits like ornamental value or community-wide environmental enhancement. Moreover, vegetable gardens often need fencing to deter animals like rabbits, hindering their potential to enhance the community's aesthetics. In communities where flower and grass gardens prevail, one's vegetable patch can affect the overall environment and the interests of others. However, this household is not accountable for its actions, which is why local Americans disapprove of Chinese people growing vegetables in backyards. Despite the Chinese offering their grown vegetables freely to American neighbors, it doesn't alter their standing. Through years of community life, local Americans have reached a consensus: the community environment should consist of gardens and parks, not fenced-off vegetable gardens ^[10].

The old generation of shoulder-carrying heirs is rapidly aging and disappearing. In another 10 years or so, there will be no more Chinese vegetable patches at home or abroad, and the Chinese vegetable patch culture will be a nostalgia and historical memory. In the future, the disappearance of the Chinese vegetable patch culture will represent the complete extinction of Chinese shoulder-carrying culture.

According to China's Prof. Wen Tiejun, the courtyard economy with Chinese characteristics is essentially the Chinese vegetable patch culture.

The post-50s Prof. Wen Tiejun said, “If the courtyard economy largely disappears, we will reap the rewards, which means that the Chinese vegetable patch culture has disappeared.”

First, the courtyard economy holds significant value in the daily lives of farmers. It entails the cultivation of vegetables, fruit trees, poultry, and livestock within or near farmers' yards, primarily for household consumption or small-scale sales.

This practice plays a key role in farmers' livelihoods.

Secondly, courtyard economy serves as a supplementary source of income for farmers. By growing vegetables and fruit trees in their yards, farmers can diversify their meals and reduce reliance on external markets. This is crucial for rural communities, often vulnerable to inconsistent food supplies. Additionally, farmers can generate extra income by selling their produce locally, which is especially beneficial in rural areas with limited job opportunities and lower incomes. The courtyard economy offers farmers a flexible business model that enhances their income streams.

Thirdly, courtyard economy creates employment opportunities. It requires farmers to invest time and effort in planting, managing crops, and raising livestock. This provides job prospects for rural residents, particularly those who face difficulties finding off-farm work. As a result, the courtyard economy becomes a significant income source for these individuals.

However, courtyard economy is at risk of disappearing. With the advance of rural modernization and urbanization, courtyard economy has gradually declined or disappeared. This is mainly due to changes in economic, environmental, and social factors faced by farmers. For instance, farmers' aspirations for higher incomes and more streamlined lifestyles have gradually led to the substitution of the courtyard economy with more commercialized agricultural practices. As rural land is diverted to other development projects, the scope for the courtyard economy's expansion is narrowing.

Concurrently, farmers' proficiency and enthusiasm for this traditional model are waning. The decline of the courtyard economy has repercussions on farmers, prompting them to rely more heavily on markets for food procurement, thereby increasing both their cost of living and food safety concerns. Secondly, the disappearance of the courtyard economy has eroded farmers' economic vitality and autonomy, ultimately limiting their economic development and job prospects.

Moreover, the dwindling of this traditional practice has estranged farmers from their natural surroundings, contributing to environmental degradation and disrupting the sustainable ecological cycle. ^[11]

More important functions of the courtyard economy include exercising the body, prolonging life, enjoying a peaceful life, uniting heaven and man, and cultivating the sentiment.

2.4.

Throw the baby out with the bathwater: To discard something valuable along with something not desired.

I don't think we should throw the baby out with the bathwater. There are some good features of the present system that I think we should retain.

In today's modern society, the traditional Chinese shoulder-carrying culture, though on the brink of extinction, remains both enduring and profoundly practical. Thus, the study and restoration of this cultural phenomenon is highly significant. With the global buzz on the prospect of colonization of Mars, a pertinent question arises: who would be better suited for such an extraterrestrial migration—modern individuals or those rooted in an agricultural society who practice shoulder-carrying?

Elon Musk's "Mars Colony Plan"

SpaceX, a cutting-edge American space exploration company, was established by the world's wealthiest man, Elon Reeve Musk. His vision for SpaceX is to establish a self-sustaining civilization on Mars, housing a million inhabitants, in pursuit of humanity's interplanetary aspirations — often referred to as the "Mars Colony Plan."

Musk has vowed to transport a million people to Mars by 2050, creating a "second home" for humanity on Mars.

Musk tweeted that with roughly 100 interstellar vehicles, each carrying 100 tons, SpaceX could ferry 10 million tons of payload to orbit per year. He added that whenever Earth and Mars orbits are synchronized, it will be possible to send 100,000 people to Mars."

On DXY, a fellow contributor shared an article delving into the medical considerations for a Mars colony. Suppose you were tasked as the Chief Medical Officer for a Mars colony: what equipment and medicines would you take (within a limit of 10 items)?

Just yesterday, Musk unveiled the latest advancements in the Mars colony during a SpaceX staff meeting, asserting that within 20 years, they'll have relocated to Mars, becoming a transplanetary species.

His vision is to send 1 million people to Mars by 2050. Undoubtedly, these people will undergo rigorous selection, including crucial professions like doctors. However, given the vehicle's payload capacity, there are bound to be compromises.

If entrusted with the role of Chief Medical Officer for a Mars colony, what essential equipment and medicines would you deem necessary for the initial phase? Assuming a limit of 10 items, which 10 would you select? Let me offer a few ideas first.

Anti-infective drugs, ceftriaxone or cefradine, CT, alcohol, scalpel, surgical needle and sutures, blood biochemistry all-in-one detector, anesthesia machine, general anesthesia drugs, monitor, and physiological sugar saline. ^[12] Some people follow the posting, "There is no need to see a doctor for a minor illness, but there is no cure for a major illness." China's DXY medical scholars have already launched a heated discussion on the medical problems of a Mars colony.

In fact, another issue is particularly important: Comparing modern Western sports with Chinese traditional shoulder-carrying labor, which one has a greater impact on physical health?

Western sports indeed excel in running faster, jumping higher and farther, and their ability to elevate national pride, sparking government promotion and transforming athletes into national heroes. Media coverage and academic investments have inspired the public to abandon traditional labor for sports and exercise. Yet, often overlooked are the substantial injury risks inherent in these activities, acknowledged by professionals. If Mars settlers adopt sports, they'll also inherit these risks. What would we do if a sports injury occurred on Mars? We've witnessed the long-term implications of such injuries, often plaguing athletes for life.

This begs the question: What would be the preferred exercise choice for Mars immigrants? Would they opt for the shoulder-carrying labor of agricultural societies, which is essentially a holistic experience that involves working in vast fields, growing crops, harvesting fruits, achieving physical fitness, and remaining injury-free even in old age? Or would they prefer modern physical exercise? The former has a rich history as an instinctive form of exercise for humans, encompassing physical exertion, food production, and willpower honing.

In agricultural societies, shoulder bearers engage solely in traditional labor and walking, devoid of modern sports. Traditional Chinese medicine focuses on orthopedic injuries, primarily stemming from labor, and treats them conservatively, often restoring shoulder-carrying capabilities. Without modern sports, they experience far fewer acute and chronic injuries unrelated to labor. This exemplifies the traditional spine of Chinese culture, rooted in shoulder labor. Such cases span millennia and should be examined in the context of Chinese civilization, traditions, customs, and politics. Described in books and old photographs, the author has also observed this phenomenon in recent decades. However, due to a lack of global understanding of China's shoulder-carrying culture and traditional spinal practices, little has been done to explore the differences between Chinese and Western national traditions. This research gap has left us with only 5 to 10 years as this cultural practice fades away with changing generations. As Chinese shoulder-carrying culture represents a significant intangible heritage, linked to spinal health worldwide, it deserves promotion and preservation. The author hopes this article sparks interest among the scientific community, both in China and globally, to collaborate in studying this unique cultural phenomenon.

Under the Chinese shoulder-carrying culture, which upholds humans' primal form and movement patterns, there is a lower incidence of diseases and greater longevity. Sustaining this posture of bending over for labor not only fortifies one's strength and health but also strengthens the productive muscles of expectant mothers, leading to smoother deliveries. This movement pattern is intricately tied to the success of pregnancies and the rate of natural childbirths. Research into human fertility holds immense significance, not only for our future survival on Earth but also for the reproduction of future Mars colonists and the overall future of the human race.

3. Conclusions

Not only do we need the knowledge and skills to treat disease, more importantly, we need the ability to identify the risk of disease formation early! It is the ability to prevent and anticipate, which is sadly lacking in this society.

Many thought the author was talking nonsense in a serious manner, while others thought the study was worthless and even created anxiety. There are frequent earthquakes, floods, and other geological disasters. The lesson comes. Originally, Chinese people used to work all their lives, each being able to carry a hundred grams on their shoulders. They could work all day and all their lives without any problems, and they could also organize self-assistance. Nowadays, the shoulder-carrying culture has been abandoned by many people, resulting in the next generation's inability to perform manual labor and an increase in cervical and lumbar spondylosis cases. How many modern individuals are still capable of digging and carrying heavy loads? Such work is now reliant on machines or on the older generation who can withstand it

for a while. In the future, we may have to wait for rescue teams to arrive. The saying that "truth is in the hands of a few" holds some truth. However, the research on the value of shoulder-carrying goes beyond this. It holds more significant value.

We all aspire to humanity's journey to traverse the starry oceans, and initially, we need to conquer our solar system. For instance, after returning to the moon, we aim to explore Mars and intend to prepare the establishment of a colony. So who will be the first person to go to Mars?

Recently, Alyssa Carson, an 18-year-old American girl from Louisiana, who is currently a high school student, has gained popularity. According to reports, when Alyssa was 3 years old, she saw Mars for the first time through a cartoon and fell in love with its red hue, so Alyssa has dreamed of becoming an astronaut and stepping on that red planet. Finally, through persistent efforts, Alyssa has finally realized her dream. To be precise, her dreams are nearly realized, as NASA has chosen her as a potential candidate for the first human landing on Mars.

The author believes that the Chinese agriculturalists, renowned for their shoulder-carrying ability, are the ideal candidates for colonization on Mars. Drawing from two illustrative examples, it is evident that these individuals possess a robust Chinese spirit, enduring shoulder-carrying capability, and exceptional resilience to illness, thereby demonstrating remarkable survival abilities. Furthermore, they are adept at self-healing, enjoy constructing homes and cultivating vegetables, and exhibit robust fertility.

As such, the Martian settlers require individuals with these shoulder-carrying and survival skills to ensure the continuation of their legacy. The author recalls his grandfather, a resilient post-10s ferry boatman and skilled builder. He nurtured seven children into adulthood and, despite contracting esophageal cancer, remained physically robust, capable of hauling heavy loads and traversing long distances until his passing in his 60s. Grandpa's life was a constant whirlwind of activity. He fished, kept bees, constructed houses, toiled in the fields, and much more. Akin to the diligent worker bees in the animal kingdom, he was perpetually busy, rarely fell ill, and remained unwaveringly diligent until his final breath. He went to extreme lengths to ensure a better future for his descendants.

The challenge that faces the global scientific community this century is how to cultivate modern individuals with intellectual and cultural resilience. Observing the photograph, Alyssa stands with her chest held high. However, it's worth noting that she possesses the S-shaped spine common in modern individuals, which indicates she's not suited for heavy physical labor and may be prone to lumbar spine issues.

According to the *Quotations from Chairman Mao Tse-tung*, it is imperative to cultivate intellectuals who can engage in labor and farmers who are intellectual. In the traditional Chinese shoulder-carrying culture, the Nanniwan Reclamation campaign with merely shoulder poles and hoes has created China's Nanniwan spirit and set up a glorious self-sufficient flag. After the anti-Japanese war entered a phase of confrontation, due to the Japanese "sweep," the Kuomintang intransigence, economic blockade, and serious natural disasters, Shaanxi, Gansu, and Ningxia Border Areas encountered great economic difficulties, with the people and the army falling into difficult circumstances. Comrade Mao Zedong asked at the production mobilization meeting: "What about starvation? What about disbandment? Or sustain ourselves?" As a

result, a mass production campaign was rapidly launched. Mao Zedong himself inscribed, "Sustain ourselves to have enough food and clothes." "It was a time of great hardship but great passion," Yuan Lei, vice president of the Nanniwan Branch of the Yan'an Cadre Training Institute, accompanied reporters to the Nanniwan Mass Production Memorial Hall. "Mao Zedong and Zhu De took the lead in reclaiming the land for planting, while Zhou Enlai and Ren Bishi participated in spinning competitions and became capable spinners. Zhu De also traveled all over the mountains and valleys around Yan'an in search of open land, and eventually, his sights focused on Nanniwan - then a desolate and little-populated Rotten Mud Bay," he explained. In the spring of 1941, the 359 brigade, under the leadership of brigade commander Wang Zhen, sang the war song and vastly marched into Nanniwan. Without houses, they constructed huts and kilns. Lacking clothing and food, they braved the elements to till the soil, mixing black beans and elm bark with rice to survive. With no agricultural tools, they ingeniously transformed shells and scrap metal into plows and rakes. Remarkably, in just three years, over 200,000 *mu* of farmland materialized from nothingness, and numerous factories and mines were established from the ground up. The once desolate landscape of "barren mountains, foul water, and black mud pools" transformed into a "lush and vibrant paradise." ^[13] The Mars colony will require the resilient spirit and ingenuity of the Nanniwan reclamation, relying heavily on the Chinese shoulder-carrying culture.

Undeniably, cultivating proficient shoulder-bearers is a far greater challenge than landing on the moon or journeying to Mars. The author eagerly anticipates the emergence of a new generation of skilled shoulder-carrying workers in the future. Especially for the spine, shoulder-carrying heavy objects can strengthen the spine, prevent spinal diseases, and learn from the Chinese shoulder-carrying culture.

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