

# JAPAN ALPS, its Physical Profiles and the Beginnings of People's Mountaineerings under the outward Looks of Worship

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## I. Preface

Although Japan Alps and European Alps and Himalaya Mountains are similarly called or described as 'Alps' or 'Alpine Looking' having, on the natural and physical aspects, differences between them especially among the first one and the latter two are very obvious. In cultural and historical research they must be separated and be treated independently rather than be studied in the same category. The author had examined those differences among them and had pointed out that the unlikenesses were reflected culturally and historically in the people's lives of the surrounding areas.

**key word:** the Alps, Hida • Kiso • Akaishi ranges, Glaciation, Mountaineering,  
Worships

## II. Location

The Chubu District occupies the central portion of Japan where is the most widest part of Honshu island. This part of the Honshu island contains generally north-south aligned Hida, Kiso and Akaishi ranges with high altitude of 3,000 meters and steeply eroded lot of valleys. Those high and steep mountains are paralleling with each others in north-south direction.

The Japan Alps is not single mountain but three independent mountain ranges, yet all of them show the obvious similarity of reliefs in that they have flat-topped surfaces on their summits or ridges that are a part of relics of the last Pliocene Era origine peneplains. These are characteristic landforms being its peculiar to the Japan Alps. It also is worthwhile that the Pleistocene glacier erosional effects are existing within small and limited area. As a result the summits of each mountain peaks have fine views in all the directions. Without glacier eroded sharp so called knife ridges and large extent uneven skylines, those mountains had and has been accessible easily for the native people living surrounding areas. They also have the name 'NIPPON ALPS' which represents their physical character very properly with their 3,000 meters altitude summit soar out above the forest margin and exhibiting in everywhere alpine lookings rocky and grassland in summer season, ice and snow in winter season. They has been often referred to as the 'JAPAN ROOF' which means the most highest zones in the Central Highland region.

### III. Japan Alps Relief Features

From some distant in eastward location 10 or 20 kilo meters away, for example on the Oomine highland summit near Ohmachi City or on the Utsukushiga-hara (-hara means plateau) of Matsumoto city, people can enjoy the full panoramic view of the northern Japan Alps. Those observation platform borders on the east fringe of the Matsumoto Basin, are facing to the northern Japan Alps across over the Matsumoto basin. From the east direction the Japan Alps appear as a vast stretch of ridges and peaks linking with each others of small undulations.

The Japan Alps, whether of which the North (Hida Range) or the Central (Kiso Range) or, the South (Akaishi Range), all are similar features in that they have flat-topped crests.

Those are substantially differ from the original European Alps and the Himalayan mountains. Although in the Japan Alps, too, the Alpine glaciers of the Pleistocene have come and gone on several times over the last million years. Japan Alps have not so high altitude at most 3,000 meters with its short history of the crust upward movement and, with its latitudinal southward position approximate of 35-36° N, amount of snowfall is and was not so much and the effects of the glaciations were limited ones. As the result cirque formation activities were tiny and, original planation surfaces of the last Pliocene Era were left widely. This made it possible for people to take along on the ridge mountaineering routes.

Thus, in Japan Alps any person can reach every peaks by way of normal mountaineering safe course without dangerous action such as rock climbing. Since the Pre-modern Edo-era popularized mountaineering had developed.

### IV. Alps and Himalayas With Landforms Made by Quaternary Glacier

Fig.1 and Fig.2 exhibit typical Alpine landscapes in where mountain glacier erosion agency is prevailing over. They show remarkable landform features derived from Alpine glacier erosion actions. At sufficiently high altitudes, glaciers form both because temperature is far below freezing point and mountains receive heavy snowfalls. In time continuously accumulated thick fallen snow become heavy ice and it commences downhill flow, then an active glacier has come into being. On the upper valley head, snow is collecting and bowl-shaped hollows are curved by the outward motion of the ice and by intensive shattering of the rock near the masses of compacted snow. These depressions developed in bedrock termed cirques. Fig.1 shows this cirques on the leftside mountain slope. Some folds on the glacier surface are proofs of moving ice.



Fig.1 View from the regular service airline between Lhasa and Chengdu, flying over Hengduan Shan, by author, August of 1998. Valley glaciers and bowl-shaped cirques can be seen clearly.

Where two cirque walls intersect from opposite sides, a jagged knifelike ridge, called an *arete*, result. In Fig.2 sharp and steep ridges intersected on the ridge too. Where three or more cirques grow together, a sharp-pointed peak is formed by the intersection of the *arettes*. Such peaks are called *horn*. In Fig.1 and Fig.2, it is easy to find also such horns. Comparing with Japan Alps to be described later, it is obvious those glacier eroded mountains had and has been exposed far extent to wilder and more violent natures than that of Japan. For the long time people could not access to those mountains because the mountain natures had far surpassed human abilities. People had believed that various and many devils surely might hide behind in depth glacier eroded deep invisible mountain corner.



Fig.2 View from the regular airline service after Chengdu airport departure 1 hour, flying over Hengduan Shan, by author, August of 1998. Several sharp tooth-like horns can be seen soaring above expanse of cloud.

Above two pictures were taken by author on the regular service airline between Lhasa and Chengdu, in August 1998. Mountains in the picture were eastern extended portion of Himalayas, the Hengduan shan. Even today there are many unexplored peaks in the Himalayan Range including Hengduan shan (中村,1996). There are lot of dangerous points deep in those mountainland. Still today mountaineerings itselfs are very risky works even be full equipped with varoius climbing instruments and under enough preparations. Thus mountaineerings are highly adventurous actions at the risk of many persons lives. So, it is widely accepted that the sucess of reaching the summit is, not only be honorable achievement but be obvious conquer and the victory over the wild nature.

#### V. Surrounding Area and People's Life of Japan Alps

Small undulating skylines of Japan Alps are, geomorphologically, remnants of planation surfaces that had formed in the last Pliocene and the early Quaternary stage, Plistocene epoch. In each of Fig.3, Fig.4 and Fig.5, Japan Alps mountains can be seen in the far background. In Fig.3, from the left (south) to the right (north), the Tsubakuro (altitude of 2,763 meters), Gaki (2,647 meters), Karasawa (2,632 meters), are making the row.

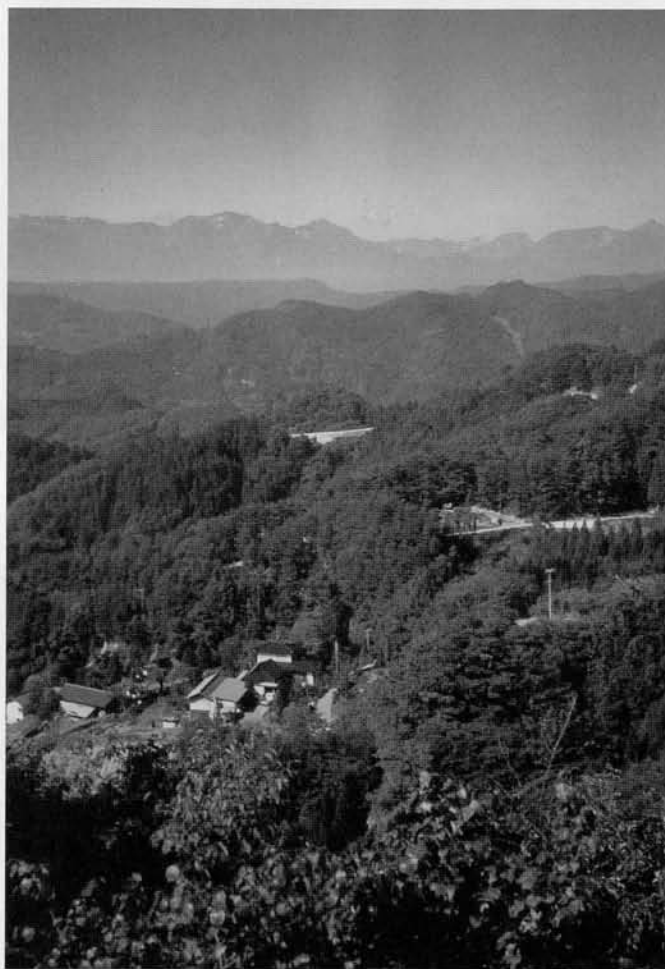


Fig.3 From the left to the right are skyline of Mt.Tsubakuro, Mt.Gaki and Mt. Karasawa. Foreground settlement are on the flat-topped surface of Saigawa hilly area. At the sunset times in each fine days, inhabitants can look Buddha-Paradise in the far west, so as a halo appears around Japan Alps mountain ridges. October 2000, by author.

In Fig.4, northern extension of the peaks make the row of the Renge(2,799 meters), Jii(2,670 meters), Kashimayari(2,890 meters), and Goryu(2,814 meters).



Fig.4 Skyline of Mt.Renge, Mt.Jii, Mt.Kashimayari and Mt.Goryu, from the left to the right. October 2000, by author.



Fig.5 Skyline of Hakuba Mts. In the foreground harvested ripen rices are arranged for sun-drying. Paddies are on the rice terrace. October 2000, by author.

Fig.5 shows peaks of Hakuba mountains altitude of above 2,800 meters.

All of these peaks are connected by normal climbing footpaths and walking along ridges are easy. Japan Alps offers for the citizens nice trekking routes rather than hard mount climbing courses.

Those pictures were taken on the western slope of Mt.Hijiri located in the northern portion of Chikuma Mountainland which is extending north-south direction along the eastern border of the Matsumoto basin. Mt.Hijiri, altitude of 1,447 meters soar out on the Saigawa hilly province, being monadnock relief with volcanic rock having numerous small cracks, facilitating as rainwater reservoir. Lot of paddies has been opened on the foothills of Mt.Hijiri. Most of them take rice terrace forms. Fig.6 shows the landscape of



Fig.6 Rice terrace after harvest. On the northern foothill of Mt. Hijiri. October 2000, by author.

the rice terrace.

On the Hijiri mountain, located in the leeward side toward northwestern winter monsoon, it is given a little more sum of snowfalls than in the bottom of Matsumoto basin, so as dwellers can enjoy skiing although limited short duration. Fig.7 shows winter scene after a little snowfall. Melted snow becomes mountain groundwater through



Fig.7 Far background is the Japan Alps being under heavy snowfall amidst winter monsoon. Middle ground is winter Saigawa hilly province. Foreground are farmland and settlement with remaining little snow. Picture is taken at the foothill of Hijiri mountain, February 2003, by author.

penetration and will be used for padi irrigation in spring season.

On the high altitude portion of the Japan Alps heavy snowfall has come in every winter and it covered mountain surface with thick depths. With the approach of spring, along with snow melt day by day thick remaining snow deposition shirink its size, displaying various figures amidst exposed rock slopes. They looks like animals as a running horse (Hakuba) and as a working aged man (seeding Jii). People inhabited surrounding areas of the Japan Alps have made use of this remaining snow figures as a sort of agricultural working calendars. There are also various other relationships between Japan Alps and nearby dwelling people's lives in many aspects, in mountainland, gathering young herbs or picking young leafs in spring and mushiroom gathering in autumun are only some examples of nice pleasures.

In Japan Alps mountain climbings had to start from the valley bottom in where both



valley sides had been deepened and scoured steeply by endless erosion actions. Although people had to do hard climbings in this portion, once after arrival above on the ridge section they had enjoyed excellent beautiful views in all the directions. People had been able to make safe climbing so far as taking along on the ridge routes. And even today the summits of the many mountains are crowded with people wishing to watch the first sunrise of the new year. This scenic observation place also had held to the worship place once in ancient days. The most easily accessible Mt. Tsubakuro (2,763 meters), summit is of granite rock and showing excellent view with blight colour. Today, anyone aiming to climb Mt. Yari (3,180 meters), after departure from the mount Tsubakuro will need to take a full day trek on the roof along route till the destination, can enjoy nice view all around on his full course.

#### **VI. Volcanic Mountains as a major Worship Place**

Mt. Fuji (3,776 meters), Mt. Ontake (3,063 meters), Mt. Tateyama (3,015 meters) and Mt. Hakusan (2,702 meters), all of them are great volcanos and also locate in the central portion of the Honshu island are, not only famous in Japan but also be as worldwidely known for their religious special role attracting many pilgrim mountain climbing believers from the whole nation, as often described. Adding for their symmetric and excellent scenic outline features with high altitudes, each of them over 2,700 meters as lanked the class of 3,000 meters surpassing any other surrounding summits. And summits of those volcanic mountains are sacred ground where people of many localities visit. That the fact more attention should be paid is, geologically, all of those four peaks are 'young' volcanic mountains, active or, only temporarily dormant ones. It is also often described that climber be incentivised with religious passions were able to see and to certify existence the heaven world and the hellworld side by side at the same time.

In the Japanese Buddhism, it had been accepted that the 'next world' could be easily accessed from the present world in the high mountains, above all, volcanic mountains. Volcanic activities such as ash and gas gushing and hot water rushings might be the hellworld itself. On the contrary, in fine days, symmetric figures of volcano mountains shows themselves nice views and, on the summit climbers can enjoy in all the directions excellent scenic landscapes, close resemblance to the Buddhism paradise, especially, sunrise and sunset times.

#### **VII. Origin of the religious Mountaineering**

The origin of the Japanese religious mountain climbing could be traced back to the ancient Nara and Heian era. It has been insisted that in Japanese cultural tradition, the nature is the object to harmony with rather than to battle or to conquer, and mountains are also in the same context. It was essentially needed for the Buddhism priests themselves to have the exercising place in the deep mountains far distant from the everyday

secular place. The exercising place in where they had often got comprehension of Buddhism doctrine with inspirations in the midst of pure nature. And those priests had found that, for large numbers of common people, to visit high mountains by climbing works were also very effective way to understand Buddha's teachings, getting through some comprehension of Buddhism doctrines with inspiration. Then, for the Japanese people in the pre-Modern Edo era, mountain climbing had never been an adventure but a sort of the pilgrimage ones. Climbing actions means only to obey its religious rules.

However, that harmony with the nature was for the ascetic priests, needed severe training in the depth of mountains out of the way. Among the various reasons of the most important was to avoid many dangers of wild nature, i.e. the ability of forecasting sudden weather changes which resulted in heavy storms and the technique of mountaineering safe route findings.

Climbers in those days were limited only to special persons who had practiced a severe thorough training in the deep mountains. They were called *Gyoja*. Lately they had become well-experienced and excellent guide with real ability for the common people mountaineering. Popularization of religious mountain climbing had began in the days near the ending of 18th century, pre-Modern Edo era. Then the numbers of religious mountain climbers of common people had increased rapidly. They were organized in their each inhabited units named *Kou* (講). Reform trials concerning the traditional religious purification ceremony had been arisen amidst those *Gyoja* and austerities were more simplified that had resulted in the more increased numbers of climbing people. Even today numerous people are belonged to any of above mentioned *Kou* organizations of each four volcano, *Fuji-Kou*, *Ontake-Kou*, *Tateyama-Kou* and *Hakusan-Kou*. Every year selected and designated persons were sent for climbing pilgrimage as representatives from their own homeland communities. After the climbing had attained they received divine tablets which facilitate as a talisman, issued at the mountain shrines or temples and bring back them to their homelands. Pilgrims were financially backed up by their community members and distributed brought-back divine tablets for the each members of the pilgrimage community.

### VIII. Conclusion

Climbers then were limited only to special persons who had practiced a severe thorough training in the deep mountains. They were called *Gyoja*. They lately had become well-experienced and excellent guide with real ability for the common people's mountaineering. In outward religious super ability looks thorough trainings, *Gyoja* had obtained never any super ability. They had obtained only their physical strength and detailed and wide knowledge concerning wild animals, wild plants and changing weather. As they could catch any signs of danger approaching through animals behavior or moving clouds, they soonly stopped training and sought some shelter and had never taken any action till

the storm had completely passed over. Then, they were able to become excellent guide for common people's safe mountaineering. The natural environment of Japan Alps, had not so much wild natural violence as European Alps or Himalayan mountains, made it possible to realize the effort of Gyoja's training. Japan Alps had and has been mountains that were accessible for the Japanese normal people mountaineering under the leadings of experienced and trained *Gyoja*, since already from the pre-modern Edo era.

In Japan many mountains were named after things or matters of normal daily lives, i. e. draft animals, and birds or insects, hero or heroine of folk tales, important place names such as dividings, and various gods assisting Buddha. They represents many sort of materials in Japanese common people's normal lives rather than thoughts or ideas or, some worships had been asserted again and again in many cases.

### 和文の要旨

## 日本アルプスの自然と近世からの集団登山について

### I. はじめに

同じアルプスと呼ばれ、あるいはアルプスの山容としばしば記述されるが、欧州アルプスあるいはヒマラヤと、日本アルプスとは、自然が、似ているよりもはるかに多くの点で違っている。ゆえに、歴史的文化的に見ても、麓の人々とのつながりは、違う点の方がはるかに多い。信州の地で山岳を文化的にも深く認識しようという意図は大事だが、その前に、自然の違いは、門外漢であっても努力して深く理解しておかなければならないであろう。

キーワード：アルプス、飛騨・木曾・赤石山脈、氷食地形・登山・信仰

### II. 日本アルプスの位置

本州の中部地方は幅がいちばん広く、この部分に、南北方向に平行してのびる日本アルプスがある。日本アルプスは三本の、飛騨・木曾・赤石の、険しく刻まれた谷のある、高度3,000米級の独立した山脈の総称である。独立しているが、いずれもが高度のよく揃った尾根をもち、第四紀更新世以降は侵食がすすんで原面は残っていないが、揃った高度の尾根が過去（第三紀後半）にいったん準平原の状態になったのを示すといわれる（貝塚・鎮西, 1995）。それで、ひとたび尾根上に立てばほとんどの山が視界に入る、すこぶるよい眺望が得られ、尾根を伝ってどの山へも行ける。この二つが、日本アルプスの重要な特徴である。森林限界の高度2,500米をゆうに越え、夏は岩と高山植物の草原、冬は雪と氷の世界となるが、氷食のもたらした地形変化は小さく、起伏の小さな尾根がどこまでも連なる。また、中部地方のいちばん高い区域に広くまたがるから、日本の屋根とも呼ばれている。

### III. 日本アルプスの地形

松本盆地を間に、北アルプスを西に望む大峰高原（池田町）・聖山（麻績村）・美ヶ原（松本市）は飛驒山脈の優れた展望台である。飛驒山脈の松本盆地側は険しい斜面の谷だが、視界に入る尾根が小起伏で南北方向にえんえんと連なる様がよくわかる。尾根の小起伏の連なりは、飛驒・木曾・赤石の三山脈のいずれにも共通し、地学の専門家たちによれば、この状態は第三紀後半には形作られていたという。この状態は本場の欧州アルプスやヒマラヤにはない、日本アルプスに固有の状態である。見通しの利くこの素晴らしい眺望を、我々の祖先達も大勢で一緒に、すでに近世から楽しんできた。日の出や日没には太陽の光を受けた雲や稜線が金色に輝き、今日の我々もまたご来光には万歳を唱和、日没には西方浄土に合掌するのである。だから日本アルプスは、仏陀が人々を極楽に導く世界を思い描ける所であり、敬虔な仏教徒には教理を悟る所であっても、魔物の巣くう所ではなかった。

#### IV. 欧州アルプスやヒマラヤは第四紀の氷食作用の産物

日本文化の中で日本アルプスを論じるには、欧州アルプスやヒマラヤ山脈の自然の理解が不可欠である。それは、かの山々には日本アルプスとはまったく違う自然があるからだ。その一つが大規模に発達した氷食地形である。写真に見るとおり、氷食は稜線を両側から鋭く深く切り込み、獣の牙か鋸の歯の様に連なる。だから起伏が極端に大きい尾根の縦走などは、とうてい不可能である。もともとが大きな高度の山地を覆う積雪がまた深く、後氷期の今なお山岳氷河の侵食は活発である。近代欧州でもアルプス登山は困難を極め、多くの犠牲者を出しながら山の自然が次第に解き明かされてきたのは周知のとおりである。アルプスやヒマラヤの厳しい自然は長い間人々を寄せ付けず、見通しの利かない深い谷間は魔物の棲みかと思われ、信じられたのは不思議ではなかった。ヒマラヤの東、写真に示した横断山脈には今なお未踏の山がたくさん残っている。これら世界の屋根への登攀は今でも自然への挑戦であり、登頂は「成功」であり、自然の征服である。人々の観念・自然観の類似や違いを論ずるより先に、自然自体の違いを正確に認識しなければならないように思われる。

#### V. 日本アルプスと麓の人々・日本アルプスの登山はそんなに大変ではなかった

いっぽう、人里をはるかに隔てた深山というイメージと裏腹に、日本アルプスの登山はそんなに大変ではなかった。侵食が激しいから、登山口からしばらくは険しい登りの連続だが、これを過ぎいったん尾根へ出れば人々の前にはすばらしい眺望が広がった。そして安全な尾根歩きをしている限り、日本アルプスは危険な所ではなかった。冒険家が命がけて魔物はいないと証明しなくてはならなかった欧州アルプスとの違いは実に大きかった。今日でも老若男女を問わず大勢の人々がご来光を拝みに自力で尾根上にやって来る。

飛驒や信濃の麓からは、北アルプスがよく見える。軽井沢や小諸はもちろん、諏訪盆地や長野盆地からさえ、アルプスの眺望が楽しめる。大規模な氷食地形こそ発達していないが、周辺地域に比べるとアルプスの積雪は多い。秋の終わりや春の初め、冠雪や残雪は麓の人々に季節推移の区切りを告げ、雪形の消長は農作業の目安となってきた。それで登山でも日々の暮らしでも、日本アルプスは麓で暮らす人々には、畏怖されるより、親しまれる場合がはるかに多かった。

## VI. 火山と山岳信仰

大型の火山の富士・御岳・立山・そして白山はいずれも中部地方にあり、またいずれも3,000米級の高山で、いわゆる信仰登山で知られている。これら火山はどれも若く、活動中か、過去の活動が人々によく記憶されている。熱湯やガスの噴出や植生のない景観は人々に賽の河原の名のとおり地獄を容易に想起させた。けれども好天下の素晴らしい眺望は仏陀の導きで到達可能な天上世界で、日本では、地獄とならび来世もまた可視だった。日本の山の名前には、農作業の目安や、昔話の人物の名や、日常生活で常に接する動物や、仏を助ける神々の名に因むものが大変多い。日本では観念の世界より、具体的な日常生活の延長が高山だったのである。火山もまたそうであった。信仰登山という用語には、人々の日常生活と山とを分離し、山を理念や観念の中だけで扱おうとする意図が感じられる。これは筆者には同意できない。

## VII. 信仰登山の由来と結論

いわゆる信仰登山の始まりは奈良・平安期まで遡れるようである。多くのところで、日本の伝統文化は自然との一体化を重んじると説かれ続けてきた。それは、山も同じである、という。仏道を極めようとする人々は日常世界を離れ、山に籠って修行を重ねた。彼らはそうやって体を鍛え、集中力を養い、感性を鋭くし、僅かな自然の変化も察知できる力を身につけた。だからこそ彼らは天候の変化を事前に知り、危険な行動を極力避けることができた。こうして大勢の人々を安全に登山させる力を、仏道や神道修行の名の下に会得した。宿駅制度の定着で近世には旅が便利になり、行者達の意見で精進決済の儀式が簡略化され、集団登山が実現した。登山者は自分の講仲間を代表し、護符を持ち帰るため全国からやってきた。だから、集団登山の背景には、行者達の、訓練で得た深い自然認識と、民衆の、信仰よりもむしろ、現世利益の追求があった。

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