EAGLE COUNTY CLIMBING COALITION

An Ethical Framework for Via Ferrata

Principles for the construction, design, and application of routes

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Introduction

Every practice in the climbing family carries an ethic. Climbers have argued over pitons, bolts, chipped holds, glued flakes, fixed ropes, and retro-bolted routes for as long as the equipment to do these things has existed, and out of those arguments came a code that is largely unwritten, locally enforced, and broadly shared. The code has never demanded zero impact. Bolts, fixed anchors, rappel stations, and approach trails are all permanent alterations the climbing community accepts. What the code demands is justification.

The object of that justification deserves precise statement. In every practice climbers recognize as climbing, passage through vertical terrain is not guaranteed, and grades exist to describe how difficult it is to secure. Climbing's ethic is the counterpart of that uncertainty. Grades describe the uncertainty that remains on a route. Ethics govern who may reduce that uncertainty, by what means, and at what cost to the rock and to other climbers. The clean climbing movement of the 1970s argued that protection should leave the rock as it was found. Reinhold Messner warned in 1971 that unrestrained bolting would engineer the impossible out of climbing altogether. Both arguments concern the same thing: how much uncertainty a climber may remove, and who bears the loss when it is removed.

Via ferrata is the most engineered reduction of uncertainty in the climbing family. A single route may involve hundreds of drilled anchors, continuous steel cable, iron rungs, and sometimes ladders or bridges, and it is built to remain for decades. The practice is not new. The International Climbing and Mountaineering Federation (UIAA, from

its French name, Union Internationale des Associations d'Alpinisme) identifies fixed aids on the Dachstein dating to 1843, and the fixed lines built through the Dolomites during the First World War were later restored for recreational use. In the United States, however, via ferrata is young, and its builders work without a shared ethic.

This paper sets out a suggested ethical framework for the construction, design, and application of via ferrata. It is written for builders, for land managers, and for climbers who will be asked to accept new via ferrata near the rock they value.

The twelve principles below are arranged in the order a builder encounters them: the character of the rock, the claims that constrain building, the purpose building serves, and the standard to which routes are made.

The rock

PRINCIPLE 1

Not all rock is sacred.

The value climbers assign to rock often derives from its climbing lines, its structure and quality, and its history. Much rock possesses none of these. Loose, fractured, and friable terrain constitutes a far greater portion of most cliffs than does rock of climbing quality. Climbers themselves routinely look down on such rock, dismissing it as choss. To extend climbing's reverence to all rock is to confuse the value of good climbing with the material that occasionally supports it.

This principle is not an argument for indiscriminate development. It is an argument against indiscriminate preservation. A historic climbing wall, a roadside band of fractured stone, an undeveloped face of exceptional quality, and a choss pile of loose, decomposing rock are not interchangeable resources merely because each is made of rock. Principle 1 removes a blanket prohibition and replaces it with the specific constraints that follow, several of which are stricter than those climbers ordinarily apply to themselves.

PRINCIPLE 2

Not all rock is suitable for roped climbing.

Much rock can be protected, if not with removable gear then with bolts, but protection alone does not make rock suitable for roped climbing. Rock may be too loose to be climbed safely, too fractured to form a coherent line, or too broken by ledges or extreme variations in difficulty. In these cases, it does not warrant roped climbing. Such terrain may nonetheless merit passage, and via ferrata, which supplies its own holds, is frequently the only practical means of providing it.

It is important to consider that rock unsuited to roped climbing is not necessarily open to any use. Ecological, cultural, and scenic values may still govern it. It falls, however, outside the protection the climbing ethic extends to climbable rock.

PRINCIPLE 3

Poor-quality rock can be improved with care.

Rock unsuited to roped climbing retains value, and the conditions that rule it out for roped climbing are often the ones via ferrata can address. Loose material can be removed and hazards mitigated. Fractured, ledgy, and broken sections can be linked into a continuous line. Extreme variations in difficulty can be evened out with hardware, and short bands of rock can be joined into a route of real length. Through this work, such terrain may be made both functional and beautiful. Rock that holds little appeal for roped climbing can, with craft, become terrain people want to climb. Where a choice exists, this is the rock via ferrata should seek out first.

What to protect

PRINCIPLE 4

Never build on established or historic climbs.

Not all rock is sacred, but climbing's history is. The first ascent is among the most deeply regarded acts in climbing. It records what the first ascensionist faced, and by what means, and it becomes the standard against which every later ascent is measured. Climbers honor that history and preserve it through route names, guidebooks, and the long-standing convention that an established route is not altered without the consent of those who made it. Hardware placed on or beside the line erases what cannot be recreated. A builder is not in a position to override the claim of the first ascensionist, or the historical precedent established by the first ascent.

This principle is a parameter rather than an operational specification, and the rule stands as stated. Rare cases may arise at its margins where a rigid application would follow the letter of the principle rather than its spirit. Such cases warrant the utmost caution. Departures are never assumed, and may require input from the first ascensionist or, where the first ascensionist cannot be consulted, the local climbing community.

Many historic lines appear in no published guide. Before treating any face as unclimbed, a builder should consult local climbers and whatever records exist.

PRINCIPLE 5

Avoid damaging future climbs.

A future climb is rock that would support a worthwhile roped line not yet established. Its claim is weaker than that of an established climb because it is speculative, but it is real. Each generation of climbers establishes lines that earlier generations overlooked, and a cable placed across a face may foreclose a route before it has been recognized. Avoidance is therefore the presumption. Adjacent terrain, or the broken ground between clean faces, can afford an alternative alignment, and the builder is conditionally obliged to seek it.

Avoidance is rarely absolute. A via ferrata that crosses a cliff will often pass through terrain of mixed quality, and some rock suitable for climbing may be used where the route requires it. The builder should lay out the alignment to preserve the strongest panels for future roped climbing, routing around them even at the cost of a longer or less direct line. The objective is a deliberate balance across the site, in which the route uses no more climbable rock than it must and leaves the best of it open. That balance must also recognize that via ferrata is itself a form of climbing, and that a route of quality will likely require some rock of higher quality.

PRINCIPLE 6

If damage to future climbs opens access to new, inaccessible climbing resources, the value should be weighed.

Preserving future climbs is the general aim, though not an absolute one. Where development opens access to climbing that could not otherwise be reached, treating every potential route as inviolable may preserve less climbing rather than more.

The weighing must account for the potential climbing opened, and other relevant factors, against the potential climbing lost. It must also consider whether the same access could be achieved without the damage, and whether the climbing opened was effectively inaccessible rather than merely inconvenient to reach.

These are matters of judgment. Climbing's ethics have always rested on judgment, and none reduces to a formula. The judgment rests with the builder, and it is only as sound as the builder's ability to read the rock, recognize where potential lines lie, and understand what the construction of a route demands. This is among the reasons builders should come from route-setting and development backgrounds, as outlined in Principle 9.

Purpose

PRINCIPLE 7

Via ferrata should build access.

Access has been the purpose of via ferrata since its origin, and it takes several forms. A via ferrata may provide access to place, carrying people through terrain that would otherwise demand substantial technical ability. It may provide access to climbing itself, for those new to the discipline and for those who no longer climb on rope. And it may provide physical access to climbing areas.

In this last sense, a via ferrata is a form of transportation. Like a trail, a bridge, or a fixed descent, it is infrastructure that moves people through terrain they could not otherwise cross. It reaches crags, connects climbing areas, furnishes descents, and replaces approaches that are otherwise dangerous or effectively inaccessible. A route built for this purpose becomes part of the climbing infrastructure of an area and serves the community whose rock it uses.

The value of a development is not measured solely by what it alters. It is measured also by whom it serves and where it allows them to go.

PRINCIPLE 8

Seek highest and best use (e.g., public resource, climbing infrastructure).

The phrase is borrowed from land appraisal, where it names the use that produces the greatest value from a parcel. Here it names the reasonable use of a body of rock that produces the greatest durable public value without unnecessary loss of other significant values. It is not an economic measure, and it does not hold that every cliff should be developed to maximize recreation.

Every body of rock admits of a best use. For exceptional traditional terrain, that use is traditional climbing. For rock unsuited to roped climbing, it may be via ferrata. For a short section of unremarkable rock that guards an important climbing area, it may be access. For cliffs of ecological, cultural, geological, or scenic significance exceeding any recreational value, it is preservation without development.

Highest and best use does not privilege via ferrata; it disciplines it. The question is not whether a via ferrata can be built on a given face but whether via ferrata is what that face is best suited to. A route that serves the public holds the strongest claim.

The builder and the route

PRINCIPLE 9

Builders should have route-setting backgrounds (e.g., gym, development).

Designing a via ferrata is a far greater undertaking than equipping a climb. A bolted route protects movement the rock already provides; a via ferrata creates much of its movement through the placement of its infrastructure. That work requires three forms of understanding:

- **Movement** governs how the route climbs: the spacing, position, and orientation of holds and rungs for a range of body types, the development of sequences, and where participants rest and commit.
- **Construction** governs whether the route can be built, whether it will endure, and whether it is safe: the placement of cable and clipping points, the management of transitions, and the consequences of a fall on every section.
- **The rock** governs the line itself: finding the correct line through the terrain and its exposure, using natural features where they can carry the route, placing hardware only where it is required, and avoiding damage to established roped lines and, where appropriate, future climbs.

As in any form of route setting, the quality of the route reflects the setter. A via ferrata, however, is set once and in steel. Its design must be resolved before construction and installation begin, and good intentions do not substitute for the competence to do so.

PRINCIPLE 10

Because of high infrastructure, routes should be like art.

The bolts of a sport route recede into the climbing. The hardware of a via ferrata is, in many ways, its defining feature. Infrastructure that central to the experience should be crafted, not merely installed.

To call a route art is to hold its infrastructure to the standard of fine work: the best available materials, precise fabrication and installation, and form considered as carefully as function. A climber who finishes the route, and a visitor who sees it, should recognize that it was thoughtfully designed and well built. Climbers have long regarded the placement of protection as a craft. The construction of a via ferrata, in which every piece of hardware is placed permanently and in plain view, demands that craft in its fullest form.

PRINCIPLE 11

Design should be intentional.

Intentional design begins with composition. A route should have a coherent line and a rhythm. The builder shapes an experience through terrain, determining where participants look, how the route unfolds, and how the cliff is revealed to them.

Each rung, anchor, and length of cable either serves a purpose or constitutes excess. Sound design employs the rock wherever it suits the intended difficulty of the route and introduces hardware where it does not. More hardware is not better design. Artificial aids should resolve a problem or serve the experience, not provide the most convenient construction solution.

A well-designed via ferrata integrates its hardware with the rock. Thoughtful consideration should be given to engagement with the rock itself where appropriate. Where rock and steel are joined in this way, the route rises above a mechanical ascent of hardware and becomes climbing in the full sense.

PRINCIPLE 12

If possible, routes should be instructive in climbing technique.

Because via ferrata is climbing, a route should, wherever possible, teach climbing technique. Where appropriate, allowing participants to climb on natural rock is itself instructive. This teaching does not rely on natural rock alone, however, and the infrastructure should be built with the same purpose in mind. As on a well-set gym route, the placement, spacing, and orientation of rungs can help develop proper climbing technique. A route designed with this intent imparts an understanding of climbing. Those who engage with a via ferrata should leave as better climbers.

Restraint

Restraint runs through all twelve principles. A skilled builder is defined not only by the ability to determine where infrastructure can be installed but by the judgment to recognize where it should not be.

Restraint means moving a line to protect an existing climb. It means leaving an attractive wall untouched because its climbing potential is unusually high. It means omitting a rung the rock does not require, and accepting a less dramatic route design because another section of the cliff carries greater ecological value. On occasion, it means concluding that a proposed via ferrata should not be built. Restraint is not opposition to development. It is the discipline that makes development defensible.

Conclusion

Via ferrata will be built in the United States whether or not the climbing community possesses an ethic for it. The question is whether it is built well, on appropriate rock, and for sound reasons.

The principles set out here answer that question in sequence. They begin with the rock, recognizing that not all of it is sacred and that some of it is improved with care. They protect what climbing holds in highest regard: its history, its first ascents, and the lines not yet climbed. They direct via ferrata toward its proper purpose, physical access to climbing and the highest and best use of the rock. And they hold the builder to the standard of both setter and craftsman, so that each route is composed with intent, built to endure, and able to teach those who climb it.

Taken together, they hold via ferrata to the same care the rest of climbing extends to the rock and its history. The objective is not to avoid changing rock at all costs. It is to ensure that when rock is changed, it is the right rock, changed for good reason, and changed well.

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