HILLARY MODEL, HILLARY MEDAL

Seth Sicroff

n 2015, Dr. Jack D. Ives was awarded the first Lifetime Achievement edition of the Sir Edmund Hillary Mountain Legacy Medal (SEHMLM). Both the usual SEHMLM, which has been awarded six times through 2015, and this special Lifetime Achievement edition are intended to honor the humanitarian legacy of Sir Edmund Hillary and also to encourage its emulation; the difference is that the regular award is intended to give a boost to mid-career workers in mountain development and conservation, while the Lifetime Achievement award is an expression of gratitude in recognition of a body of work that is more or less complete. In this case, Jack Ives has been formally retired since 1996, but continues to contribute energetically and substantively in the field of montology, where his impact is unequalled.

The question must inevitably arise, however, as to what aspect of Sir Edmund's achievement is emulated or mirrored in that of Jack Ives. One man was an adventurer, a celebrity, for years universally recognized as the epitome of heroism and unsurpassed physical achievement, who went on to complete dozens of infrastructure projects on behalf of the Sherpas of Nepal. The other is an academic, the preeminent montologist of our time, whose most tangible accomplishments have been his publications and his students. What is the connection between these two careers?

In the following pages I briefly recount the origin of the

SEHMLM, and review the elements of the Hillary Model of development assistance which the Medal is intended to celebrate and promote. I look at the issues of employment, motivation (gratitude, geopolitical concerns, environmentalism, humanitarianism, thirst for adventure), geographical scope and beneficiaries of projects, nature of the projects, modus operandi, and impact. I then summarize the qualifying accomplishments of those who have received the Medal to date, and explain how their surprisingly diverse modalities of development assistance represent the necessary and even predictable evolution of the Hillary Model.

I. BACKGROUND OF THE SIR EDMUND HILLARY MOUNTAIN LEGACY MEDAL

As one of the originators of the Hillary Medal, a founder of the Nepalese non-profit Mountain Legacy, which administers the award, and a member of the Hillary Medal Selection Committee, I can testify to both the rationale of the award as well as the inherent plasticity of that conception. My original idea came about in discussions with Empar Alos (later Empar Sicroff), in October 2001, as we were trekking the Everest trail, an area replete with reminders of Sir Edmund's efforts. The current Nobel prizes had just been announced, and I was thinking about the mixed legacy of the inventor of dynamite, and how much more fitting it would be for the world's supreme awards to be named after someone with a more consistently benign impact.

A Sir Edmund Hillary award, we thought, could also inspire people of all walks to challenge themselves, to seek adventure, and to undertake some project to make the world a better place. According to the Memorandum of Understanding that Sir Edmund signed along with Professor Teiji Watanabe in 2002, the Sir Edmund Hillary Mountain Legacy Medal "both recognizes Sir Edmund's life-long commitment to the welfare of



Sir Edmund Hillary
Mountain Legacy
Medal, showing
Guru Rinpoche
carving out the
beyul (sacred
hidden valley) of
Rolwaling with a
hand-held plow.



Dolpo artist Tenzin Nurbu, who was commissioned to draw the design for the Sir Edmund Hillary Mountain Legacy Medal. mountain people and their environment and also encourages the continuing emulation of his example. It is awarded for remarkable service in the conservation of culture and nature in remote mountainous regions." This wording appears also in the "Namche Consensus," the unanimous resolution of the 2003 Namche Conference ("Parks, People and Mountain Tourism"), organized by Empar, Teiji, and myself, which formally initiated the award.

In presenting the proposal, we reminded Namche Conference participants of Edmund Hillary's various humanitarian projects; we did not state, however, what exactly would constitute emulation of that example. The omission was not an accident. Hillary had appeared at a unique juncture in a unique corner of the world, at a time of great changes, and those changes have continued, ensuring that no one can ever substantially duplicate Hillary's achievement. And so, implicitly, we meant "emulate, mutatis mutandis" - in other words, emulate, while changing those things that need to be changed. One of those changes was elimination of the word "remote" from the rationale for the Medal: when even Namche Bazar (the gateway village of Sagarmatha National Park) has Internet cafes serving chocolate croissants, it is clear that remoteness has become an overly exclusive criterion. Nonetheless, as we continue to select Hillary Medalists from among candidates with increasingly diverse contributions, and circumstances continue to change, we should spell out what we are talking about when we speak of the Hillary Model of development assistance.

II. THE HILLARY MODEL OF DEVELOPMENT ASSISTANCE

The general parameters of the Hillary Model would seem reasonably clear from what is widely known of Sir Edmund's career. Working with amateur collaborators, commercial sponsors, and host communities, Hillary initiated and undertook dozens of projects, nearly all in Sherpa districts of Nepal; these include

two hospitals, thirteen clinics, twenty-seven schools, two airstrips, two reforestation nurseries, several bridges, water supply and sewage systems, and repairs to religious structures. In many cases (most notably the hospitals at Khunde and Phaphlu), the projects entailed ongoing support; many of the schools were assisted temporarily after founding, before being turned over to government and local control. On the other hand, there were also ad hoc actions such as fundraising for the repair of monasteries, and (more dramatically) the distribution of medical supplies, information and care which are credited with halting a smallpox epidemic in 1963. These are just the better known of Hillary's contributions. Over the course of many decades Sir Edmund maintained close personal friendships with various Sherpa associates, which involved gifts and acts of generosity both small and large. Hillary lent his voice and his prestige to the establishment of Sagarmatha National Park. And there were repercussions from Hillary's climbing achievements as well as the direct assistance: for better or worse, the publications by and about Hillary contributed greatly to the expansion of tourism in Solu-Khumbu as well as Nepal in general. Edmund Hillary's impact is in many respects Promethean. Like Prometheus' gift of fire, Hillary's impact has had personal costs and negative consequences, but the general consensus is that the changes have been overwhelmingly positive.

Hillary's humanitarian efforts came at a watershed moment in the history of development assistance, and certainly contributed to the mainstreaming of many aspects of what I am referring to as the Hillary Model. For centuries, development assistance had been almost entirely self-serving, motivated by greed, fear, and cultural imperialism. The Romans built roads throughout their empire in order to expedite military movements. The British built the rail system in India primarily to expedite the extraction of plunder. The Marshall Plan helped rebuild Europe after World War Two, but the main goals were

to rebuild European economies in order to provide markets for American goods and to prevent the spread of Communism. Even evangelists and missionaries have had their own spiritual goals. Top-down, almost always unsolicited, self-interested: these qualities of previous international assistance programs were completely reversed in the work of Sir Edmund Hillary. But this departure from prior models does not in itself dictate a specific modus operandi.

From a purely practical viewpoint, it would be useful to be able to define that Hillary Model in a way that would facilitate the selection of Hillary Medalists. There are many potentially demarcative dimensions of humanitarian development assistance:

II-1. Benefactor Identity

Edmund Hillary became involved in his development work as a result of expeditions that were sponsored by foreign agencies and companies. Does it matter that he was a foreigner working in an area where he had no stake other than recreational? Does it matter whether the work in question was undertaken as a hobby or a paid job? Would it matter if a Hillary emulator is an employee of a government agency, a corporation, a university, or a non-profit?

These questions cannot be decisively answered without consideration of other factors, especially motivation and mode of operation. If, for instance, it seems important that the project be generated as an act of creativity by the same person(s) who carry it out, it would be unlikely that the project occur in the context of employment by a government agency, corporation, or any entity with a top-down organization. Even in the Peace Corps, the volunteers are normally sent into the field with specific instructions as to how to accomplish objectives that are identified at a higher level of hierarchy. If disinterestedness is critical, the Hillary Model would militate against projects

organized in one's own village, for the benefit of one's family and friends, but it is hard to see why it should be essential that the benefactor be foreign-born or somehow completely alien to the focal area; practically speaking, the *deus ex machina* is a species in short supply.

As a matter of historical fact, most foreign-initiated development work before Hillary's had been undertaken for objectives that were essentially inimical to local interest – whether mercantile, military, or evangelical. Even those works that were undertaken to propagate "good will," as Hillary perceived the Peace Corps' purpose, were in fact conducting Cold War by other means (Hillary 1964, 5–6). But is it necessary that Hillary emulation be entirely disinterested, entirely without ulterior or ancillary motive? Must it be unpaid, or perhaps even paid for out-of-pocket or through tedious fund-raising by the Hillary emulator him- or herself?

There seems to be a general feeling that good works should be unremunerated, despite the well-established rewards (both obvious and subtle) of altruism. Hillary made it clear that neither he nor his family and close associates profited directly from the Himalayan Trust projects (1964, 17–18); on the other hand (and this is important for our HM selection criteria), to my knowledge Hillary himself never implied or said that development aid work should be unremunerated.

In any case, the whole issue of compensation is unexcogitable: there are simply too many variables to consider. In Hillary's case, the activist was being paid by major companies for services that were made more valuable by his expeditions, whether recreational, humanitarian or mixed. He had teams of collaborators, including his brother and Zeke O'Connor, who were apparently compensated for at least some of their efforts. He was writing books based on his experiences, which sold quite well, and the value of his brand was also enhanced. However, he seems not to have profited directly from his development work.

Many of those involved in development work these days have regular employment as university faculty. They may carry out humanitarian projects in their spare time, but those will most likely be considered research or field work, and contribute to the long-term financial prospects of the professor. They may be working on paid sabbatical, or with the assistance of grants from organizations such as Fulbright, Guggenheim, or MacArthur. They may have revenue streams as consultants. They may be getting a substantial tax write-off. The U.S. State Department per diem allowable on tax returns for business-related time spent in Nepal, for instance, is \$161/day, and need not be supported by receipts for expenditures to that amount.

If Sir Edmund Hillary could carry on his projects on an amateur basis, that is because a professional adventurer has more flexibility with his or her time than most of us. Hillary's projects were also such that he could complete them in a matter of weeks. As time goes on, and basic infrastructure is not the most pressing need, development needs and development methods have become increasingly technical and multi-faceted. Many projects require full-time attention over much longer periods, and may even require years of specialized training beforehand.

With respect to his career as a developer, Hillary was arguably a hobbyist (in the sense of one who regularly engages in activity for pleasure, rather than as a job), even after he incorporated his non-profit agency. However, Hillary gave no indication that he would have objected to being paid, if adequate funding had been available. Whether he would have pocketed his development salary or plowed it back into more projects is immaterial. For historical, ethical, and practical reasons, professional or amateur status cannot be counted as essential criteria of the Hillary Model of development assistance.

II-2. Motivation

Logically speaking, the issue of motivation would seem important in defining a development model: the rationale for initiating the philanthropic project must be persuasive to those who are called on to collaborate, support, and imitate that effort. Characteristically, Sir Edmund never belabored such peripheral issues. In various contexts, he discussed factors that motivated his work, but he never proposed that a particular motivation is essential to the kind of development work that he preferred.

II-2a. Gratitude

In this connection, a recurrent theme in writings about Sir Edmund Hillary (including his own) is that Hillary undertook his development projects in order to "repay" the Sherpas of Nepal for their help in achieving his ascents (e.g., Ortner 1978, 14). In the preface to *Schoolhouse in the Clouds*, Hillary declares the motivation of the expeditions' "major program" – apart from the planned assaults on "two great unclimbed peaks":

We intended to repay in some measure the debt we owed to the Sherpas who live in the shadow of Mount Everest: we would build schools for them, pipe fresh water, and treat their diseases (Hillary 1964, v).

Cynthia Russ Ramsay quotes Hillary:

In terms more meaningful than money, we wanted to show our gratitude to the Sherpas – the high-altitude porters, cooks, and assistants from the village of Khumjung who had worked so hard for us in the mountains (Ramsay 2002, 76).

Elsewhere, Hillary commented on the proposal to build a school:

It was Urkein [sic; usually "Urkien"] Sherpa who first suggested that the greatest need in Khumjung was a school – and it seemed an ideal way for me to repay the Sherpas for the help and pleasure they had given me (Hillary 1975, 250–51).

On the face of it, this might seem a plausible explanation for Hillary's assistance, given the extraordinary services that Sherpas have rendered on virtually all modern Himalayan climbing expeditions, as well as the famous hospitality they have offered their clients in their home villages. But still it is a little hard to believe that any service rendered on Sir John Hunt's 1953 expedition and in the previous year's reconnoitering with Eric Shipton could have merited a payback over a period of more than half a century (continuing even after Sir Edmund's death), with an immense impact on the lives of thousands of Sherpas, not to say the entire nation of Nepal.

Just to be clear, Hillary does recount an occasion when a Sherpa saved him from serious injury or death. On one of his first days teamed with Tenzing Norgay, Hillary plunged into a crevasse and was saved by a timely belay from his partner (Sufrin 1966, 33). However, that really wasn't a game-changer: climbing partners save each other's lives all the time. Rescues are just part of the sport; Hillary notes that Tenzing was laughing as he hauled his partner out of the crevasse. On other expeditions, there have been harrowing rescue efforts, and instances of terrible sacrifices, but Hillary doesn't seem to have had any such experiences on his earliest Himalayan expeditions that might have left him indebted for life. The relationship between Tenzing and Hillary after Everest, while at least cordial, was not nearly as close as one would expect if gratitude for service were the motive behind Hillary's development work, and nearly all of Hillary's closest relationships with Sherpas began after 1953. In fact, the most specific statement of gratitude as a motivation for his development projects comes up in connection with Sherpa assistance in dealing with minor inebriation:

Feeling the need to relieve myself of the pressure of too much chang, I indicated to Mingma my intention to go outside. He said he would come with me, lest I fall over the wall... (Hillary 1999, 286).

That was in the village of Phortse, not on a climb. He then recounts the similar help that Jim Wilson received on a ten-minute walk between Khumjung and Khunde:

It was very dark, and [Wilson] admitted he was not especially sober. "But", he said, "it was no problem, my feet never touched the ground." A Sherpa on either side kindly gave him the dignified impression that he was walking upright while in fact carrying him all the way home to Mingma's (Hillary 1999, 286).

In the next sentence, Hillary goes on to address his motivation for the development assistance:

It was no wonder that Louise and I, and all the members of the Himalayan Trust, developed a great affection for Mingma and Ang Doule and indeed all the Sherpas. They gave us much help and friendship and in return we felt the need to assist them in obtaining the schools and medical facilities they urgently needed (Hillary 1999, 286).

The truth is, Hillary became drawn into these "repayment" projects in a rather roundabout fashion. Following the Hunt expedition, Hillary spent three years on Antarctic adventures. His return to Nepal materialized after he was contacted by Field Enterprises, when he was in the United States to receive an "Explorer of the Year" award from Argosy magazine. The publishers of World Book Encyclopedia wanted Hillary to do promotional and inspirational talks for their sales force. John Dienhart, Public Relations Director, liked Hillary's idea of doing a combined science and climbing expedition, and arranged for World Book Encyclopedia to finance a project that combined a yeti search with research on the physiological impact of altitude (and specifically the possibility of acclimatizing sufficiently to permit climbing at extreme elevations without oxygen); an assault on Makalu (8,481 masl) would test the theory (Hillary 1999). There are no published accounts that mention an intention, at this point, to repay Sherpas for past services. That is certainly not to say that Hillary did not have some such inclination or even an inchoate plan, but it was not on his avowed agenda when he returned to Nepal, seven years after summiting Everest.

Hillary's initial undertaking on behalf of the Sherpas was the Khumjung school. The story of the genesis of this venture comes up in the account of that first World Book Encyclopedia expedition, High in the Thin Cold Air, half of which is authored by Desmond Doig, and the second half by Sir Edmund (Hillary and Doig 1962). Doig narrates the yeti search, which was the lead-off project of this expedition. He first mentions the idea of building a schoolhouse in the context of negotiating with the "Khunde Major" (headman of Khunde and Khumjung) for permission to borrow the Khumjung "yeti scalp." In the "Articles of Agreement..." regarding this transaction, the Hillary expedition committed to the following in exchange for permission to remove the scalp for six weeks: one village member (Khunjo Chumbi) would accompany the scalp to Europe and America; a gift of 8000 rupees would be made o the Gompa at Khumjung for renovations; and Hillary and his colleagues would try to raise funds for a school that would serve Khunde and Khumjung. As Sherry Ortner relates the episode, the school plan would seem like a *quid pro quo* gesture, but not for past services - rather, an exchange for the commercially valuable loan of the putative yeti scalp (Ortner 1999, 197). The Himalayan Trust's Web page biography, "About Sir Edmund," suggests that the gesture entailed both generosity and practical reciprocity:

In 1960, Ed was in the Everest region leading an expedition studying high altitude physiology. At a high camp one night he asked Sirdar Urkien what, above all, would he like for his children and the Sherpa people. ... Urkien asked for a school in his village of Khumjung. A month later when the village elders gave him permission to borrow the yeti scalp from their monastery, they required in return that he build a school (Himalayan Trust, 2016).

In Alexa Johnston's "authorized biography of Hillary, the pragmatic aspect of the proposed project is unequivocal:

Village elders were extremely reluctant to part with the precious relic which brought prestige to their village and good luck with weather and crops. Ed brought to the negotiating table an offer to build a school at Khumjung and pay the salary of its first teacher. He didn't have the money to pay for it, but hoped that he might convince Field Enterprises to help with this and with airfares for those accompanying the yeti scalp (Johnston 2005, 190).

There was an additional point, not in the signed document, but stipulated orally: if the scalp was returned even one day late, Sirdar Dawa Tenzing, Urkien and Annullu (Sherpa members of the Hillary expedition) would forfeit "their entire properties and effects... to the village and monastery" (Hillary and Doig 1962, 89). It may be argued that Hillary did not believe this draconian outcome was a possibilility (although everyone knew that timing was very tight, and as it turned out the scalp was returned only hours before the deadline); but the great risk to the welfare of three Sherpa families seems inconsistent with a project motivated by gratitude to these very people.

In the same book, Hillary brings up the Khumjung school only in the last few pages (Hillary and Doig 1962, 232–237). Hillary says that the possibility of a school for Khumjung first entered his mind while he was in Rolwaling – in other words, during the first stage of the expedition, the yeti search. After a brief account of the building of the schoolhouse and a more comprehensive description of the dedication ceremony, Hillary and Doig leave Khumjung. Hillary's account leaves no doubt that while he intended to return, he had no intention of embarking on further development projects.

We climbed up to the crest of the pass toward Namche Bazar. From here we could look back and see the houses of Khumjung, the green potato fields, the giant Chortens and Mane Walls flanking the village, the gleaming wet rock precipices climbing up into the mist, and our little school, with the children waving at us from the veranda. Next moment a cloud of rain blanketed it all out, and with something of a lump in my throat I turned away and dropped down the long slopes that led back to civilization – promising myself as I did so that I would return some day to this village in the clouds, to enjoy the hospitality of its friendly mountain people and gain refreshment from their kindly philosophy; and to feel again the uplift of spirit and the quickening of the pulse as the eyes roamed upward and dwelt lovingly on the perpetual challenge of icy spire and rock tower, high in the thin cold air (Hillary and Doig 1962, 236–237).

Years later, when Hillary retold that same story in *Nothing Venture*, *Nothing Win* and in *View from the Summit*, he noted, "When I left Khumjung on June 13th I little realised I was leaving behind what was to become a new way of life for me" (Hillary 1975, 251; Hillary 1999, 261). Whatever his motivation

(top) Tsedam Sherpa, proprietor of Zamling Guest House and International Mountain Equipment, poses with dancers participating in the Khumjung School Jubilee. These children live at Tsedam's non-profit boarding house rather than walk many hours to school each day. Behind them is a bust of Sir Edmund Hillary, and the school itself.

(bottom) Sherpas crossing Syangboche pass, a half hour north of Namche Bazaar, before descending to Khumjung, where they will participate in the 2011 Khumjung School jubilee festivities. The primary school was Ed Hillary's first development project on behalf of the Sherpas, and was expanded to include high school facilities in 1982.





for undertaking that first school, it is clearly inaccurate to attribute Hillary's entire humanitarian career to gratitude for the Sherpa's assistance in getting him to the top of Mount Everest.

The solution to the paradoxical nature of Hillary's gratitude actually lies in the inexact meaning of the word itself, and the recursive nature of the kinds of experience we characterize as gratitude. We may be grateful for circumstances and even feelings with no transactional component; we may (and arguably should) feel gratitude for gratitude itself, a feeling that would be difficult to distinguish from "grace." Hillary touches on this broader sense of the word in recounting his feelings in the course of that discussion with Urkien at Tolam Bau. "Shivering a little in the cold," climbers and Sherpas were discussing the history and the future of the Sherpas:

In a warm flood of memory I dwelt on the many things we had gained over the years from our Sherpas. Not only help in the physical sense – so many loads carried here, so many risks taken there, or so many lies (alas) lost somewhere else. But few of us had failed to learn something from the character and temperament of the men themselves – their hardiness and cheerfuness, their vigor and loyalty, and their freedom from our civilized curse of self-pity (Hillary 1964:1).

A few pages later, Hillary states that his "main motivation" for the Himalayan Schoolhouse Expedition was "the deep affection and respect [he] had developed for the Sherpas over many years of Himalayan expeditions..." This is gratitude only in the most general sense: gratitude for the Sherpa's embodiment and validation of human values that Hillary already exemplified himself, and for some that he would need to cultivate more intensively, when tragedy struck hard.

II-2b. Geopolitical concerns

Hillary is initially skeptical about the value of education in a remote locale such as the Khumbu: he points out that there are no jobs for "sedentary" workers, and that a "full-scale educational program" would likely result in outmigration, as newly educated Sherpas left for easier work in the lowlands (Hillary and Doig 1962, 233). On the other hand, Hillary thought that a basic education – the ability to read and write – would be helpful: by letting Sherpas take more interest in their national affairs, and be more aware of social improvements in Nepal, an education could help inoculate them against Chinese propaganda. (I should point out that Hillary's concerns about the downside of education were subsequently alleviated, and he participated personally in the 1982 construction of a high school at Khumjung.)

Although one might suppose that Hillary would be unconcerned with Cold War politics, it stands to reason that he, like everyone else, would be intensely aware of the 1957 launch of Sputnik and the polarizing face-off between Communism and capitalism. This larger geopolitical motivation can be traced in certain of Hillary's accounts of the genesis of the first school house project, where it is apparent that Hillary has larger concerns than the current poverty of the Sherpa communities:

One evening, a group of us were huddled around a smoky fire on the Tolam Bau Glacier and the conversation turned idly to the future welfare of the Sherpas. "What will happen to you all in the future" I asked sirdar Urkein [sic]. He thought for a moment and then replied, "in the mountains we are as strong as you – maybe stronger. But our children lack education. Our children have eyes but they cannot see. What we need more than anything is a school in Khumjung village." For the first time there rose in my mind the determination to build a school for the Sherpas. It would

be the least I could do for my very good friends (Hillary 1999, 244–5).

It is significant that Hillary's question, elsewhere reported as an offer, is couched in terms of a discussion of the future. rather than repayment for past services (although those past services, and current comradeship, were undoubtedly factors). The uncertain future of the Sherpas weighed heavily on Hillary and Doig as they poked about in Rolwaling valley, not two miles from the Chinese border. The recent triumph of the Communist world in first reaching outer space with the ominously beeping Sputnik satellite posed a Damoclean sword over the free world. While Desmond Doig, in his account of the yeti search program, doesn't mention the seminal conversation with Urkein, he does write extensively about the Chinese specter. Not only were the Chinese purposely jamming expedition communications (Hillary and Doig 1962, 61-62), they also seemed to be mounting aurora-like displays and whizzing flashing lights that were apparently launches of "some form of rocket." Doig seriously speculates that the Chinese may already have launched a "Chinknik"! (Hillary and Doig 1962, 64) It seems likely that the recent Chinese invasion of Tibet, and the disruption of the traditional Sherpa economy (which depended on north-south trade) was the immediate point of departure for that conversation on the future of the Sherpas.

Hillary himself confirms that the Chinese threat was a factor motivating his interest in the school project. In his memoir of the second philanthropic expedition, Hillary writes,

My main motivation was the deep affection and respect I had developed for the Sherpas over many years of expeditions, but there were other reasons. I was not unaware, for instance of the increased penetration by Chinese Communist propaganda and money across the border and felt that the Sherpas should at least have some opportunity to see that Western society has its virtues and its opportunities

for growth and freedom (Hillary 1964, 15-16).

Lest anyone believe that Hillary's anxiety was pure paranoia, I strongly recommend Brot Coburn's *The Vast Unknown* (2013), which includes an account of the CIA-sponsored attempt to plant surveillance equipment on Nanda Devi, in order to spy on Chinese weaponry tests in Tibet; Barry Bishop, Lou Jerstad and other Everest climbers were recruited for this cloak-and-dagger adventure.

Hillary's reference, above, to Chinese Communist propaganda comes at the end of his most protracted excursus on development assistance, in the opening pages of the account of his first expedition planned specifically to build schoolhouses for Sherpa communities. He discusses the usual "massive" aid programs, and their failure to achieve the goodwill (much less the gratitude) of their intended beneficiaries, and he contrasts them with the American Peace Corps, which is palpably more successful at earning goodwill.

The importance of goodwill is frequently overlooked or ignored. We should not expect people to be continuously grateful for what is being done for them – the giver-receiver is always a tricky and dangerous one, and most aid is strongly flavored with self-interest. Whereas gratitude has something of inequality about it, goodwill is an active and growing idea that a proud man need not feel ashamed to entertain. One of the most successful creators of goodwill in recent years has been the American Peace Corps (Hillary 1964, 5).

Whatever Sir Edmund's early geopolitical ruminations, there is no sign of sustained commitment to national security or even pride. The success of the 1953 Hunt expedition certainly brought instant fame at least in part because it was seen as an enhancement of Elizabeth's coronation, as if a flag had been planted for another extreme outpost of the empire on which the sun never set. Nonetheless, it would be hard to read into Sir

Edmund's work any motivation to achieve anything significant "for God and Country" – or even just for World Peace.

II-2c. Environmentalism

Love of nature was a fundamental motivation for nearly everything Ed Hillary undertook, but he was not, from the outset, motivated by a consistent desire to protect the environment. In Hillary's first book, *High Adventure: Our Ascent of Everest* (1955), Hillary recounts the long trek toward Everest.

I was walking a little ahead, hunched miserably under my umbrella, when I saw a movement at the side of the track. Next moment a slender snake about two feet long wriggled across my path. My sole weapon was my umbrella. I lowered it quickly and leapt to the attack. Just as the snake was about to disappear inoffensively into the brush, it received a couple of fearful thuds over the head and expired. I picked it up by its tail and carried it triumphantly down towards a group of Sherpas. Their violent and terror-stricken scattering made me realize for the first time that the snake was probably poisonous (Hillary 1955, 25–26).

Even in retrospect, telling the story some years later, Hillary shows no contrition whatever about the pointless killing. In his view, and that of his contemporaries, this would have been just another minor act of bravado, like Hillary's gruff comment on descending from the summit of the world's highest mountain, a peak revered by many people as the literal abode of gods: "Well, George, we knocked the bastard off" (Hillary 1999, 34). Of course, sensibilities have changed since the fifties.

A more substantial sign of Hillary's insouciance regarding wildlife conservation was implicit in his approach to the yetihunt phase of the scientific expedition sponsored by World Book Encyclopedia in 1961. The objective was to determine whether the yeti was "a myth or a monster" (Hillary 1975, 235), but no serious thought was given to the ethical problems that

might materialize if it were shown to be a new species (or several). According to Desmond Doig,

Our ambition, of course, was to capture a live Snowman, though I am certain that none of us knew quite what we would do with the beast if we succeeded in making one prisoner. Hillary had more than once expressed himself opposed to keeping Yetis in captivity.

"I would be inclined to let the creatures go after thorough examination. I think there is precious little in civilization to appeal to a Yeti," he once said (Hillary and Doig 1962, 5).

At some point, Hillary's attitude began to shift. In the summer of 1962, Hillary joined a Sears Roebuck expedition, in his capacity as consultant and field-tester of tents and camping equipment. As a "treat," a moose hunt was organized, and Hillary obediently took aim at a "magnificent bull."

'Shoot him,' instructed the guide. With a feeling of reluctance I raised my rifle and fired... the animal jumped and then stood quivering. 'Quickly, shoot again! Shoot again! Shouted the guide... and shoot again I did – a fusillade of shots and the moose dropped to the ground.

I knelt beside the animal holding up the noble head and the great spread of antlers so they could take my picture. It was forty-eight inches across I was told – very good indeed – but not quite a record. I felt no triumph – only shame and disgust with myself. What right had I to destroy such a beast? We had used aircraft and tracked vehicles to chase it down. What courage, strength or skill had I shown? I resolved never again to carry out such senseless and cold blooded slaughter in the name of sport (Hillary 1975, 256–56).

As tourism increased in the Khumbu, Hillary was painfully aware of his own role in the degradation of the environment. The 1953 Everest Expedition consumed the remainder of a

vast supply of wood fuel (largely juniper shrubs) left over from the 1952 Swiss expedition, and cut more as well. Subsequent mountaineering expeditions quickly removed all shrubs from the high valleys. Lukla airfield, which Hillary had built, directly contributed to the explosion of trekking traffic, putting unsustainable pressure on the forests, both for timber to construct new hotels and for wood fuel (Hillary 1999, 357). In addition, the new wealth and the expansion of the Sherpa communities as well as the influx of outsiders led to a boom in housing construction, as younger members of the family suddenly had the means of establishing their own households.

Hillary was aware that Sherpas were not so concerned, early on, by the loss of forest cover, or by the trailside litter. In lobbying for the establishment of Sagarmatha National Park, he went against the wishes of most of the Khumbu community, which was strongly opposed to increased meddling by His Majesty's Government. With the initiation of the park, the Himalayan Trust undertook an ambitious reforestation project, planting over a million saplings, and achieving notable success in restoring a section of the denuded slopes north of Namche Bazar.

Clearly, Hillary did not start out as an environmental activist (an avocation that did not even exist prior to the consciousness-raising led by Rachel Carson and Lady Bird Johnson), nor did he get involved in conservation at the specific request of the Sherpas. Rather, he came to his role as a steward of Himalayan ecosystems both out of love for the mountains (and revulsion at the damage caused by mountaineers and other tourists) and also out of concern for the quality of life and the livelihoods of the Sherpa communities.

II-2d. Humanitarianism

From his first visit Hillary was concerned about the health problems of the Sherpas. There was extremely high incidence of infant mortality, death in childbirth, goiter and cretinism, alcoholism and cirrhosis, and trauma from falls and other accidents. Hillary's first schoolhouse expedition was delayed by an outbreak of smallpox which might have devastated the region (and beyond), but which Hillary's team effectively squelched with a remarkable emergency campaign. Over a few weeks' time, some 7000 people were vaccinated. Hillary often noted the serendipitous impact:

Of all the programs we carried out on the expedition-schools, waterworks, medical clinics and the like—the one most widely appreciated was undoubtedly the vaccination, and this hadn't been part of my original plans (Hillary 1964, 49).

Over the course of the next decades, Hillary marshaled an extraordinary, multi-pronged program to help the Sherpa community adapt to the disruption of their traditional lifestyle, and prosper to an extent unparalleled among previously impoverished and marginalized ethnic minorities.

As with his environmentalism, Hillary's humanitarian achievements are beyond question, but they emerged rather unpredictably. Hillary was never an extroverted "people-person." As a youngster, Hillary was a reader and a dreamer. His schoolteacher mother coached him at home, so that he advanced more rapidly than most children in school, and was smaller and weaker than his classmates. His father was a martinet who believed in corporal punishment (which, in retrospect, Hillary contended was largely deserved); Ed's mother believed that "you can judge people by the company they keep" and she didn't feel that most of my classmates had too much to offer." Young Ed wasn't allowed to take part in after-school games. Edmund's size and social inexperience became more problematic when he was accepted, two years earlier than was usual, to Auckland Grammar School, one of the more prestigious in the New Zealand. Alone, academically and emotionally confused, he ate his lunches by himself; he wryly recalled "watching the activities of a small ant colony.... By the end of the month I felt I knew these ants better than I did my fellow students" (Hillary 1975, 18ff).

Once Hillary started to grow, his lonely train trips to and from school became more exciting.

The horseplay and battles, the broken windows and smashed seats – nothing vicious about it – merely the side effects of violent youthful energy a little misdirected. I learned how to fight in the train, how to hurl my opponent into the corner of the seat a lie on him so he couldn't use any superior skill at boxing or wrestling (Hillary 1975, 22).

There is no hint of simmering misanthropy in Hillary's account. On the contrary, despite the years of fierce arguments with his father, Edmund maintained an underlying feeling of deep affection and respect for the man. It may be that his traumatic experiences, combined with a habit of introspection, enabled him to appreciate the point of view of others, and certainly contributed to his modest, moderately self-deprecating, view of himself, his nonchalant attitude toward authority, and his skepticism regarding conventional wisdom.

In any case, Hillary did not come to his development projects with a prior commitment to the welfare of all his fellow human beings. Even as an adult, Hillary was prone to resort to violence on occasion. He recounts with satisfaction an incident on one of his first expeditions, when he was helping extricate a truck from the mud; a crowd of smart alecks were standing by making jokes, which, though unintelligible to Hillary, nonetheless infuriated him.

I am, I think, fairly long-suffering, but I have my limits. After I'd carried seven or eight loads through the mud, my temper was starting to fray a little. I was returning to the truck, covered in mud from head to foot, when the well-dressed young man produced another smashing witticism.

It was too much! Behind him was a large ditch full of water. I took one step forward and pushed with all the energy of my pent-up feelings. His shriek of horror as he hurtled towards the water is still one of my treasured memories (Hillary 1955, 13).

This episode occurs in Hillary's account of the ascent of Mt. Everest, but there are similar outbursts even in the course of his philanthropic projects. In a diary entry, for instance, Hillary notes that the village of Pangboche is "terribly poor and the inhabitants notorious moronic" and wonders whether the planned school shouldn't be built in Phorche [Phortse] instead (Hillary 1964, 62). Hillary's handling of obstruction and theft was not unusual in the context of mid-century mountaineering expeditions, but would be questionable in the context of more recent approaches to philanthropy:

The man was so obviously lying and was so confident that nothing could be done about it anyway that my gorge rose. When he cracked a hearty joke with the silent ring of Sherpas round about I could stand it no longer. I leaped up and thumped him vigorously around the ears and knocked him down. He scrambled about on his hands and knees, trying to escape, and presented the seat of his pants to my irate gaze. Next moment I had delivered a mighty kick to send him tumbling down the hill into the darkness (Hillary 1964, 62).

Hillary records that his explosive tactics had their desired effect in Pangboche. In Namche Bazar, on the other hand, he tried to carry on despite the village's well-deserved reputation for "dishonesty, deceit and banditry" (Hillary 1964, 35); the school project there failed.

Unlike most humanitarian activists, Hillary was unblinking about both his tactics and his beneficiaries. In his preface to *Schoolhouse in the Clouds*, Hillary observes that "[the Sherpas] are good and bad, strong and weak, honest and dishonest like the rest of us. But few of those who visit can remain indifferent

to their loyalty, affection and charm, or unimpressed with their remarkable toughness and courage." (Hillary 1964, v) And (as noted below), he could also be quite scathing about the mixed results of his efforts to assist.

II-2e. Adventure

Unlike the other plausible motivations for Hillary's development work that we have been reviewing, "adventure" does not seem like a stimulus in itself. On the contrary, the pursuit of adventure would seem by definition solipsistic, and probably alien to a mentality that would choose to serve the basic needs of others. Conveniently, however, the motivation of adventure is a topic that has been studied by social scientists, and we can briefly review their findings to see what bearing they have on the Hillary Model of development assistance.

Cultural Anthropologist Sherry Ortner analyzes the mentality of Himalayan mountaineers in terms of social tensions and change, finding in mountaineering an implicit critique of modern "bourgeois" existence – ironically, despite its dependence on resources provided by that existence (Ortner 1999, 35). The critique of modernity has evolved over the past century. She cites Younghusband, and even Mallory, as attributing a spirituality to the "there-ness" of Everest, in contrast to the "crass materialism and pragmatism of modern life" (Ortner 1999, 36–37). Other elements of the critique include the assertion that modernity is noisy, routinized, boring, and soft, while mountaineering is difficult, dangerous, challenging (not just physically but morally), and forces climbers to see themselves as they really are.

While there may be a large measure of truth in Ortner's analysis, the critique of modernity seems an unlikely explanation for any given climb. Certainly the role of privileged revolutionary seems a poor fit for one of Hillary's background and demeanor.

In Mountain Experience: The Psychology and Sociology of Adventure (1983), sociologist and climber Robert Mitchell explores the question, "Why do people climb mountains?" Even if one limits one's inquiry to the motivation of mountain climbers (as opposed to anybody who for any reason might climb a mountain), the explanations are diverse. However, Mitchell's central answer is essentially "for fun," and more specifically, for the experience of what Csikszentmihalyi calls "flow" – an experience that is not limited to mountain climbing.

It is the state in which action follows upon action according to an internal logic which seems to need no conscious intervention on our part. We experience it as a unified flowing from one moment to the next in which we are in control of our actions, and in which there is little distinction between self and environment; between stimulus and response; or between past, present, and future (Csikszentmihalyi 1974, 58; Mitchell 1983, 153).

Mitchell further explains the three elements that constitute and potentiate the flow experience:

First, for flow to be achieved, it is necessary for freedom of choice among a wide range of uncertain outcomes to be possible. Second, the actor must creatively fashion from these myriad uncertainties some limited task within the limits of his or her perceived abilities. Third, he or she must achieve a level of involvement such that consciousness of the task at hand and the doing of it blend, that action and awareness become indistinguishable (Mitchell 1983, 154).

The key to enjoyment of flow is the short-term nature of the disparities in the balance of challenge and ability – in other words, of boredom (when the challenge is too small) and panic (when the challenge is too great). Mountaineering tends to be chosen as a pastime by people who view their usual circumstances (work, home life) as "predominately of alienating certainty or anomic uncertainty" (Mitchell 1983, 191). The special nature

of mountain climbing is the serial juxtaposition of extreme contrasts, of "delight and disappointment, hope and despair, cynicism and faith" (Mitchell 1983, 200). The playing out of uncertainties barely within the limits of one's perceived abilities results in a multi-dimensional emotional rollercoaster that is itself perceived as highly enjoyable – at least in retrospect.

I would add that there is another dimension to adventure that underlies its appeal. Any experience that can be cast as an adventure actually shares an important narrative structure with the myths (and from them the legends and the popular literature) that define all cultures. (See, for example, Propp 1968, Raglan 1936, Campbell 1949.) A challenge is posed, interrupting a relatively uneventful period of life; a hero (or prospective hero) must accept the challenge, marshal resources (often including collaborators), confront obstacles, travel to another world, overcome an existential threat, acquire a transformative boon, and return (again, confronting obstacles) to re-integrative rituals. Just as photographic clichés (sunset over the ocean, Eiffel Tower rising over Paris, self alongside celebrity) seem to coerce our duplication of them, the mythic narratives attract duplication. We feel the resonance, which we interpret as "meaning in life." It is important to stress that, while adventure is in a sense cliché experience, the obstacles and risks are real, and extreme discomfort (or worse) is part of the package. Just as Prometheus wound up shackled to a rock with an eagle ripping out his liver every day, Ceres must mourn the absence of Persephone half the year for all eternity, Achilles lost his beloved companion Patroclus, and Odysseus lost his entire crew, mountain climbers lose toes, close companions, and even their lives. The loss is not intentional, or even indispensable, but in retrospect the extreme cost is often perceived as validation of the adventure.

References to boredom, restlessness, and adventure are pervasive in Hillary's works. In his memoir Ascent: Two Lives Explored: The Autobiographies of Sir Edmund and Peter Hillary,

Sir Edmund begins, "I was a restless, rather lonely child and even in my teens I had few friends" (1984, 1). In high school and university, he found escape in reading and "dreaming of great adventures" (1984, 20). Dropping out of university as World War II began, he worked fulltime with his father's honey-making enterprise, which was exempt from military service. Even when it came to what might seem a hum-drum life, Hillary described bee-keeping in terms of adventure:

It was a good life – a life of open air and sun and hard physical work. And in its way it was a life of uncertainty and adventure: a constant fight against the vagaries of the weather and a mad rush when all of our 1,600 hives decided to swarm at once. We never knew what our crop would be until the last pound of honey had been taken off the hives. But all through the exciting months of the honey-flow, the dream of a bumper crop would drive us on through long had hours of labour (Hillary 1955, 2).

Apparently, the bee business did not provide high-enough adventure to hold Edmund's attention. "As time passed my thoughts turned increasingly to the air force again. While I realized that I was doing a useful production job I was becoming bored with hard routine work" (Hillary 1975, 31). When he was twenty, he went for a drive through the Southern Alps of New Zealand's South Island. "Strangely stirred... restless for action" he scrambled up to the nearest patch of snow, and returned to his resort "with an astonishing sense of achievement" (Hillary 1955, 2-3). That evening, observing a couple of young climbers surrounded by admirers, Hillary "retreated to a corner of the lounge filled with a sense of futility at the dull mundane nature of [his] existence... [He] decided there and then to take up mountaineering" (Hillary 1955, 3). After a couple of years working for his father's bee farm, Hillary enlisted in the air force (1984, 21). During his service and afterwards, he found more and more time to escape into the mountains.

For the rest of Hillary's life, adventure remained the central theme of his existence. There were expeditions by tractor in the Antarctic and by jet boat in Nepal and India, camping trips throughout North America, and literally on and on. In his foreword to *Nothing Venture, Nothing Win* Hillary notes that, even after the successful completion of a great adventure, he was "always too restless and life was a constant battle against boredom" (Hillary 1975, xiii). According to Alexa Johnston, Hillary's authorized biographer, Hillary wanted to title his 1955 book about the historic ascent of Mt. Everest *Escape from Boredom*, but the publisher convinced him that *High Adventure* would be more marketable (Johnston 2005,7; see also Ortner 1999, 322 n. 44).

The key point, for this inquiry, is that, whether rock climbing or negotiating ice falls or shooting rapids on a jet boat or skirting Antarctic crevasses on a tractor, Hillary's motivation for physical adventure outdoors was essentially the same as his motivation for development assistance projects. When he found that susceptibility to mountain sickness cut off his access to literally high adventure, it turned out that the projects that began with the Khumjung schoolhouse eight years after Everest offered surprisingly similar challenges:

My second illness on Makalu spelt the end of my career as a high-altitude climber. But I think it is very true to say that as one thing seemed to become impossible for me, other opportunities and other interests certainly developed. And although these interests were perhaps not as dangerous or as exciting as some of my previous ones, yet they were in many ways just as important challenges (Hillary 1999, 262).

At the end of *Nothing Venture*, *Nothing Win*, Hillary reflects on his life's path in terms that make clear the equivalence of adventure and development project:

Most of all I am thankful for the tasks still left to do – for the adventures still lying ahead. I can see a mighty river to

challenge; a hospital to build; a peaceful mountain valley with an unknown pass to cross; an untouched Himalayan summit and a shattered Southern glacier – yes, there is plenty to do (Hillary 1975, 308).

The equivalence of motivation can also be discerned in the structure of Hillary works. A distinctive aspect of most of Hillary's prose after the first expedition that included assistance to the Sherpas is the melding of recreational adventure narrative and development project narrative. In Schoolhouse in the Clouds the major episodes are the implementation of a water supply for Khumjung (Chapter 2), confrontation with smallpox (Chapter 3), establishment of a school in Pangboche (Chapter 4), the assault on Taweche (Chapter 5), the temporary clinic in Khumjung (Chapter 6), trekking (Chapter 7), schoolhouse in Thami (Chapter 8), assault on Kangtega (Chapter 9). The texture of the narrative is quite consistent: each episode involves a challenge, plan of attack, marshalling of resources and manpower, management of relationships, confrontation with obstacles, adjustments, more obstacles, more adjustments, climactic outcome (usually triumph, or provisional setback). In each case, the climactic event is a comparatively brief moment, while the bulk of the narrative dwells on the process of adventure: the grinding slog, the establishment of camps, management of restlessness in the face of inclement weather. Companionship is a key ingredient. Inevitably, the key to success is endurance and persistence beyond one's presumptive capacity. Indispensably, there is an appreciative audience, optimally a celebration of team and village collaborators, but also several generations of readers, and prospective supporters of future expeditions.

The equivalence is not simply formal. Hillary advocated for mountain adventure as a worthy motivation in itself, and appreciated the opportunity for mountain adventure that is offered by development adventure:

The Sherpas have given much to Himalayan mountaineering

and the mountains have given much to them in return. Not only have expeditions supplied a valuable source of income for the villages, but they have given the young men the chance to produce their finest qualities of courage and fortitude. Small aid projects such as mine have grown out of comradeship developed on the mountains. For these reasons as well as my own personal affection for the great peaks, I will always try to include an unclimbed summit in any expedition I may organize (Hillary 1964, 8)

One ingredient of the development adventure matrix, often overlooked in the narrative, is the obstruction of authorities. Whether due to the developer's naïveté or the authority's corruption, xenophobia, or Nepal's special brand of "aid fatigue" (not the usual donor fatigue, but resistance on the part of government officials and bureaucrats to development projects, and repeated appeals for donors to give cash rather than infrastructure or expertise), the upshot can be lethal to development efforts. Heydon (2014) alludes to several causes of resistance to Hillary's efforts, including the illegal ascent of Ama Dablam by members of Hillary's 1961 expedition team (Mike Gill, Barry Bishop, Mike Ward, and Wally Romanes). The original name of Hillary's organization, Sherpa Trust Board, was clearly problematic for an authoritarian government intent on squelching centrifugal impulses among ethnic groups. The name was later changed to Himalayan Trust Board, and then Himalayan Trust, but the focus remained on the Sherpas. Setting aside such specific issues, it is a fact that even such a renowned hero as Sir Edmund Hillary must inevitably confront obstruction for the sake of obstruction. The continual struggle for permission to proceed with humanitarian projects is, to say the least, dispiriting.

Nonetheless, looking back at the age of 79, Hillary concluded that the development adventures were actually more satisfying than the sporting adventures:

Achievements [particularly first ascents] are important and I have reveled in a number of good adventures, but far more worthwhile are the tasks I have been able to carry out for my friends in the Himalayas. They too have been great challenges in a different way – building mountain airfields and schools, hospitals and renewing remote Buddhist monasteries. These are the projects that I will always remember (Hillary 1999, 11).

More telling, in his writings Sir Edmund repeatedly proselytizes for adventure *per se*. For example, in the penultimate chapter of *Nothing Venture*, *Nothing Win* (1975), a title which seems as much an exhortation to the reader as a summation of his own experience, the opening paragraph directly addresses the reader:

Chapter 18

Adventures Galore!

'There's nothing left to do!' is a common cry you hear from all sorts of young people and it's sad in a way because you know the speaker must be closing his eyes to the adventurous opportunities that still abound. The world is full of interesting projects – if you have the imagination and resourcefulness to seek them out (Hillary 1975, 284).

This kind of exhortation is only odd if you consider that Hillary doesn't advise his readers to go to Nepal, to help the Sherpas, or even to make the world a better place. His one over-riding theme is that whatever meaning there is in his life comes from adventure, and particularly from comradeship in adventure. Love, family, homeland, and the beauty of unspoiled nature are present in his works as *values*, but in an incidental way. Hillary felt strongly that adventure is essential to human experience and must be actively pursued as a good in itself.

II-3. Geographic Scope and Beneficiaries

Charitable work can be focused in many different ways. It may be focused by geographical region, or by ecosystem type, or by some quality of the beneficiaries – gender, livelihood, ethnicity, social or natural circumstance, for instance.

The geographical scope of Sir Edmund's development assistance work is relatively narrow: for the most part the focus has been on the Sherpa homeland in Nepal, particularly the areas known as Khumbu, Pharak and Solu. The non-governmental organization that Hillary incorporated in New Zealand to assist his fundraising efforts was originally called Sherpa Trust Board, and renamed Himalayan Trust Board, later shortened to Himalayan Trust, without any commensurate broadening of the mission. Unlike other groups, such as the Himalayan Rescue Association, the Trust has endeavored to assist primarily the Sherpas (whatever their economic status), and only incidentally the tourists, researchers, and other groups (Nepali and foreign) who visit (or even reside in) the Sherpa homeland.

The rationale for the scope of Hillary's work is purely a matter of "elective affinity": while the Sherpas have had some difficult times, they are extremely resourceful, and are probably the single most prosperous ethnic group in Nepal and perhaps over the entire Himalayan region.¹

In terms of the Hillary Model, one would have to conclude that a narrow geographic focus is consistent with other

¹ Rogers reports that the Austrian INGO Eco-Himal cut back its activities in the Khumbu for this reason:

Other than its projects in the Thame area, Eco-Himal has decided to phase out its involvement with aid projects in other parts of Khumbu. According to an Eco-Himal representative I talked with in Khumbu in 1999, the Austrian government is no longer as interested in funding aid projects in Khumbu as it once was. The reason cited was that many Khumbu residents have grown rich over the years and it is difficult to justify continued aid for them when there are people in other regions of Nepal who have a much greater need for aid. The Eco-Himal representative noted that there were numerous Khumbu Sherpas who had become millionaires (as measured in US dollars) as a result of their involvement in tourism (Rogers 2007, 125).

strategic choices (long-term grassroots assistance as opposed to top-down, broadly distributed efforts) but that the choice of which specific area to assist would be a matter of personal choice. Given that the Hillary Model of development assistance is linked emotionally to adventure in relatively sparsely populated mountainous regions of countries that lack the resources to provide adequate stewardship of their own remote communities and ecosystems, it would seem reasonable to limit SEHMLM recognition to efforts in the mountains of Asia, Africa, and Latin America. On the other hand, as living conditions change, it may well be that there are other mountainous areas that also need the attention of Hillary emulators.

II-4. Nature of the Projects

Those who know even a little about Sir Edmund's development work are generally aware that he founded schools and clinics. There were also airstrips, water supply lines, and bridges. Foot trails, the key infrastructure element in a region with essentially no vehicles, were extended or improved. There was support for the restoration and improvement of cultural monuments (notably monasteries), teacher training, scholarships, special training for park wardens and medical and dental personnel. Hillary helped with the planning of the national park, which became a World Heritage Site (natural and cultural). His team confronted and defeated an incipient epidemic of smallpox. Hillary's groups have been active in the response to disaster, including the 2014 avalanche on Everest and the 2015 earthquakes.

What can we generalize about this array of projects? Most of them involved assistance with infrastructure of a basic sort, as well as attending to emergencies. They also happen to be tasks that an amateur with Hillary's particular skill set and special ability to recruit collaborators might undertake. Just as there are few areas with such a remarkable array of unclimbed peaks in close proximity to communities enduring such harsh

conditions, there are few places as utterly devoid of infrastructure as the Khumbu in 1960 – and few places have been transformed as thoroughly as the Khumbu in such a short time. Electricity, telephone, cell phone, sewers, television, Internet, and cappuccino have arrived. Sherpa lodgekeepers in Namche have homes in Kathmandu, cars, and children educated in universities around the world. Still the Himalayan Trust continues its work. Clearly, the Hillary Model cannot be limited to development assistance of the most basic kind, or to the sort of work a clever amateur might undertake, or to projects that will completely transform a culture or an ecosystem.

II-5. Modus operandi

The most comprehensive description of the Hillary Model of development assistance appears in William "Zeke" O'Connor's *Journey with the Sherpas* (2012). Like Hillary, O'Connor stresses the strategic advantage of the bottom-up "micro-aid" approach pioneered by Edmund Hillary, as opposed to the top-down approach being applied in the attempt to rebuild Afghanistan – when the goal is "goodwill, as well as development." He emphasizes these aspects of the Hillary approach:

- 1) **Ask locally.** Treat the locals as equals, who understand their own needs better than outside experts do.
- 2) Require local investment. Since locals generally do not have cash to contribute, they should at least contribute a large proportion of the initial labor. This "sweat equity" buy-in encourages not only community pride, but also the limitation of requests to those that actually have broad support.
- 3) **Stick with it**. Hillary teams return year after year to monitor and assist with staffing and maintenance.

O'Connor emphasizes also the contribution of the network that supported (and still supports) Hillary projects, including his own Sir Edmund Hillary Foundation, which drew important funding from the Canadian International Development Agency (CIDA) (O'Connor 2012, 205–207). Sir Edmund Hillary was the name that sparked the efforts, but the projects materialized through the collaboration of friends and family, commercial sponsors, government funding, independent donors, and the local community.

O'Connor's précis may represent the theory of the Hillary Model, but the actuality was somewhat more complicated. We don't have complete information about the formulation of project plans, for instance, but it seems clear that many were undertaken without a local petition, or even local discussion.

A notable example was the establishment of airstrips in order to bring in material for the construction of schools. Apparently, a Swiss pilot working for the International Red Cross approached Hillary to ask for help delivering aid to the Tibetan refugees who were fleeing in the wake of the failed 1959 uprising. Captain Schreiber agreed that if Hillary's expedition would clear a landing strip at Mingbo, he would fly in the aluminum sheets for the Khumjung school (Hillary 1999, 251; 1964, 2). The Mingbo airstrip was decommissioned soon afterwards because of safety issues, and the main result seems to have been that the Pangboche families who earned some cash for their labor on the strip were able to use their savings to avoid starvation when the potato crop failed in 1962 (Hillary 1964, 135). In 1965, Hillary decided to build another facility for similar purposes, and the result was the establishment of the airstrip at Lukla - now known as the Tenzing-Hillary Airport. The local people did participate to the extent that some farmers came forward and offered to sell certain fields, but there do not seem to have been any of the efforts to promote local empowerment that were described by O'Connor, presumably because the air strip was intended as a means to carry out other projects, not as a project in itself (Hillary 1975, 260). Whatever the reasoning, it is clear that "ask locally" was not a universal principal.

In another instance, Hillary derailed a plan to build an airstrip to service the prospective Everest View Hotel, a luxury resort planned by a Japanese-Nepalese company. The plan was to lay the strip right through the precious potato fields of Khumjung village, for which the villagers would receive compensation as well as food flown in from Kathmandu to make up for the lost potato producton. It seemed a "reasonable and generous suggestion," which had already swayed local opinion when Hillary called a meeting and persuaded them to renege.

If they gave up their village for an airfield what would happen to their pride and independence? They were now the focal point of a hundred thousand [sic] vigorous tough people – did they want to become a dependent bunch of pensioners, lining up each week for handouts of food? (Hillary 1975, 305)

It may be argued that Hillary was indeed right and everybody else was wrong, but Hillary's impact on development in this case, and others, was extremely potent, and not scrupulously consistent with the model sketched above.

Again, Sir Edmund lobbied strongly in favor of the establishment of Sagarmatha National Park, a move supported by the New Zealand government (and by Ngawang Tenzin Zangbu, abbot of Tengboche) but opposed by most residents of the Khumbu, who could see no possible advantage to themselves in allowing the government to take over local management of the forests, imposing regulations without local consensus, collecting

Upper image shows Zeke O'Connor (left) and Peter Hillary (right) at the Khumjung School Jubilee celebration. Zeke O'Connor is the founder and executive director of the Sir Edmund Hillary Foundation of Canada. In the lower picture, Peter Hillary chats with Zeke's daughter Karen, president of the Foundation.





entrance fees to be used for federal purposes, and establishing an enclave of lowland Nepalis in what had been a relatively homogenous Sherpa homeland (personal communication, Ang Tshering Sherpa, a.k.a. Ang Doma, Khumjung village headman, 1981). Hillary's longtime friend Konjo Chhumbi spoke against the park, scolding Hillary for his betrayal: "Hillary first brought sugar to the lips of the Sherpas, but he is now throwing salt in their eyes." (Ramsay 2002, 107) It may be that the park has been advantageous to the Sherpas, but neither the decision process establishing it nor the administration of the park have reflected the view that the locals are best able to manage their own development.

A further example of Sir Edmund's top-down approach to development decisions was his original intention to limit Sherpa schools to six grades:

Too much education could make the children misfits in the simple life of their community. They'd drift to the towns... too proud to dirty their hands with physical labor. ... Only those few pupils who made outstanding progress would be given more education with a view to filling the need for more teachers. (Hillary 1964, 23–24)

For the same reason, Hillary deprecated the idea of study abroad:

One generous American suggested we send several of the brighter boys to the United States, give them a thorough schooling, and then bring them back as teachers. Such a plan would be doomed to failure and would in fact only do harm to the Sherpa community. There is so little in common in standards of comfort, hygiene, entertainment, food and even local customs between a Sherpa village and an American city that although the students might well adapt to the latter, they would lose all interest in returning to the former (Hillary 1964, 168).

Hillary later reconsidered, and in 1982 the Khumjung primary

school was augmented to include the district's first high school.

The ideal of long-term oversight of development projects, a commitment that has been borne out in the case of the hospitals in Khunde and Phaphlu, turned out not to be practical in many cases. Schools were turned over to the government after five years, resulting in a dramatic drop in performance, and outright failure in some cases (e.g., Beding, in Rolwaling). Most of the original Hillary bridges failed eventually as well, and most have been replaced by other agencies. The point is not that Hillary's assistance work has been evanescent: quite the contrary, the man and his collaborators have been by far the most faithful benefactors of the Sherpas. But bottom-up development, especially in the absence of unlimited funding, is by its nature unpredictable. The problems include funding and staffing, maintenance of consensus among diverse stakeholders, resistance and interference from outside authorities, and failure to accurately foresee the future. Inevitably, flexibility trumps principle in many cases, and in others defeat and failure are to be expected. In fact, if there is one overriding value in Hillary's projects, it is pragmatism.

II-6. Impact

The impact of assistance of any sort is hard to quantify for the same reasons it is hard to predict. We know that the Hillary's projects transformed the Khumbu in fundamental ways. The clinics and hospitals mitigated widespread problems including goiter (with resulting cretinism) and childbirth mortality; the campaign that halted the incipient smallpox epidemic saved many lives and warded off an economic collapse that might have depopulated the entire district. Air access at Lukla shortened the trek to Namche Bazaar from about ten days to less than two, which meant that tens of thousands more people are able to visit every year. With tourism came a new economy, largely replacing both subsistence agriculture and north-south trade. Thanks

to the schools founded by Ed Hillary, the Sherpas were ready for the tourism boom: their competence in English and other languages as well as ability to learn modern business practices enabled them to profit directly from new opportunities, including the sponsorships of tourists who responded to qualities of the Sherpa character in exactly the same way that Sir Edmund had. The mere association of Sir Edmund's name and story with this remote corner of the world gave it a charisma that attracted not only recreational tourists but also a disproportionate number of researchers and philanthropic agencies.

The extent of the transformation for which Sir Edmund was largely responsible was far greater than he expected, and also qualitatively different. To begin with, he understood that "sustainability" (a concept not yet in the developer's lexicon) was a relative concept. In educating the younger generation, as noted above, Hillary intended to open only limited opportunities:

The Sherpa's finest traits have been developed in their battle against their tough environment. The last thing I would wish to do is to remove them from battle completely; better to put some sharper weapons into the Sherpa's hands (Hillary 1964, 169).

As the changes in Khumbu snowballed, Hillary expressed both regret and resignation:

Lukla has hastened the onset of officialdom and tourism into the Everest area. Already the Khumbu has received many of the 'blessings' of civilization – forests are being denuded; rubbish is piled high around the camp sites and the monasteries; and the children are learning to beg. The Sherpas have a hospital and half a dozen schools, and more work is available to combat the galloping inflation – but is this sufficient recompense? At times I am racked by a sense of guilt. My only consolation is that the traditional Sherpa way of life was doomed in any case, few societies can overcome the temptations that the civilized world has to

offer. We have helped the Sherpas retain their individuality – enabled them to compete in their new society. And if contact with the west has made them lose their traditional hospitality, their religious motivation, and their community spirit – who cares? Foreign money, they tell me, is a powerful panacea for such ailments (Hillary 1975, 263).

Of course, Hillary did care, and he realized his efforts were deeply appreciated.

II-7. Conclusion: The Hillary Model, simplified

Like all Promethean ventures, Hillary's work has been mythified to the point that defining a Hillary Model based on what we know of the actual work may seem disrespectful. However, any Model that is beyond the capacity (and even the intentions) of Sir Edmund himself, and that in any case is limited to a special set of circumstances, will not be especially useful as a set of practices for successive generations to emulate. We need to know what is essential, what is incidental, and what is simply counter-factual.

Regarding most of the parameters we have considered, I think we can afford to be quite radical, and pare away many non-essential factors. With respect to his career as a developer, Hillary was initially an amateur. He had no professional training, and was never directly remunerated for his efforts. However, as noted above, professional status is hard to pin down. The director of a non-profit organization may receive a salary... or not. Does that make a difference? Finally, development needs and development methods have become increasingly technical and multi-faceted. Once the basic infrastructure is in place, social engineering gets much more complicated. It is indisputable that the Khumbu today needs engineers, park administrators, and others specialists – even academics.

As far as motivation is concerned, Hillary did not come down from Mt. Everest with a burden of moral debt that he

needed to pay off. He did not feel that the Sherpas on his expedition were unfairly exploited, or that they had performed more heroically than the *sahibs*. He liked the Sherpas and their culture, and he was happy to help them. As a criterion for the Hillary Medal, I would just say that the activist should undertake work on behalf of people and communities that he or she likes and respects. Assisting people whose character and culture one deprecates is likely to backfire, and result in diminished goodwill.

A key element of the Hillary story is adventure. I have tried to make the case that for Hillary the development projects grew out of his career as an adventurer and that the projects themselves became a variety of adventure. But is adventure a necessary component of the Hillary Model? Would it be contrary to the model to undertake schoolhouse and clinic projects without a prior recreational experience in that area, hosted by the prospective benefactors? The fact that this question can reasonably be posed shows that there may be a basic misapprehension of the Hillary Model. The Hillary Model, as I use the term, is more about the life of the developer than about the work being done.

Edmund Hillary, like his son Peter and his great collaborator Zeke O'Connor, believed that adventure is absolutely vital to the human spirit. It is important to each of us, and to our society, for the values and emotions it awakens: curiosity, initiative, creativity, persistence, adaptability, pragmatism, loyalty, joy and courage. If Sir Edmund had recommended emulation of what we are calling "the Hillary Model," I believe that it would likely have been primarily for the good of the individual and only secondarily for the community or planet served by the development adventures. Yet our individual openness to challenge is indispensable to our success not only as individuals, but also as communities, nations, and species.

The relationship between adventure and development

takes multiple forms. It can occur in sequence, as in Hillary's case. The recreational adventure may lead to more recreational adventures, alternating with development adventures or periods of "routine life." Or, since recreational adventure can be experienced vicariously (through reading or learning about the great explorers, adventurers, or even friends and relatives), the development work can itself come first, with recreation sandwiched in, or simply combined. The recreational adventure may lead to a career related to that adventure (for instance, as a tour operator, perhaps with a distinctly green ethos), or to special training and then a professional career in development.

It should be emphasized, again, that the Hillary Model is essentially pragmatic. If one is undertaking a new sort of project, as occurred in the founding of a national park that included human communities that were not to be displaced, there may be no existing protocol with prescribed steps that ensure particular outcomes. Creativity and imagination will come into play, but not necessarily in a predictable or sufficient supply. Unforeseen consequences, regrettable or otherwise, are to be expected.

One final element of the Hillary Model: inspiration. People don't generally get into development work out of the blue. They read about – or hear about – the work of a Hillary, or a Scott MacLennan, or an Anatoly Boukreev, and decide to help out, or do something similar. Then their work may inspire someone else to start a project, without ever having heard about Sir Edmund Hillary. The purpose of the Sir Edmund Hillary Mountain Legacy Medal is to honor Sir Edmund by keeping alive and vivifying the awareness that adventure is central to the human experience and that there can be adventure in doing good things.

That brings us to the ultimate question: If the Hillary Model is not dependent on gratitude, or general concern about the welfare of our planet and all its denizens, or type of project, or years of commitment, or degree of success, then what kind of development work would be excluded? There actually is an answer. What is excluded here is the kind of development work performed strictly as a job. Work that is routine, with no adversity, no challenge, no need for creativity. Work that does not inspire others to emulate and even surpass. That kind of work may be necessary, but it doesn't earn a Sir Edmund Hillary Mountain Legacy Medal.

III. MODALITIES OF THE HILLARY MODEL EMBODIED IN THE WORK OF HILLARY MEDALISTS

Since 2003, when Sir Edmund authorized the Sir Edmund Hillary Mountain Legacy Medal and it was subsequently ratified by the "Namche Conference Consensus," the Medal has been presented six times. The first was presented jointly to Helen Cawley and Michael W. Schmitz, Eng. Subsequent editions went to Anthony John "Papa Tony" Freake (2005), Dr. Alton Byers (2007), Scott MacLennan (2010), Ang Rita Sherpa (2011), and Dr. Harshwanti Bisht (2013). In 2015, a special "Lifetime Achievement" version was presented to Dr. Jack D. Ives.

The humanitarian efforts, both for development and for cultural and natural conservation, that have been carried out by these recipients of the Hillary Medal are diverse and also representative of the basic elements of the Hillary Model of development assistance.

In many cases, the projects carried out by Hillary Medalists are quite similar to Hillary's own. By his own account **Anthony Freake** was directly inspired by the work of Sir Edmund. Tony was an avid climber and trekker, even serving as president of the UK section of the Austrian Alpine Club. In 1989, in the course of a trip to the Khumbu to climb Mt. Mera, Freake visited the village of Phortse (3800 masl). Located high above the main Everest trail, and across the river from the popular Tengboche Monastery, Phortse had benefited less than most Khumbu communities from the economic impact of the Khumbu's tourism

boom, despite an outstandingly beautiful setting. Tony experienced the same warm hospitality that had charmed Edmund Hillary, and he also saw the great needs.

Over the course of the next two decades, Tony and his wife Sheila visited Nepal twenty-eight times. Tony founded the Phortse Community Project (PCP), raised money and brought groups to collaborate with the villagers in infrastructure projects that transformed Phortse and earned Papa Tony the love of the villagers and admirers around the world. More than any other form of tourism, development tourism (including voluntourism) has a strong multiplier effect. Tony Freake's work became in itself a tourism attraction, as evidenced by the sidebar account in Lonely Planet's hugely popular *Trekking in the Nepal Himalaya*:

Local Hero

Everyone knows about the development projects founded by Sir Edmund Hillary, but fewer people have heard about the work done by Tony Freake, an English trekker who has made it is personal mission to raise the standard of living for the inhabitants of Phortse. Taking the principle that development should be administered by local people, his first project involved sending funds and plans for the construction of a boarding house for teachers at the village school in 1989. Three years later, the Phortse Community Project travelled to Phortse to build the village health centre, using donations from the Eton College Mountaineering Club.

In 1996 the Eton mountaineers raised £25,000 for the construction of Phortse Gompa, which was built using traditional techniques and materials, with the blessing of the head lama of Tengboche. In 1999 a new primary school was constructed and in 2004 the village got its first year-round water supply. One year later, a hydroelectric plant on the Konar Khola brought electricity to the village for the

first time. 'Papa Tony' was awarded the Sir Edmund Hillary [Mountain Legacy] Medal in 2008 for 'remarkable service in conservation of culture in remote mountainous regions' (Mayhew and Bindloss 2009, 129).

Tony knew that, without educational and recreational opportunities, the children of Phortse would have to leave home at an early age to be boarded at schools in Kathmandu, contributing to the disruptive outmigration that threatens many remote communities. Like Sir Edmund, whose work directly inspired him, Papa Tony was able to inspire others with the urgency of the task at hand. Thanks in great part to their work, and to the story of the charismatic benefactor, Phortse has emerged from the rain shadow of the established Everest trail and become a tourist attraction in its own right.

Helen Cawley and Michael Schmitz were chosen for the 2003 Hillary Medal for their work on the Tengboche Monastery reconstruction project. Theirs was first of all an adventure of the mind, a quest for deeper understanding of Tibetan Buddhism, which transported them to an otherworldly retreat reminiscent of Harrer and Aufschnaiter's seven year stay in Tibet. Working closely with Tengboche's famed abbot, Rinpoche Ngawang Tenzin Zangbu, Michael and Helen spent seven years transforming the monastery. The basic structure had been rebuilt

Upper image shows Anthony "Papa Tony" Freake, chatting with Namche Conference organizer Empar Alos at Sagarmatha National Park headquarters on Mendelfu Hill, Namche Bazar. In lower photo Papa Tony explains his Phortse Community Project to participants in the Namche Conference ("People, Parks, and Mountain Ecotourism"), in May 2003. Three years later Papa Tony was awarded the 2006 Sir Edmund Hillary Mountain Legacy Medal for his development work in Phortse.





and rededicated in 1994, five years after being destroyed in a fire. Schmitz and Cawley were asked to study the needs of the monastery in the face of increasing pressure from huge numbers of tourists, for whom the iconic site was the single most important way-stop on the Everest Trail. After in-depth discussions with the abbot, monks, local people, lodge keepers, police, Sagarmatha National Park personnel, trekking agencies, tourists and porters, they produced the Tengboche Development Master Plan. Among the projects undertaken and completed by 2003 were:

- a frost-free and safe supply of water;
- new toilet facilities:
- a satellite telephone system, particularly important for summoning rescue and evacuation helicopters;
- school, staffing, and funding;
- a porter's lodge;
- a pension and emergency fund for monks;
- new housing for the monks, and a new protective wall to ensure privacy for the monks;
- reforestation and forest protection;
- an Eco-Centre and Sacred Land Shop that welcomes and informs visitors, and also revenue to guarantee the sustainability of the monastery;
- a clinic in Namche Bazar staffed by an *amchi*, a doctor qualified in Tibetan Medicine;
- a medical herb plantation in Techo (on the way to Thame) to preserve endangered Himalayan medical plants and to create an alternative source of income as a counterbalance against the regional dependency on tourism.

The Tengboche project also provided a model and training for the subsequent Schmitz-Cawley adventure, the Thubten Choling Monastery Development Project, which they undertook at the request of His Holiness Trulshik Rinpoche, one of the teachers of the current Dalai Lama. Thupten Choling, near Junbesi, houses more than 300 monks who sought refuge there after fleeing Chinese oppression in Tibet. The project entailed construction of a large prayer hall, kitchen, dining hall, classrooms, printing press, library, water system, toilets and hydropower station. All construction was executed in classic Tibetan style. Like Ed Hillary and Tony Freake, Schmitz and Cawley have focused their efforts on a specific community, bringing to bear an astonishing level of expertise, painstakingly acquired, on projects that represented cutting-edge technology in the given context. They have done so through close consultation with a range of stakeholders, all of whom had well-defined needs and wishes, and the result has been a sustained adventure in grassroots development assistance.

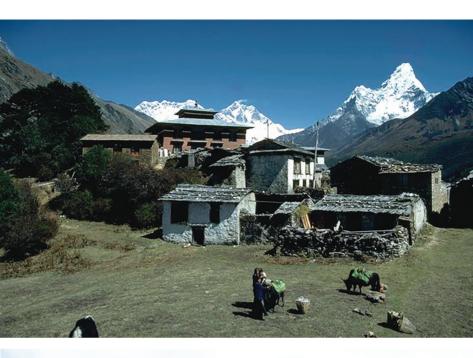
In 2010 **Scott MacLennan**, founder and Executive Director of The Mountain Fund, received the Sir Edmund Hillary Mountain Legacy Medal. MacLennan's story is an excellent illustration of the contagious etiology of adventure. Co-owner of an Albuquerque, New Mexico, enterprise that manages low-income housing, MacLennan, was not a climber, but he was invited by a childhood friend who had partnered with the late Russian climber Anatoli Boukreev to attend a memorial for Boukreev. There he met Linda Wylie, Boukreev's girlfriend, and through her learned about a small clinic that she and Anatoli had been supporting. The clinic was located in Goljung in the Rasuwa District of Nepal. In Scott's words,

Linda was about to leave for a Peace Corps gig in the Ukraine and asked if I'd be willing to fill in as contact person for this clinic – "just sort of keep an eye on things" – while she was out of the country. Naively, I agreed. Soon afterward a Nepali fellow appeared in New Mexico looking for "Miss Linda." He was from the clinic and bore news that the little operation was running out of money and facing closure. The guy lived with me for six months and talked



Above: Helen Cawley and Michael Schmitz, joint winners of the first Sir Edmund Hillary Mountain Legacy Medal, presented in recognition of their seven year project to renovate Tengboche Monastery. The Medal was presented by Peter Hillary and Tengboche abbot Rinpoche Ngawang Tenzin Zangbu. On the facing page, the upper image shows Tengboche Monastery in 1981, before it was destroyed by fire. The lower image shows Tengboche Monastery in 2003, after completion of the project.

every day about the financial need of this clinic. Finally, one day, over a breakfast burrito at the Frontier Restaurant I asked how much money was needed. When I heard that the cost of the clinic was about \$7,000 per year and that it served over 8,000 people I made the fatal error of exclaiming that such an amount was "chump change" and could be raised easily in the States. As it turned out, this blurt was taken as a commitment on my part to actually go out and get the chumps in question to contribute that change (Sicroff 2010b).





After an extensive fundraising campaign ("pestering [his] friends" and eventually founding his own non-profit, The Mountain Fund) MacLennan felt obliged to visit the clinic and "see what the heck I had gotten my friends into." He ended up marrying a Nepalese woman, Sunita, and together they spend half their time in New Mexico and half in Nepal. The work in Nepal includes the rehabilitation of two monasteries, the staffing of a public school, and the foundation of two clinics and a training hospital. MacLennan has set up a microloan program and a mobile medical voluntourism program; he established Her Farm, a working farm project in the hills west of Kathmandu, as a practical focus for a leadership Program for Nepali girls and women. The Mountain Fund has also served as a nonprofit incubator and "fiscal agent" for start-up NGOs. These are just a few of the many projects MacLennan has established both in the mountains and in gateway regions - not just in Nepal, but in Peru, El Salvador, and Pakistan as well.

My own first awareness of MacLennan's work came through Pepper Etters, a young mountain and river guide and photographer with plans to do graduate work in outdoor recreation science, who had joined Empar and me in 2000 for our first *Bridges: Projects in Rational Tourism Development* (Bridges-PRTD) field study expedition to the Khumbu and Rolwaling. A few years later, Etters led an expedition to provide Rolwaling with their first clinic and trained nurse. Scott MacLennan handled the in-country logistics and facilitated the construction and training; Pepper Etters returned home and, instead of studying outdoor adventure, became a physician assistant (PA). Adventures with Scott MacLennan have provided a similar life-changing inspiration for dozens of clients and collaborators (Sicroff 2010a). For Scott, "It's one great adventure. I do it because I can" (personal communication, March 2016).

Like Sir Edmund, **Dr. Harshwanti Bisht** found adventure in development work after a career in climbing. In 1981 Harshwanti Bisht, Rekha Sharma and Chandra Prabha Aitwal were the first three women to summit the main peak of Nanda Devi (7,816m). Bisht was also a member of the Indian expedition to Mt. Everest, in 1984. Bisht writes of that experience:

When I was in Khumbu with the 1984 Indian Everest Expedition, I saw the great effect of Sir Edmund Hillary's

November 17, 2010, RMIT University, Melbourne: Scott MacLennan, founder and director of The Mountain Fund, receives the Sir Edmund Hillary Mountain Legacy Medal from Peter Hillary. Also shown, Dr. Beau Beza (then Chair of Hillary Medal Selection Committee), and Sue Badyari (CEO of World Expeditions, a major sponsor of the Hillary Medal project).



work to conserve the natural environment and to bring economic opportunities to the Sherpa communities. So that inspired me to work in Gangotri, which is one of the holiest pilgrimage sites but faces many great challenges, both in protecting the environment and in serving the needs of the various stakeholders (Bisht, personal communication, 2013).

Now professor of economics at Government Postgraduate College in Uttarkashi, Dr. Bisht has labored since 1989 to improve conditions in the Gangotri area of Uttarakhand, at the headwaters of the Ganges in northern India. Her Save Gangotri project has planted tens of thousands of saplings, organized ecoawareness campaigns, propagated endangered medicinal herbs, and introduced ecotourism standards to an area that had been ravaged by climate change and unregulated pilgrimage. Dr. Bisht's development adventure, like Sir Edmund's, has entailed a grinding slog through bureaucratic obstruction, including a legal case in which she eventually prevailed.

Bisht has had remarkable success in restoring the birch forests around Gau Mukh (Cow Snout), the terminal area of Gangotri Glacier, ravaged by the double-whammy of unmanaged pilgrimage and mass-market tourism as well as climatic change. As the forests take hold, they have an increasingly significant impact in augmenting humidity and lowering local temperatures. According to Kumar Mainali, president of Mountain Legacy and editor of Himalayan Journal of Sciences, this labor-intensive approach is an extremely positive development:

Dr. Bisht's great contribution needs to be seen in the context of the Chipko Andolan, the movement of village women who used to place their bodies in the path of large-scale commercial timber operations in an effort to empower, or recover the power, of local forest managers. That grassroots movement inspired similar actions around India, and had a significant impact in slowing the rate of deforestation. Dr.

Bisht's plantations are located in Uttarkashi district, adjacent to Chamoli, epicenter of the Chipko movement. Like the Chipko heroes, Dr. Bisht is showing that the action of a committed woman can make a difference against forces that seem irresistible. In this case, Dr. Bisht and her colleagues are reforesting the ancient birch stands alongside Gangotri glacier, creating a slightly cooler microclimate that Dr. Bisht hopes will slow the glacier's recession. Like all new grassroots efforts, it sounds quixotic, but it is not. If we don't pitch in and help, our loss will be incalculable (Sicroff, 2013).

In 1994, Dr. Bisht published Tourism in Garhwal Himalaya. This monograph is a blueprint for integrated mountain development, embracing a full panoply of opportunities, objectives, challenges, and action proposals. One of the key findings of Dr. Bisht's study is that there is a convergence between pilgrimage and adventure tourism, in terms of destinations as well as amenity requirements. Her chapter on "Elements of Adventure Tourism" begins with the point that "Mountains are sacred because they possess beauty and they inspire mankind to meditate and grow spiritually" (Bisht 1994, 33). She finds not only that adventure tourists are increasingly pursuing goals similar to those of traditional pilgrims, but also that a large proportion of self-identified pilgrims actually share the values of secular tourists. Travel for them is not intentionally painful, and self-abnegation does not apply to infrastructure, waste management, or safety:

The meaning of pilgrimage was to renounce the material world and sought nature's balmy effect on the troubled souls. Present day Pilgrimage is absolutely changed. Today even pilgrims ask for comfortable transport, accommodation, food and medical facilities (Bisht 1994, 100,102).

Dr. Bisht's publications, like those of Sir Edmund Hillary, have been vitally important in the propagation of her development efforts, and also in the promotion of adventure tourism in the Indian Himalaya. They also underline the importance of going beyond "asking locally." Like Sir Edmund, Dr. Bisht has a broader view of tourism development opportunities and perils than do the local communities so eager to plunge into the economic mainstream. Just as Sir Edmund reached out to the people of Khumjung to change their minds about plowing over their potato fields in favor of an airstrip, and worked with international agencies to establish a park in the Khumbu despite the Sherpas' fears of loss of control of resources (and even eviction), Dr. Bisht has had to face strong resistance to many of the measures she proposed. The Hillary Model of development must accommodate the reality that, when it comes to science and especially to slow processes of environmental change and degradation - the worm's-eye view must be supplemented by top-down education.

For her ongoing efforts, Dr. Bisht was awarded the Sir Edmund Hillary Mountain Legacy Medal in 2013.

On May 29, 2011, at the Golden Jubilee celebration of the Khumjung School, Peter Hillary presented the fifth edition of the Sir Edmund Hillary Mountain Legacy Medal to a friend of the family. **Ang Rita Sherpa** is the son of Ang Dooli and Mingma Tsering of Khunde. Mingma was Sir Edmund's sirdar, his closest comrade and foreman in the early development

March 17, 2014, ICIMOD headquarters, Kathmandu, Dr. Harshwanti Bisht receives Sir Edmund Hillary Mountain Legacy Medal. Upper image, from left: Uma Khakurel, Director of Highland Excursions; Peter Hillary; Dr. Harshwanti Bisht; Dr. Kumar P. Mainali (President of Mountain Legacy) Lower image, from left: Uma Khakurel; Dr. David Molden, Director General of ICIMOD; Dr. Harshwanti Bisht; Peter Hillary; Amelia Hillary, daughter of Peter Hillary.





projects; the two families are still extremely close. Here is Peter's introduction:

I am delighted to be here to introduce Ang Rita Sherpa. But before I do I just want to tell you that we have trekked with the Australian Himalayan Foundation from Phaphlu to Khumjung. And when I was in Phaphlu I asked Dr. Mingma Gyalzen [director of the Hillary hospital in Phaphlu] what is the most important thing remaining to be done in Solu Khumbu. And yesterday here in Khumjung we had another meeting in which we asked the [Khunde] doctors what is the most important thing remaining to be done in Solu-Khumbu. Now you might think that all these doctors would say that health care is the most important thing to be done. But no... they said education is number one. But education doesn't work without great teachers. Great teachers open up a world of possibility. And we're here today to celebrate someone who is a graduate of Khumjung School, and some great teachers, an old Hillary family friend, Ang Rita Sherpa. Ang Rita has dedicated himself to the management of remote mountain protected areas. We think that it's a marvelous thing that the Hillary Medal that was approved by my father about ten years ago goes to Ang Rita on the golden jubilee of Khumjung School. I'm sure that Dad would be thrilled that one of his scholarship boys from Khumjung School is receiving this award after an incredible career in national park management.

Very briefly, Ang Rita works for The Mountain Institute in Kathmandu [as Senior Program Manager for the Himalaya Program]. He was involved in the establishment of the Makalu-Barun National Park, the Khumbu Alpine Conservation Council, and much of this work has been adopted as a model for other parts of the world, including the Andes in South America, and more recently the Sacred Sites project here in Khumbu. Well, it gives me very great

pleasure to invite Ang Rita Sherpa to the stage to receive the Sir Edmund Hillary Mountain Legacy Medal (Sicroff 2011).

Ang Rita is a good example of the evolved perception of educational needs since Sir Edmund wrote that five or six years of primary school should suffice. Ang Rita has an undergraduate degree in Parks, Recreation and Tourism from Lincoln University, New Zealand, and he worked for nine months as a volunteer in the U.S. Parks Service (Yellowstone and Grand Teton National Park) before joining The Mountain Institute. He received his masters degree in Protected Landscape Management from the University of Wales in 2002. His thesis is entitled "Making Wilderness Area Management Sustainable through Ecotourism: A Case Study from the Makalu Base Camp of Makalu-Barun National Park, Nepal." And, speaking of over-achievers, Ang Rita is married to Ngawang Doka Sherpa, a Canada-trained dentist who runs the Namche Dental Clinic.

Ang Rita Sherpa was a key member of the task force that prepared for the establishment of Makalu-Barun National Park; his work included biological inventories, community consultation and boundary demarcation. In 1992, Mr. Sherpa was assigned to serve as Conservation Education, Tourism, and Natural Resource Officer for the Makalu-Barun National Park Project. In addition to initiating conservation education programs, he developed training program guidelines for local entrepreneurs, scouts and guides.

In 2004, The Mountain Institute and the American Alpine Club launched a project entitled "Community-based Alpine Conservation and Restoration of the Mt. Everest Alpine Zone" with the goal of protecting and restoring the fragile alpine ecosystems of Sagarmatha National Park and its Buffer Zone. As part of the project, the Khumbu Alpine Conservation Council (KACC) was formed with financial and technical support from The Mountiain Institute (TMI), the Small Grant Programme

(SGP) of the United Nation Development Program (UNDP), Argosy Foundation, and the National Geographic Society. Local participation has lead to improved enforcement of regulations, reducing fuelwood use and allowing slow-growing high altitude juniper shrublands and pastures to regenerate. Ang Rita was responsible for the implementation of this project in partnership with local Sherpa communities, government and non-government agencies, and recreational stakeholders. The KACC project has contributed to the development of a model for alpine conservation which has since been successfully applied to alpine regions in the Makalu-Barun National Park and in Peru's Huascarán National Park.

Ang Rita Sherpa was instrumental in the Sacred Sites of the Khumbu Region project, initiated by TMI in 2004. The main goal of the Sacred Sites Trail is to improve local livelihoods while strengthening cultural traditions in the Khumbu region of Nepal by expanding community-managed tourism in those parts of Khumbu that lie off the primary "Everest trail." Specific steps range from monument restoration to documentation of musical traditions to promotion of the use of cloth bags (rather than disposable plastic bags) for rice exchanges during Dumji festival celebrations

More recently, Ang Rita designed and implemented TMI's *Lake to Lake: Food for Enterprise Program* in Nepal's Karnali Zone. The program entails a panoply of projects, including promotion of apple horticulture, water sanitation, and conservation, designed to alleviate malnutrition in populations impacted by conflict as well as chronic food deficit.

From 1995 to 1997, Ang Rita Sherpa was responsible for transboundary exchange programs between the Tibet and Nepal. In 2002 he facilitated a community-based workshop for TMI's program in Tibet. The main objective of the workshop was to assess the potential for tourism growth in the village of Tedrum and surrounding areas and to recommend means of mitigating



Khumjung, May 29, 2011: from left, Dr. Beau Beza, then of RMIT University, Melbourne Australia; Peter Hillary (rear); Ang Rita Sherpa, recipient of the 2011 Sir Edmund Hillary Mountain Legacy Medal; Ang Doule, Ang Rita's mother and widow of Mingma Tsering, longtime friends of the Hillary family; Dr. Alton Byers, recipient of the 2006 Hillary Medal.

the effects of increased tourism on the cultural heritage and the natural environment. Tedrum is a religiously significant site, encircled by meditation caves, medicinal hot springs, and three monasteries that are especially important as they represent the only remaining centers of the Drigung ("Whispered Transmission") branch of the Kagyü Sect of Tibetan Buddhism. Nonetheless, the area currently had relatively low productivity

and a weak local economy due to high elevation, poor road access, a single-product economy, poor communications and low level of education.

Given the increasingly technical nature of both problems and solutions in fragile ecosystems that support human communities, development and stewardship are increasingly the province of academic institutions. **Dr. Alton Byers**, recipient of the 2006 Sir Edmund Hillary Mountain Legacy Medal, was a colleague of Ang Rita's at The Mountain Institute, serving as Director of Research and Education; currently he holds a position at the Institute of Arctic and Alpine Research (INSTAAR) of the University of Colorado, Boulder, and serves as co-manager of the High Mountains Adaptation Partnership (HiMAP). (Sicroff 2006)

Byers has a long and distinguished career specializing in integrated conservation and development programs, applied research and the establishment of mountain-based educational courses and materials.

Along with Ang Rita, Byers worked with local residents and the government of Nepal to establish the Makalu-Barun National Park and Conservation Area. From 1994 to 1996 he worked as founder and director of Andean Programs in the Huascarán National Park, Peru, and then directed the Appalachian Program and 400-acre Spruce Knob Mountain Center in West Virginia between 1998 and 2000, initiating conservation, teacher training, and community-based projects.

Dr. Byers has been a strong advocate of an approach incorporating applied research results into the design and implementation of conservation and community development programs. This stems from his earlier research projects in Nepal, where he demonstrated that the lack of such an approach and absence of reliable information had led to misunderstandings regarding human impact on the environment.

These misunderstandings resulted in scarce funds being applied to perceived problems that correlated well with a presumably politically correct agenda, while real problems in the same general vicinity were overlooked. One prime example was the assumption that trekkers, mountaineers and the local Sherpas were responsible for major deforestation verging on catastrophe. Dr. Byers demonstrated not only that this conclusion was based on false assumptions and political expediency but also that it had diverted attention from critical environmental damage that was occurring in the alpine meadow and subalpine ecosystems.

Byers went on to launch the Community-Based Conservation and Restoration of the Everest Alpine Zone Project with support from the American Alpine Club and the National Geographic Society. This has now become a Sherpa-directed project aimed at protecting and restoring the Khumbu's fragile alpine ecosystems from unregulated adventure tourism.

Alton Byers received his doctorate degree from the University of Colorado at Boulder in 1987. His chief advisor was Dr. Jack D. Ives, recipient in October 2015 of the first Lifetime Achievement edition of the Sir Edmund Hillary Mountain Legacy Medal. Ives is currently Adjunct Professor of Geography and Environmental Studies at Carleton University in Ottawa. Alone among recipients of the Hillary Medal to date, Ives has made all of his development and conservation contributions in the context of projects sponsored by academic institutions and international agencies – that is, he has not worked on his own, or with a non-profit founded by himself (as did Hillary, Freake, MacLennan, and Bisht) or as an employee of a non-profit agency founded by others (as did Ang Rita and Alton Byers).

Jack Ives had a distinguished career as a geomorphologist and glaciologist before broadening his interests to include areas usually associated with human geography, development

and other fields. Early research focused on the onset of glaciation and dynamics of glacial movement, avalanche mapping, and impact of cloud seeding. Jack and his wife Pauline explored large tracts of Northern Labrador. (Jack has always emphasized his great indebtedness to Pauline for support, assistance, and advice.) Later projects have ranged from the development of community-based trekking tourism in Lijiang (Yunnan Province, China) to the first scientific study of Glacial Lake Outbreak Floods (GLOFs) in the Himalayas and the initiation of efforts to reduce those hazards as well to mitigate the economic disruption of exaggerated claims regarding assumed imminent disasters.

In his statement on the selection of Jack Ives to receive the Sir Edmund Hillary Mountain Legacy Medal, Dr. Mainali observes that,

Sir Edmund Hillary's greatest achievement may be that he inspired us all to seek adventure and challenges in the mountains, and that those challenges can include doing something useful for the environment and for the people living there. Jack Ives, along with Prof. Bruno Messerli and many other collaborators, took the lead in placing the needs of mountain peoples and mountain landscapes on the global political agenda, so that it now seems natural to consider them, along with rainforests and coral reefs. (Sicroff 2015)

Like Edmund Hillary's, Jack Ives' trajectory from working-class schoolboy to the pinnacle of his field was launched by a thirst for adventure. Jack was born in Grimsby, a fishing port in Lincolnshire, UK; in his teens, he enlisted on two trawler trips that took him through arctic Norway and to 78° N in the Barents Sea. This experience fired his enthusiasm for mountains and the arctic. It also prompted him, as an undergraduate, to organize the University of Nottingham's first arctic reconnaissance, prevailing on his trawler friends to provide free transport to arctic

Norway. For the next three summers (1952–1954) Jack led a series of expeditions to the Vatnajökull area of Iceland, undertaking studies on the dynamics of glacial movement. These expeditions entailed close contact with isolated Icelandic sheep farmers, from whom Ives learned the importance of taking into account the local people's appreciation of their own history and environment. Like Sir Edmund, Ives learned lessons during his recreational and scientific adventures that came to shape his research and development work as a cultural geographer and montologist.

In 1954 Jack married Pauline Cordingley, and they emigrated together to Canada, where Jack earned a doctorate in geography at McGill University. Ives recently published a memoir, *The Land Beyond* (2010), focusing on his research expeditions in Labrador while he was director of the McGill Subarctic Research Laboratory. Following these adventures, Ives was appointed assistant director and then director of the Federal Geographical Branch. In this capacity, Jack organized seven interdisciplinary expeditions to the then barely known Baffin Island, which form the core of his most recent monograph, *Baffin Island: Field Research and High Arctic Adventure*, 1961–67 (Ives 2016). One of Jack's many lasting achievements was the establishment of a federal glaciology center, which is still in operation.

In 1967 Jack moved to Boulder, Colorado, as full professor of Geography and Director of the Institute of Arctic and Alpine Research (INSTAAR). Here he founded and edited the quarterly journal *Arctic and Alpine Research* (now *Arctic, Antarctic and Alpine Research*), and directed ground-breaking projects in the Colorado Rockies, including avalanche forecasting, mountain hazards mapping, studies on the ecological impacts of cloud seeding, and research and lobbying to create the Niwot Ridge Biosphere Reserve, in conjunction with the newly established UNESCO Man and Biosphere program. During this period,

from 1968 to 1975, Ives collaborated with the great German geographer, Carl Troll. As President of the International Geographical Union (1960 to 1964), Troll founded the Commission on High Altitude Geoecology. Jack succeeded Troll as president of this Commission, which drew him increasingly into worldwide mountain affairs; from 1972 to 1992 he alternated in this position with his close colleague, Prof. Bruno Messerli (University of Bern, Switzerland). Their comradeship led them into close cooperation with UNESCO and especially with the United Nations University (UNU) and Food and Agriculture Organization (FAO). In short, Ives moved from geomorphology and glaciology into the field of human geography. His major concerns are now human impact on the environment, mountain hazards, sustainability of mountain livelihoods, and highland-lowland linkages. In particular, he has been concerned with the protection of mountain communities from misguided and exploitative policies implemented by corporations, national planners, and international development agencies.

At Boulder, and later at the University of California at Davis, Jack Ives advised and later mentored an astounding coterie of international graduate students and post-doctoral fellows, who involved him in development projects in Nepal, northern Thailand, Ecuador, China, and eventually almost every major mountain system in the world. He founded the International Mountain Society (IMS), which, with the UNU and important support from the Swiss Agency for Development and Cooperation (SDC) (among others) published Jack's second journal, *Mountain Research and Development (MRD)*. The mission statement of the IMS, and by extension of *MRD*, is "To strive for a better balance between mountain environment, development of resources, and the well-being of mountain peoples."

Together, Pauline and Jack Ives published *MRD* for twenty years, and then transferred it, along with stewardship of the IMS, to colleagues at Bern University. Both the IMS and MRD



Ottawa, October 29, 2015: From left to right: Susan Gregson,
Assistant Deputy Minister for Asia Pacific, Department of Foreign
Affairs, Trade and Development, Canada; Pauline Ives; Jack Ives;
Seth Sicroff; Liana Sicroff; His Excellency Simon David Lambert
Tucker, High Commissioner of New Zealand; His Excellency
Kali Prasad Pokhrel, Ambassador of Nepal; His Excellency Sturla
Sigurjónsson, Ambassador of Iceland; Dr. Nimal Rajapakse, Vice
President (Research and International), Carleton University;
Kamala Pokhrel; Penny Tucker.

have been critically important in fostering international interdisciplinary research directed to the solution of complicated processes that have degraded the environment, threatened the sustainability of traditional cultures and livelihoods, and constrained economic and social opportunities.

A watershed achievement was Ives's organization of the two Mohonk Mountain conferences, particularly Mohonk II in 1986, focusing on "The Himalaya-Ganges Problem." Maurice Strong, later Secretary General of the United Nations Conference on Environment and Development (UNCED), also known as the Rio Summit, served as Honorary Chairman. The resulting Himalayan Dilemma: Reconciling Development and Conservation (Ives and Messerli 1989) is credited with derailing a juggernaut theory that blamed highland farmers for impending catastrophic deforestation, flooding, and political destabilization. With Maurice Strong's collaboration, Jack and his closest colleagues led the successful effort to include a mountain agenda in the Earth Summit report. A key element of the Rio+5 follow-up was the 500-page Mountains of the World: A Global Priority (Messerli and Ives 1997), which drew heavily on the MRD's archive of more than 550 published articles, as well as "the accumulation of 18 years of editorial experience and the sustained record of publication, participation in mountain field research, training exercises and conferences" (Ives 1998).

Chapter 13 of AGENDA 21 (the UNCED action plan) has been the gyroscope guiding international investment in development and conservation in impoverished mountain regions and highlighting the need to recognize and apply the invaluable knowledge of mountain peoples. Ten years after UNCED, the United Nations declared 2002 as the International Year of Mountains, approving an initiative proposed by the Kyrgyz Republic. During the 4th PrepCom, the final run-up to passage of Chapter 13 at Rio, the Ethiopian delegation to the UN invited Ives to join them during the final UN vote, in order to serve as their advisor in the General Assembly. Donald Friend, a contributor to this Festschrift, has stated that "Jack D. Ives, more than any other individual, is responsible for this international declaration" (Friend 2013). A year later, the UN followed up by declaring December 11 the date to be observed annually as International Mountain Day.

Since retiring in 1997, Ives has produced a number of significant monographs, including *Himalayan Perceptions* (2004),

Skaftafell in Iceland: A Thousand Years of Change (2007), Sustainable Mountain Development: Getting the Facts Right (2013), and most recently, Baffin Island: Field Research and High Arctic Adventure, 1961–1967 (Ives 2016). As in many of Sir Edmund's books, the narratives interweave accounts of adventures in the field with more substantive material, and like Hillary, Jack takes his adventures seriously. Energy, willingness to accept challenge, persistence, flexibility, and comradeship (and collegiality) are critical to Ives' unparalleled accomplishments. He has remained close friends of the family of Ragnar Stefánson, whom he first encountered in 1952 (Ives 2007), and since 1968 he has personally assisted Tibetan and Bhutani refugee families, assisting with export enterprises and sponsoring children's education; one young woman earned two medical degrees and returned to Darjeeling to practice gynecology on behalf of an underserved community (Ives 2013, 41ff). Above all, Ives has cared enough to teach and inspire. He continues to support and participate actively in research and development projects being carried out by his fifty-five former graduate students as well as dozens of colleagues around the world. Among these, he believes that a vital development, considering the impact of climate change on the stability of glacier lakes in the Himalaya (for instance), would be the founding of an international interdisciplinary "disaster management university" in Kathmandu (Sicroff 2016).

Sir Edmund, in his final assessment, was clearly worried about the degradation of the mountains he loved.

Everest has also become an appalling junk heap... Regrettably our expedition was one of the first to set this miserable example and it is not much of an excuse to say we didn't know any better. Fortunately, matters are slowly changing. ... A sense of environmental responsibility is slowly creeping in (Hillary 1999, 367).

Jack Ives, too, has expressed mixed feelings regarding the state

of the world's mountains and the efficacy of his own efforts. Reviewing the results of Rio+20, Ives laments,

These meager outcomes after twenty years can only be described as pathetic. Years of discussion, field research, and publication stand in stark contrast to three bleak paragraphs. Where does one start to find an explanation? One can only ask, What has happened? (Ives 2013, 270)

Yet contemplating defeat and rising to renew the struggle is part of both the adventure of life and also the adventure of mountain stewardship.

... While Rio+20 at first glance risks being classed as a failure, one cannot escape the reality that there has been an enormous expansion of mountain awareness stemming from the tangible success of Rio 1992. Of singular significance is the rapidly expanding involvement of the mountain people themselves in asserting demands for appropriate treatment. We must still operate, therefore, on the assumption that, given the continuing growth in concern of all enlightened and committed "mountaineers," a secure future for the mountains will evolve for the benefit of the entire world.

Defeat, whether on the mountain or in development planning and conservation, is always a real prospect. Things may improve, but only with the slogging efforts of our visionaries, and a measure of luck. In the words of Sir Edmund's motto, "Nothing venture, nothing win."

IV. CONCLUSIONS

We have examined the Hillary Model of philanthropic development assistance in terms of a range of parameters, and in every respect we have felt obliged to prescribe flexible application of generalizations based on Sir Edmund's own career. The work in question may or may not be remunerated. The work may be undertaken in a professional capacity, or not. Projects may be

undertaken at the request of local communities, or they may be based on insights gained from research at a scale beyond the perception of those communities; in any case, they should be undertaken with the goal of safeguarding the interests and promoting the opportunities of the local population while fostering stewardship of the natural environment. The practitioner may or may not be consistently successful in achieving pre-defined objectives.

The key element of Sir Edmund's ideology is not humanitarianism or environmentalism (although these are important), or any political or spiritual point of view. The key is adventure: the willing exposure of oneself to risk and physical hardship in pursuit of a goal that seems intrinsically worthwhile. It is this sense of adventure that is applied to the practitioner's development and conservation efforts. The values required to survive and succeed are familiar: initiative, persistence, flexibility, creativity, loyalty, and courage. The expression of those virtues may be possible in some large-scale workplaces, perhaps even in a government bureau, as Jack Ives showed in Canada. But those values are more likely to be appreciated, or even tolerated, in projects managed by individuals or small organizations. That's a surmise, not a credenda.

In reviewing the achievements of our Medalists, we find that the projects seem to be escalating in sophistication, and that the feature that seems most endangered is grass-roots initiative. To be clear, that escalation may be less ineluctable than would seem from our review, as I have purposely arranged the dossiers thematically rather than chronologically. Nonetheless, it would be best to bear in mind the factors that constrain us to leave so much wiggle room in our definition of the Hillary Model (*mutatis mutandi*).

The first and most obvious factor is that, with or without the intervention of Hillary Model emulators, conditions on the ground are changing. Eventually all communities will have schools, clinics, water supply, bridges and access infrastructure – all low-tier factors on Maslow's Pyramid of Needs. Then they need better schools, better teachers, better health infrastructure, electricity, telephone, and other utilities. The projects require professional expertise, and government supervision if not implementation. Subsistence agriculture and bartering can no longer suffice, and a cash economy takes over. These changes are inevitable.

Given the scant economic opportunities of most mountainous regions (especially if one rejects extractive industries), and given the worksite preferences of humanitarian developers, recreational tourism will be a significant part of the economy, whether on a transitional or permanent basis. That shift suddenly entails a vastly expanded set of needs. Those needs will involve core-periphery cooperation, attention to highland-lowland linkages, expertise, and financing far beyond the means of the destination communities.

Just to be clear: in 1986 a glacial lake outburst at Dig Tsho in the Bhote Khosi valley above west of Namche resulted in a few dozen casualties, loss of several bridges, destruction of a new hydroelectric plant, devastation of scarce farmland, displacement of trails, and depressed tourism revenues for at least a year. (It also led to Jack Ives' recognition of similar dangers posed by an potential outbreak of Imja Lake.) Had the outbreak flood occurred at that same location today, the volume would have been much greater, and the impact infinitely more costly, as so many local families have invested in lodges and hotels that already are stressed by overly competitive market conditions and the seasonal nature of Khumbu tourism. A GLOF event at Imja lake, especially one that occurred in high season, would likely cause many more casualties, due to higher visitation rates, and catastrophic damage to infrastructure. The catastrophe would not necessarily be due to the replacement cost, but to the disruption of tourism traffic. A bottleneck anywhere between the Kathmandu gateway and Everest Base Camp would inevitably cause cancellations of packaged tours, mountaineering expeditions, and even independent trekking plans. Businesses and families far downstream would suffer. Fortunately, scientists (notably Dr. Byers) have been closely monitoring the volume and stability of Imja and other major threats.

Likewise, as the costs of unmitigated disasters increase exponentially with economic development, the risks of even rare or distant events (earthquake, climate change, political instability) are much greater (in terms of sustainability of livelihoods, for instance, or any other measure) than the risks of collapsing footbridges.

When it comes to tourism, the key assets are not strictly tangible. Unmanaged garbage on the trails, or tales of defiled camps on Everest, can undermine the value of a visit – even if there is little specific damage. If people *expect* a walk through pristine mountains, a few cracker wrappers may be enough for them to tell their friends not to bother – thereby ending the positive feedback loop of word-of-mouth on which tourism destinations depend. If they hear of one case, or a suspected case, of mugging, rape, assault on climbers for perceived violations of protocol, they can stop believing in the myth of the noble Sherpa, or the friendly Nepali.

And of course the linkages are such that every problem in Kathmandu becomes a problem for the highland communities. Undrinkable water, polluted air, filthy rivers, dysentery, bureaucratic corruption, persistent power outages, tangles of telephone and electrical wires, pushy touts, political demonstrations, spitting on the streets, chaotic transport – every problem becomes a deadly restraint on tourism trade, and an obstruction to the kind of opportunities Sir Edmund might hope would come with development.

Given the vastly widened ambit and interconnectivity of mountain issues, it is to be expected that the Hillary Model of assistance, and with it the Sir Edmund Hillary Mountain Legacy Medal, would countenance efforts seemingly quite unlike those described *in Schoolhouse in the Clouds*. The challenges are infinitely more complicated than those countenanced by George Mallory in his snippy riposte, "Because it's there." But when Scott MacLennan says, "I do I because I can," he acknowledges the same thirst for that tension between ability and risk that defines adventure, whether climbing a summit or reshaping the agenda of an Earth Summit or training girls to become leaders despite cultural inertia.

What efforts are worthy of a Sir Edmund Hillary Mountain Legacy Medal? The answer is not in what is done, but how. We must look for those familiar values: curiosity, initiative, creativity, persistence, adaptability, pragmatism, loyalty, joy and courage. ... and the ability to inspire new humanitarian adventures on the part of others. Judged on this basis, we can see a straight line of activism from Ed Hillary to Michael Schmitz and Helen Cawley, Alton Byers, Tony Freake, Scott MacLennan, Ang Rita Sherpa, Harshwanti Bisht, and Jack Ives.

We thank you all!

POSTSCRIPT FROM THE EDITORS

Since this article was submitted, Mountain Legacy has announced that the 2017 Sir Edmund Hillary Mountain Legacy Medal will be presented in Kathmandu on December 11, 2016, to Ing. César Augusto Portocarrero Rodríguez. It is most fitting that Mr. Portocarrero's award will be presented on International Mountain Day, in view of his notable efforts to globalize expertise pertinent to the mitigation of mountain hazards and adaptation to global changes in climate that are aggravating

the threats to mountain livelihoods, mountain recreation and mountain environments.

While Sir Edmund's own humanitarian efforts were focused on a relatively small locale, globalization was inherent in his approach to the amelioration of conditions in the Khumbu Himal. He applied his unique global charisma to rally worldwide public interest, financial support, and policymakers' priorities on behalf of recreational opportunities and development challenges in one spectacular landscape with a population of under 5000 people. Thanks to the efforts of organizations that were at least in part inspired by the work of Sir Edmund, including The Mountain Institute and the US Agency for International Development, Mr. Portocarrero has been able to project his expertise far beyond Huaraz, Peru, where he developed techniques for GLOF hazard mitigation and water resource management that are becoming critically important in mountainous regions around the world.

Mr. Portocarrero notes that he first read about the 1953 British Expedition as a child. It was a *Reader's Digest* story, and he was "completely impacted" by the stupendous efforts of the climbers

I read how Mr. Tenzing used to train for the climbing carrying bag packs loaded with small rocks. When I went for the first time to the Khumbu valley on the road to the Everest base camp I was amazed at the huge effort involved in just reaching Lukla village when there was not yet an airport. Then there was still the long trek to Mount Everest. This effort, just to be there for the final challenge, this effort is what stuck in my head and what I have thought about for so many years when the project seemed just too tough, too many obstacles, too many chances to fail. Tenzing's rocks and Hillary's great effort helped me carry on.

César Portocarrero received his degree in civil engineering

from the National University of Cusco in 1971. On May 30, 1970, that region was struck by one of history's deadliest natural disasters. The 7.9 magnitude Ancash earthquake, provoked by the ongoing subduction of the Nazca plate beneath the South American plate, caused the collapse of the northern face of Nevado Huascarán. The avalanche, largest in recorded history, hydroplaned downhill at up to 300 km/hr, burying the towns of Yungay and Ranrahirca. Overall, the quake resulted in approximately 100,000 fatalities. Portocarrero immediately joined the reconstruction efforts, focusing on schools, sewers, and water distribution.

In 1973 Portocarrero began to work on glaciology and lake security in the Huaraz region. Ever since the end of the Little Ice Age in the mid-nineteenth century, glacial regression has resulted in exponential growth of ice and moraine-dammed lakes, which are subject to catastrophic Glacial Lake Outburst Floods (GLOFs). As Director of the Institute of Glaciology and Water Resources, Portocarrero directed eighteen GLOF hazard mitigation projects.

Increased incidence of GLOFs is not the only risk posed by climate change. Receding glaciers endanger the water supply on which mountain communities and downstream urban areas depend. Portocarrero has therefore worked with stakeholders to design mitigation projects that not only reduce the levels of swelling lakes but create and manage reservoirs, irrigation, water distribution, and drainage so as to use resources prudently and equitably. The projects go far beyond infrastructure: for instance, regional stakeholders must be educated in the efficient use of water, which entails in-depth meteorological training.

Unfortunately, restricted funding has been a serious problem. For instance, Lake Palcacocha, which broke out in 1941 and killed about 7000 citizens of Huaraz, is now thirty-five times larger than it was prior to that GLOF, and the existing reduction capability is conspicuously inadequate. "Neither national nor regional nor local government has shown a political willingness to support the installation of an early warning system that would save many lives in case Lake Placacocha breaks out again," observes Mr. Portocarrero. He has proposed a multi-pronged security project linked to improved water management that would assure a safer future for Peruvians and for all those who come to enjoy Huascarán National Park, a UNESCO World Heritage Site.

In addition to his work in Peru, César Portocarrero has been active in international scientific exchange programs, many of which have been supported by the US Agency for Internation Development (USAID), United Nations Development Program (UNDP), International Center for Integrated Mountain Development (ICIMOD), and The Mountain Institute (TMI). Dr. Alton Byers has collaborated intensively with Portocarrero, both in his capacity as Director of Science and Exploration at The Mountain Instituteand more recently as Co-Manager of the High Mountains Adaptation Partnership (HiMAP) at the Institute for Arctic and Alpine Research (INSTAAR) of the University of Colorado, Boulder. In nominating Portocarrero for the SEHML Medal, Byers stated that,

I first met him around 2007 when I was developing a greater interest in glacial lakes and when he was head of the Glaciological Unit in Huaraz. I remember being mystified over how the Peruvian expertise in reducing the risk of potentially dangerous lakes (they had lowered 35 between the 1960s and 1990s) still wasn't on the radar screens of countries now facing similar challenges, such as Nepal and Bhutan. So in 2011 I took César and two other employees of the Glaciological Unit on the Andean-Asian Glacial Lake Expedition to Nepal; subsequently, AECOM ran a subcontract through TMI to bring César over to Nepal for a series of evaluations of the UNDP Imja

risk reduction project. César then played a key role in the Peru HiMAP project's work with local communities and the government to develop local adaptation plans of action that included an early warning system for Lake Palcacocha, and then participated in our July 2013 workshop in Huaraz.

One result of this collaboration is the *Glacial Lake Handbook:* Reducing risk from dangerous glacial lakes in the Cordillera Blanca, Peru, authored by César Portocarrero Rodríguez; this technical treatise is specifically designed to share expertise with other mountainous nations. The report was funded by US AID, and published by Engility Corporation and HiMAP.

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Jack D. Ives, Montologist

FESTSCHRIFT FOR A MOUNTAIN ADVOCATE

edited by Kumar Mainali and Seth Sicroff



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Portrait of Jack Ives on the cover courtesy of Prof. Dr. Matthias Winniger, and on page vii courtesy of Jack Ives.

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Front cover: The High Pamirs of Tajikistan, August 1987. Photograph taken by Jack Ives during a UNU reconnaissance expedition organized by Dr. Yuri Badenkov.

Back cover: "Always waiting..." Kristinartindar (1125 m), a mountain group adjacent to Skaftafell in Southeast Iceland. Jack's first ascent was in July 1952, when he took his photograph of the Morsárjökull ice falls, a decisive element in the early research undertaken by University of Nottingham student expeditions (1952-1954). All four of Jack's and Pauline's children have climbed Kristinartindar, several repeatedly, in what has become an Ives family pilgrimage. (May 1991)

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