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SUSTAINING INDIGENOUS COMMUNITIES: SYMBOLIC AND INSTRUMENTAL DIMENSIONS OF PASTORAL RESOURCE USE IN SHIMSHAL, NORTHERN PAKISTAN

The paper describes livestock herding in Shimshal, an indigenous mountain community in Pakistan, with particular attention to the considerations that inform herding decisions. Ethnographic fieldwork in Shimshal reveals two main categories of consideration: instrumental and symbolic. Habermas' theory of communicative action provides a basis for reformulating these categories into a set of conceptually integrated ideal types of resources and for arguing that instrumental and symbolic resources provide motivations toward consumption and conservation, respectively. Two examples of outside interventions to Shimshal's pastoral ecology reveal the limitations of conceptualizing indigenous resource use in purely instrumental terms. The paper concludes with a call to conceptualize indigenous community sustainability in instrumental and *symbolic terms.*

Cet article traite des troupeaux de bétail à Shimshal, une communauté indigène montagnarde au Pakistan en insistant sur des considérations qui influencent les décisions au sujet des troupeaux. La recherche éthnographique sur le terrain de Shimshal nous révèle deux grandes catégories: instrumentale et symbolique. La théorie de l'action communicative d'Habermas fournit une base pour la reformulation des catégories en regroupant d'une façon conceptuelle des types de ressources idéales et permet de constater que les ressources instrumentales et symboliques motivent la consommation et la conservation respectivement. Deux exemples d'intervention externe à l'écologie pastorale de Shimshal révèlent les limites de la conceptualisation des ressources indigènes dans les termes instrumentaux. Cet article conclut en suggérant le besoin d'une communauté indigène en termes instrumentaux et symboliques.

Geographers have been interested in sustainable development since its rhetorical beginnings in the early 1980s and have contributed to its subsequent emergence as a substantive approach of some practical value. In particular, geography's preoccupation with the spatial and social dimensions of territorial groups' use of resources has contributed to a partial shift in emphasis throughout the social sciences away from the mainly economic bias of sustainable *development* toward a more explicitly social concern for the long-term *sustainability* of resource-using groups (Chambers 1987; Nelson 1987; Turner 1988; Berkes 1989; Dixon and Fallon 1989; Pezzey 1989; Nelson and Eidsvik 1990; Robinson et al. 1990; Carney 1991; Berkes and Folke 1992), often at some specified socially or ecologically defined spatial scale (Fresco and Kroonenberg 1992; Mazur and 'Tunji Titilola 1992; Tacconi and Tisdell 1992). One product of this shift is a growing interest in *community sustainability* (Ross and Usher 1986; Daly and Cobb 1989; Dykeman 1990; Sargent et al. 1991; Nozick 1992), particularly in the

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context of indigenous social groups (Duerden 1992; Butz 1993). But the geographical contribution to conceptualizing community sustainability remains incomplete, because geographers have concentrated on the locational aspects of material resources and have neglected the locational *context* provided by those meanings that inform material resource use. In other words, in our contributions to community sustainability, we have not considered adequately the symbolic significance of *place*. This is an important omission because it tends to reduce community sustainability to an integrated set of instrumental economic and ecological interactions, without a central symbolic dimension. In so doing, it ignores the sustainability of *community*, which, to the extent that communities develop out of a way of life shared through frequent face-to-face social interactions, must reside to a large degree in shared meanings *in place*. A fully-realized conception of community sustainability – as opposed to ecological sustainability at the community level – would set instrumental economic and ecological concerns explicitly and directly within the cultural matrix of place.

The complex connections between cultural systems and ecological systems are hinted at in a large literature on local or indigenous knowledge (Klee 1980; Norgaard 1984; Gran 1986; Berkes 1989; Altieri 1990; Wells 1991; Flora 1992; Mazur and 'Tunji Titilola 1992; Gadgil et al. 1993). Altieri (1990) is typical of most of this literature. He identifies four aspects of traditional knowledge systems that are relevant to agro-ecologists: knowledge about the physical environment, biological folk taxonomies, knowledge of farming practices, and the experimental nature of all traditional knowledge (Altieri 1990, 553). In my view he could have added a fifth relevant aspect: the integration of indigenous knowledge and indigenous meaning.

Apart from several Andean studies which have 'stressed the symbolic and cultural significance of traditional agricultural resource use systems, arguing that their adaptations ... reflect an Andean ideal that is related to other aspects of Andean society and culture' (Bebbington 1991, 19; see also Masuda et al. 1985), publications in this vein tend not to emphasize the importance of local meaning in contextualizing local knowledge, and neglect the role of place in mediating the relationship between ecological knowledge and meaning. One exception is Kloppenburg (1991, 528; emphasis in original), who stresses that 'it is the *locality* of such [local] knowledge production which most completely intimates the many dimensions of its character' in that 'it is derived from the direct experience of a labour process which is itself shaped and delimited by the distinctive characteristics of a particular place'.

The purpose of this paper is to interpret an empirical example from an indigenous community in northern Pakistan in order to offer a departure point for a more humane and more geographical conception of indigenous community sustainability – one which incorporates the distinctive symbolic characteristics of the places that situate communities and achieves the incorporation of place-symbols in a way that makes some sense within the prevailing context of ecologically sustainable development. To this end, I suggest that it is useful to conceptualize indigenous communities as being sustained in place by their access to two interacting types of ecological resources: instrumental and symbolic. I am aware that these types are largely inseparable in lived experience. Their value is purely heuristic.

As Mitchell (1990) argues, all distinctions between symbolic and instrumental realms are ideological constructions that fail to represent even the Western societies that constructed them, much less small-scale Asian societies. I also recognize that the concept of 'resources', symbolic or otherwise, is also a modern Western construction. I have deliberately set these concerns aside. Given the strategic-instrumental preoccupations of most development agencies, it seems likely that the sort of place-based symbolic constructions I have in mind will be taken seriously only if they are conceptualized as if they are resources in themselves, deserving of separate attention.

The paper has four main sections. The first section describes livestock herding in Shimshal, an indigenous community in the mountains of northern Pakistan, with particular attention to the considerations that inform communal herding decisions. I present a simple inductive typology of decision-making considerations, consisting of two categories: symbolic and instrumental. It is evident that herding strategies in Shimshal are informed explicitly by a motivation to consume instrumental resources in a way that conserves the symbolic significance attached to those resources and the places in which they are found. In the second section, a brief exploration of Habermas' (1984) conceptualization of communicative and instrumental action provides a basis for reformulating the inductive typology used to describe herding in Shimshal into a set of conceptually integrated ideal types of resources, whose relevance is not limited to Shimshal. My use of Habermasian conceptualizations is selective and heuristic. I do not mean to infer that the theory of communicative action applies more generally to social change in Shimshal; as a metatheory it is explicitly Western and often blatantly Eurocentric (Poster 1989; Said 1993;

Table 1
Field Research in Shimshal, 1988–1989

Site	Research activities	Types of data collected	Biases of data
Village	• formal 'membership' and participation in a wealthy and powerful household • attendance at village-level decision-making procedures • participation in indigenous forms of sociation, especially reciprocal visiting	• descriptive and interpretive accounts of pastoral resource use • descriptive and interpretive accounts of experiences and meanings of high places • observations of community and household-level decision-making behaviour	*Accounts*: • elite • male • lineage-specific • village-contextualized *Observations*: • elite • village-contextualized
Trails	• sustained interaction and conversation with porters-*cum*-companions from all socio-economic strata • observation of, and participation in, indigenous lived experiences of diverse high-altitude places	• participatory observations of indigenous behaviour toward / in diverse high places • observations of diverse high places • *in situ* descriptive and interpretive accounts of high places, the way they are experienced, and what they mean	*Accounts*: • male • young • household juniors • high place-contextualized *Observations*: • male • young • household juniors • high place-contextualized
Pastures	• participation in herding routines and activities, and hunting • attendance at pasture and kin-level decision-making procedures • development of inventory of material pasture resources (Butz 1989) • participation in indigenous forms of sociation, especially reciprocal visiting and ceremonial feasting	• observations of household, pasture, and kin-level decision-making behaviour • participatory observations of pastures and pastoral resource uses • participatory observations of indigenous behaviour toward / in high pastures • *in situ* descriptive and interpretive accounts of high places, the way they are experienced, and what they mean • *in situ* descriptive and interpretive accounts of decision-making behaviour	*Accounts*: • male • household seniors • lineage-specific • high place-contextualized *Observations*: • female • young • high place-contextualized

Gregory 1994; Butz 1995). I argue specifically that what Habermas identifies as instrumental and communicative actions are manifest in instrumental and symbolic resources, and further, that these types of resources inform motivations toward consumption and conservation, respectively.

The third section utilizes this typology of resources to evaluate two external initiatives, both associated with sustainable development programs. The first is an initiative by the Aga Khan Rural Support Programme (AKRSP) to de-emphasize transhumant herding of sheep, goats, and yaks, in favour of stall-fed cattle. The second is a proposal by the Directorate for the Khunjerab National Park to incorporate most of Shimshal's pastures into an adjacent wilderness park. These initiatives threaten to upset the relationships between symbolic and instrumental resources that Shimshalis nurture, and in so doing jeopardize indigenous motivations to balance conservation and consumption of ecological resources. The paper's final section returns to the larger problem of re-conceptualizing indigenous community sustainability in instrumental *and* symbolic terms. I argue that it is insufficient, when considering sustainable resource use, to limit symbols, meanings, *place*, to a merely contextualizing role. There is value in conceptualizing, and then describing, symbols as ecological resources in themselves.

The seven months I spent in the community was divided about evenly among Shimshal village itself, its extensive high pastures, and the transhumant routes between them. Each site provided access to its own sources and types of information, and posed its own problems of bias and partiality (see Table 1). I attempted to develop a representative perspective on pastoral resource use by triangulating among ethnographic methods (observation, conversation, participation) at different sites (village, trails, pastures). This strategy helped to diminish biases of age, status, lineage, and the locational context of behaviour and conversation (i.e., that Shimshalis think, talk, act, and experience their world differently in the village and in high places). It failed to overcome fully gender biases, because of my gender, most Shimshalis' expectations that I associate mainly with men, and my imperfect grasp of Wakhi (the indigenous tongue, and the only language of most women).

Figure 1
Shimshal, Gilgit District, Northern Areas, Pakistan

Livestock Herding in Shimshal, Northern Pakistan

SHIMSHAL'S PASTORAL CYCLES

Shimshal is a farming and herding community of some 1300 inhabitants, located in the Central Karakoram mountains in Pakistan's Northern Areas (Figure 1). The permanent village is situated on two large terrace fans, between 3000 and 3300 m above sea level, three days walk from the Karakoram Highway. Here Shimshali villagers cultivate about 150 ha of terraced and irrigated land, almost exclusively for subsistence. Efforts to market crops outside the village are hampered by Shimshal's lack of access to motorized transport. The subsistence-oriented cropping economy is complemented by a slightly more market-oriented herding economy, which relies less on motorized transport, and which uses the vast high-altitude areas that Shimshalis control.

The community enjoys exclusive grazing rights to over 2700 km^2 square kilometres of territory surrounding the village (Figure 2). Within that area Shimshalis maintain over three dozen individual pastures, including three large and highly productive alpine areas: Pamir, Ghujerab, and Lupgar. In 1989 the community herded approximately 6800 sheep and goats, 460 yaks, and 300 cattle, more than any other community in the Karakoram region (Knudsen 1992, 32–58; Butz 1993) (see figures 3 to 5).

Shimshal's pastoral system is characterized by three large, and four smaller, interwoven transhumant cycles which reflect generations of decisions villagers have made about what, and how many, animals are grazed at which pastures, for how long, and by whom. Shimshalis conceive these cycles as sets of conventions that guide and inform, but do not determine, effective and appropri-

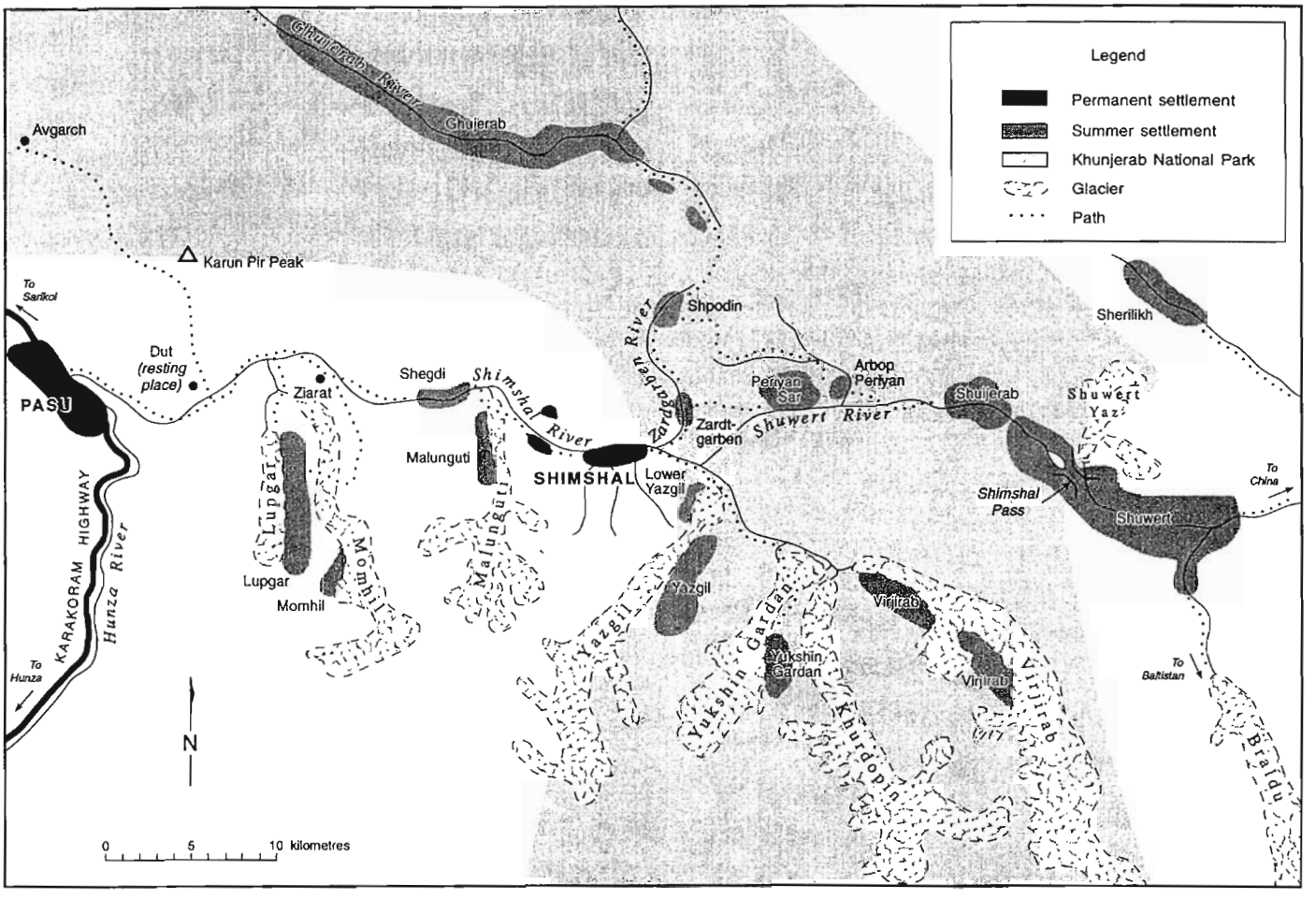

Figure 2
Shimshal and its pastures

ate herding decisions. As such, they are evolving structures, reproduced somewhat differently each year as the products of current decision-making discourse and accumulated convention. Taken together, these cycles manifest local knowledge and indigenous meaning regarding pastoral resource use in its current form, but containing the residue of previous meanings and practices.

INSTRUMENTAL AND SYMBOLIC MANAGEMENT CONSIDERATIONS

The details of pastoral activity are of little interest here (but see Butz 1989; 1993; Knudsen 1992). What is important are the considerations that inform the decisions that result in particular activities. As with most forms of decision making among primary social groups, these considerations are numerous and intricate; they are interwoven strands of a discursive process rather than items on a checklist. In Shimshal these strands can be disentangled partially into two underlying realms of concern: concern for what is materially efficacious and concern for what is appropriate. I call these instrumental and symbolic considerations, respectively. These are not terms that Shimshalis use, but they represent concerns that Shimshalis recognize: the first, for example, when they say that 'Shimshal depends on livestock at Pamir for anything beyond a lifestyle of meagre subsistence ... what we get from yaks at Pamir allows us to live like humans'; the second, when they justify their remarkable fondness for Pamir pasture in terms of Shimshal's mythological history.

Instrumental and symbolic considerations are mutually informing and seldom completely separable. Part of Pamir's mythological significance is as an instrumentally ideal habitat for yaks. Similarly, evidence of Pamir's instrumental efficacy is articulated in mythological terms in the community's folk history. Table 2 summarizes these links between symbolic and instrumental considerations, which are drawn out in more detail below.

Not only do instrumental and symbolic decision-making considerations inform one another, but in Shim-

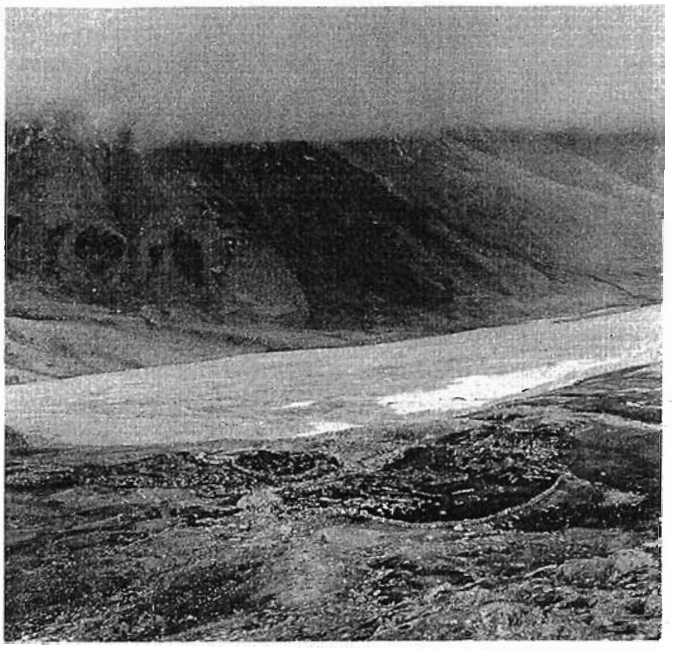

Figure 3
Shuwert summer village at Pamir (5000 m), Shimshal's largest alpine pasture. Two paddocks are visible in the foreground. Forty seasonal dwellings extend to the left of the photo.

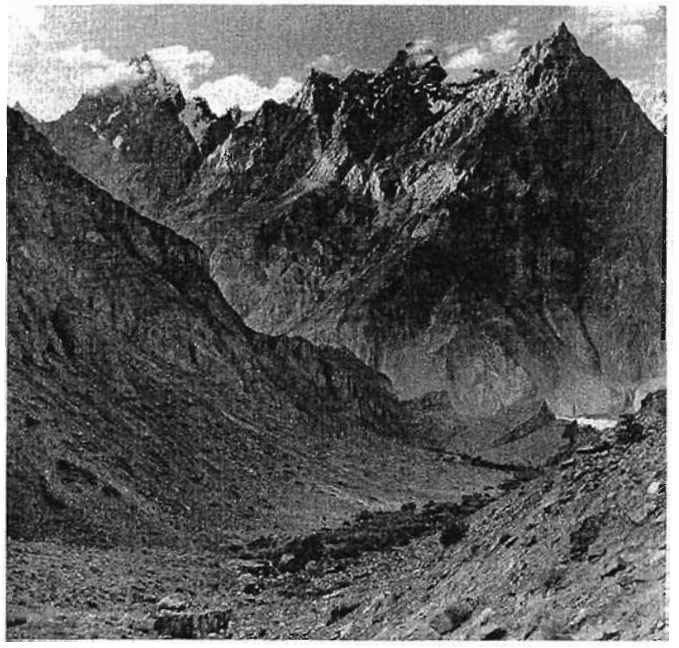

Figure 5
Sheltered winter pasture (2900 m), adjacent to the Malunguti Glacier, which is barely visible at right foreground.

Figure 4
Mid-altitude pasture (4500 m) above Yazgil Glacier. Paddock and dwellings visible at right foreground.

shal they also offset one another. Instrumental concerns for material gain motivate Shimshalis toward consumption of pastoral resources, while symbolic concerns for what is fitting and appropriate provide an impetus toward their conservation. A brief discussion of the interests served at three levels of pastoral decision making – household, pasture cycle, and community – will help explain how this is. It is worth noting at the outset that decision makers are at once household, pasture cycle, and community members. Their decisions are always informed by concerns both to consume material resources and to conserve appropriate meanings and symbols. The three levels of decision making should not be seen as competing fora, but rather as coexisting ones, in which a range of ever-present and shared considerations are validated and expressed differently, and at different spatial and temporal scales. Table 3 summarizes the discussion, with specific reference to the relationships among the three levels, the two realms of concern, and the related ecological motivations toward consumption and conservation.

In Shimshal, as throughout farming communities in northern Pakistan, *households* are the fundamental units of economic organisation (Ali 1983; Knudsen 1992). Shimshalis describe their households in explicitly instrumental terms, as made up of the people whose property and economic fortunes are inseparable. It is understand-

Table 2
Instrumental and Symbolic Contexts for Herding Yaks at Pamir Pastures

Resource	Instrumental value	Symbolic value
Yaks	• productive source of milk, hair, meat • valuable source of stored wealth • useful for draught power (ploughing, carrying loads) • hardiness at altitude (only animal that can use the highest pastures) • low vulnerability to predators (wolves, snow leopards)	• important role in Shimshali myth/history (cf. Butz, 1993, 115–63) • a source of Shimshali self-identity • a source of prestige (ownership is a demonstration of wealth and a Shimshali way of life) • ritual significance (role in festivals, religious celebrations) • historical and ecological association with Pamir
Pamir	• vastness, great carrying capacity • abundant water supply • verdant rain-fed vegetation • access to paid winter herders • well-serviced summer villages (dwellings, corrals, place of worship) • good hunting • opportunities to combine herding with portering / tourism	• important role in Shimshali myth/history (cf. Butz, 1993, 115–63) • sense of place (the *definitive* Shimshali landscape) • source of spiritual renewal, and a refuge from influences of the outside world • link with the supernatural (contains sacred places) • importance to gender roles and relations (a haven of relative female autonomy) • historical and ecological association with yaks
Rationale for ...	• *Consumption*	• *Conservation*

Table 3
A Typology of Pastoral Decision-Making Considerations

Decision-making group	Household / lineage	Pastoral cycle membership	Community
Intended beneficiary	household / lineage	pastoral cycle membership	community
Intended temporal scale	immediate	annual	long-term
Relevant scale of resources	household property	pasture cycle	community
Realm of concern	*Instrumental*	*Symbolic*	
Economic / ecological motivation	*Consumption*	*Conservation*	

able, then, that households tend to privilege *instrumental* concerns in their pastoral decision making. Households need to herd animals to ensure their continued viability and to increase their wealth, for which their members alone are responsible. Their main pastoral resources are household property and labour, supplemented by access to the privileges of membership in a pasture cycle (e.g., access to certain pastures) and in the community of Shimshal itself (e.g., access to winter grazing in Shimshal or at Pamir). All households find themselves negotiating with other households for an advantageous share of a limited set of commonly held pastoral resources, most notably the pastures themselves. The tentativeness of outcomes of this negotiation for scarce common resources, together with most households' limited wealth, leads to an emphasis in household decision making on short-term consumption of common resources for economic gain.

This process of negotiation for limited instrumental resources frequently engenders conflict among households sharing a pastoral cycle, which members attempt to resolve in negotiations at the *pastoral cycle* level. Decision making at this level is concerned with distributing the resources of that annual cycle to the satisfaction and advantage of each member household while ensuring that no single household benefits disproportionately. The most important of these resources are the pasture lands themselves, mutual herding assistance among member households, and in some cycles access to paid winter herders, corrals and huts, and portering opportunities. Decision making is still largely motivated by *instrumental* interests, albeit for a larger constituency than household-level decision making. However, because decision making at this level has to be concerned with what is appropriate (e.g., a fair distribution), as well as with what is instrumentally advantageous, and because it is expected to be consensual, it is more influenced by *symbolic* considerations than is household decision making. This is demonstrated by frequent use of the words 'right', 'fair', and 'responsibility' in decision-making discourse at this level. The decisions that result bind all participating households for that annual cycle and are renegotiated the following year.

An example of the integration of symbolic and instrumental considerations in pasture-cycle decision making unfolded in 1988, when two lineage groups (of several

households each) were temporarily granted sole grazing access to Lupgar, the smallest of the main alpine pasture areas, in order to conduct an experiment in selectively breeding livestock. This arrangement was made by members of the Lupgar pasture cycle, but also in conjunction with those of Ghujerab cycle, as one of the lineage groups involved in the experiment had long-standing kinship rights to Ghujerab cycle but not to Lupgar. The group temporarily granted its claim to Ghujerab to a Lupgar herding lineage, in exchange for their traditional rights to Lupgar. Shimshalis justified this cumbersome arrangement in instrumental terms, by claiming that selective breeding could improve the quantity and quality of livestock available for sale outside the community. But they also identified several more symbolic circumstances that helped legitimate the disruption.

First, the head of the lineage group who gained access to Lupgar was a man respected for his generous support of community-level good works and pitied for his recent victimization by a series of misfortunes. Villagers considered it only *fair* that he be aided in his most recent effort to improve the well-being of his lineage. Second, community members claimed a *responsibility* to support any endeavour that had the potential to increase the status of Shimshal as a community with special herding credentials, and they considered unified community support indicative of a solidarity of purpose appropriate to Shimshalis. Finally, several Shimshalis commented that alterations to Lupgar cycle were less serious than disruptions to Pamir cycle, both because it is a less instrumentally important pasture, and because its use is less closely associated with the founding and growth of Shimshal. The implication was that a similar arrangement at Pamir might not be considered appropriate or *right*, despite its potential instrumental efficacy.

Household and pasture-cycle decision making emphasizes instrumental considerations, because households and pasture cycles are institutions of production *and* reproduction. The *community* of Shimshal is primarily an institution of *reproduction*. It controls collective ecological resources (channels, trails, streams, pastures), but it does not exploit them collectively to create collective wealth. The community as a whole (represented by *oyoko*, a council of lineage elders and male household heads) *is* responsible for sustaining its members' collective social and spiritual rectitude. Ali (1981, 1983) captures the essence of this responsibility when he describes communities in Hunza (of which Shimshal is a part) as 'ritual congregations', a *raison d'être* of which is to safeguard and enhance a collective moral reputation through appropriate (seemly, fitting) activities and internal social relations, including those associated with ecological resource use.

One of the most important functions of community-level decision making, for example, is to organize and choreograph community-wide religious festivals. These are planned so as to instil the symbols most closely associated with Shimshalness, most obviously in skits re-enacting the founding and development of the community, but also in ceremonial dancing, in songs celebrating historical events and places within the territory, and in conventions according to which ingredients for a community feast are gathered from households and redistributed among them. In addition to instilling a sense of Shimshal as a community in place, festivals and specific elements within them are understood as representations of the health of Shimshal's collective ritual congregation. Shimshalis tell of years when important festivals were not celebrated, precisely because the *oyoko* decided that community members had not lived together as an appropriately Shimshali ritual congregation (see Ali 1983, on similar occurrences in Hunza). Ceremonial dancing, in which elders of leading lineages are followed by supporters and retainers in a slow dance around a threshing floor, is also a forum for community members to express approval or disapproval of individuals' or lineage groups' recent behaviour – including their stewardship of Shimshal's ecological resources – and to realign alliances for the near future (Ali 1981).

It follows that *symbolic* concerns for what ecological resources and practices *mean* are highly relevant to pastoral decision making at the community level. Community-level pastoral decisions are informed by a responsibility to *conserve* important symbols of Shimshal's rectitude and the ecological resources in which those symbols reside. The reproduced conventions of the pastoral (and agricultural) cycles, Shimshal's recent and mythological history, and shared senses of place are among the important repositories of meaning especially relevant to livestock herding. Community-level institutions intervene actively in pastoral resource use by mapping a general framework of pastoral movements, which corresponds to a Shimshali view of the community's material and symbolic ecological context more generally.

Its other major role is more passive: the authority to veto decisions made at other levels that are perceived as detrimental to the 'ritual congregation'. Appropriate herding practices are those which conserve important meanings and the places and artifacts that symbolize those meanings – in short, those which community members describe as 'appropriately Shimshal' (see comments on 'obligatory voluntarism' in Shigetomi 1992). Shimshalis

expect their elders to consider carefully the appropriateness of Shimshalis' herding activities and their own decisions. It is common, for example, for the current state of Shimshal's pastures to be reflected in the disposition of the *arbob*'s dancing retinue, because he is leader of the council that has ultimate responsibility for cropping and pasture cycles.

Discussion of the various levels of pastoral decision making helps explain the influence of instrumental and symbolic considerations on ecological resource use and relates those considerations to motivations toward consumption and conservation, respectively. It is worth repeating that decision makers are at once household, pasture cycle, and community members, whose decisions, at whatever level, are always informed and contextualized by responsibilities to institutions at other levels. Thus, the three levels of decision making are coexisting fora, in which a range of ever-present and shared considerations are validated and expressed differently, and at different spatial and temporal scales. They combine to facilitate the sustainable use of ecological resources across space and through time (see Fresco and Kroonenberg 1992).

THE STORY OF MAMU SHAH

The way that instrumental and symbolic considerations interweave to inform one another is illustrated in the way Shimshalis situate livestock herding within the context of a formalized mythological history. The story of Mamu Shah and the founding of Shimshal provides a rich symbolic setting for the places Shimshalis encounter in their daily lives, and for the instrumental activities they perform at those places. As such, it is part of the 'geoautobiography' of Shimshal – 'an autobiography with a strong sense of place' (Porteous 1989, 235) – that provides information about where things happened and connects (often causally) where things happened to what happened. Versions of the tale are recited often, and parts of it are re-enacted as skits at community festivals. As a result, all Shimshalis except the very young are familiar with its details, and many refer to it – and offer interpretations of it – in their everyday lives (see Butz 1993 and Lorimer 1934 for translated transcripts of versions of the story). I am most interested here in those interpretations that reproduce symbolic ecological meanings. By discussing the story's relevance to livestock herding, and especially yak herding at Pamir, I hope to emphasize the importance of place in mediating the relationships among ecological knowledge, meaning, and identity.

The story begins with a description of Mamu Shah's escape from Burusho Hunza during a time of civil war, his journey to Sarikol (a Wakhi area of Chinese Turkestan), his subsequent marriage to Khodija, a Wakhi woman, and their escape to the edges of Shimshal territory. These events immediately establish Shimshal as a refuge in an otherwise dangerous and uncertain world – a refuge facilitated by terrain and location. They also situate the community as socially and spatially distinct from, but integrated with, a larger socio-political context. In essence, the community of Shimshal exists because inhabitants of two places fled together to a third place, which provided the space to build a unique community – indeed, the first community in Hunza in which Wakhi and Burusho ethnic groups were integrated from the start. Shimshalis understand that they are what they are, in relation to the rest of the world, because of where they are. I was told on numerous occasions that one could not remain Shimshali for long outside of Shimshal, and I noticed abrupt changes in the behaviour of my companions when we entered Shimshal territory, and when we went from the village to the pastures. That Shimshalis consider themselves 'most Shimshali' in the pastures provides a symbolic rationale for their commitment to herding and pasture life, which relates to later episodes in the story.

Embedded in the account of Mamu Shah's journey to Shimshal is a description of the pastoral source of his wealth, and his exemplary husbandry of sheep and goats. Shimshal valley suited Khodija and Mamu Shah's purposes not only for its isolation, but also because of the abundance of its meadows. The excellent grazing allowed Mamu Shah (which Shimshalis translate as 'Milk King') to accumulate considerable wealth in the form of livestock, thus establishing an early link between Shimshali identity and economy, and livestock herding.

A detailed description of the couple's migration upvalley in search of more pasture land follows, and explicitly attributes symbolic significance to specific places. For example, Molonguti pasture is significant and worth caring for because Mamu Shah did certain things there: grazed his sheep, shot an ibex, argued with Khodija. These specific events (which are remembered, forgotten, invented, and reinvented) root Shimshalis to individual places. Each time Shimshalis make the trip between Pasu and the village, they relive the experiences of their progenitors. More than that, what Mamu Shah is said to have done, and where, provides a set of guidelines for current ways of living in the environment that are considered uniquely Shimshali. The very words used to tell the story exemplify what Shimshalis consider to be an appropriate

attitude toward the landscape. To translate from one version of the story: 'suddenly he rounded on Molonguti, a broad open place that was exceedingly green, with cool breezes fanning glades of shady trees' and 'today I have seen a beautiful valley. We must go there.'

The story goes on to tell of Mamu Shah's discovery of the site of Shimshal village, and amazingly, an existing channel. That present-say Shimshalis speculate that the channel had been dug by Kirghis nomads does not diminish the awe inspired by the thought of discovering water gushing from the ground into an extant irrigation system. The impact of this discovery was enhanced by the subsequent appearance of Shah Shams, an Islamic saint. Shah Shams appeared over the mountain behind a resting place called Ziarat (shrine), and made his way to Mamu Shah and Khodija's household. He presented Khodija with a bowl of milk and told her his plans to make them the founders of a great community. According to some versions of the story he is the father of Sher, the only child of Khodija and Mamu Shah. Shimshalis can point to the place Shams appeared (and have built a shrine there), which allows them to link the community as a social, spatial, and spiritual entity, to Islam. They also consider it a significant endorsement of their herding economy that Sham's gift was a bowl of milk.

In honour of the saint's patronage, the community is called Shimshal, 'Place of Shams'. Shimshalis consider themselves the symbolic (and perhaps biological) children of Shams; to the extent that they belong to Shams, they also belong to the place of Shams. Nine months after the departure of Shah Shams a son, Sher, was born to Khodija and Mamu Shah. Sher (meaning 'strong') was remarkably adept at hunting and building terraces – appropriate characteristics for the first, and exemplary, Shimshali. When his parents returned to Sarikol to find him a spouse, Sher set off, on yakback, to explore the territory upstream from Shimshal. He hunted a variety of wild beasts, discovered new pastures, found Pamir, and eventually won it in a polo match. So began some of the associations that Shimshalis have for their yaks, and their Pamir.

Sher was astounded by the ecological abundance and beauty of Pamir (its instrumental and aesthetic value). He found that the area was occupied, and was forced to compete single-handedly in a polo match against several Kirghis on horseback. Against all odds, Sher won the grazing land. The story is quite clear about where these events occurred, and just what area he won. He was aided in his unlikely victory by two things: the divine intervention of Shams and the fact that the yak he rode was better suited to high altitude and rugged terrain than his competitors' horses. Shimshalis cite this epic polo match as the foundation of their respect for yaks, and although they no longer play polo at Pamir, they claim that yaks would be valued for their ancestor's role in winning Pamir even if they had no other instrumental value. On the other hand, Pamir derives significance as an ideal habitat for yaks. Both yaks and Pamir accrue symbolic value through their association with the divine and with the community's most important hero.

Upon Sher's return to Shimshal, he and his spouse had six children, three of whom survived to become the subclan ancestors. The story concludes with a brief synopsis of the community's subsequent social development, which includes a summary of subclan genealogy. This final part is clearly a denouement, with less symbolic currency than Sher's triumphant polo match. However, it does link the story's place and ecology-based events to the present social and place-oriented existence of Shimshal. And importantly, it traces the origin and evolution of the present lineage-based herding cycles.

The interpretations Shimshalis give these legendary occurrences influence community members' instrumental use – and definition – of resources. Two brief examples will illustrate the point. First, the decision, in 1989, of one of the community's leading elders to sell his household's yaks, in order to concentrate solely on sheep and goat husbandry, was greeted with derision by most Shimshalis. Community members agreed that more money could be made more easily from sheep and goats than from yaks, but still considered the strategy foolish and inappropriate, because it was an affront to Pamir, to yaks, to the mechanics of existing herding cycles, and to Shimshalis' self-identity.

Second, despite increasing opportunity costs of being away from village activities for long periods of time, Shimshalis continue to send several young men to Pamir on *shpoon* each winter (Knudsen 1992). *Shpoon* is the term given to the practice of wintering at Pamir, cut off from the village from November to May and subsisting mainly on dairy products, in order to take care of most of the community's yaks and many of its sheep and goats. It is perhaps the most difficult of several solutions to the problem of seeing Shimshal's livestock through the winter, and various alternatives have been suggested by villagers and outsiders. One of the reasons Shimshalis retain the practice is because it re-enacts Sher's initial visit to Pamir and reproduces a link among Shimshalis, Pamir, and yaks. When men return from *shpoon*, they are treated as heroes and may be given several yaks in thanks for their

stewardship of the community's animals (see Knudsen 1992).

As suggested in Table 2, yaks and the Pamir pastures are both instrumentally significant resources. The instrumental value of each is enhanced by its association with the other: yaks are valuable because they exploit the instrumental attributes of Pamir so ideally, and Pamir pastures are valuable because yaks thrive there. They are also resources of significant symbolic value, both together and individually, in that they have meaning for Shimshalis that transcends their current instrumental function. Some of that meaning is related to a remembered history of their instrumental bounty. But much of it resides in the part they play in Shimshalis' shared sense of self-identity, sense of place, relations with the supernatural, place in regional history, and so on: in short, their significance to Shimshal's existence as a thriving and situated ritual congregation. Any initiatives to consume – or abandon – these two ecological resources are tempered by the concern to conserve their symbolic significance, something that shifting from yaks to sheep and goats, or abandoning the *shpoon*, would undermine. Shimshalis worry that the symbolic values of these resources will become sullied and degraded if the resources are used improperly. Symbolically important resources have to be conserved – treated with appropriate care – to remain symbolically useful.

While this section focused on the intricate relationship between the story of Mamu Shah and yak husbandry, it should be evident that Shimshal's folk history also informs many other realms of ecological practice in Shimshal. And, of course, the story of Mamu Shah is merely a small, if especially rich, part of Shimshal's indigenous and place-oriented symbolic world.

So far I have attempted to demonstrate that Shimshalis make decisions regarding pastoral resource use on the basis of two broad and interwoven sets of considerations: instrumental and symbolic. These considerations play out differently at different levels of decision making, but their overall effect is to encourage a balance between the consumption of ecological resources and their long-term conservation. It is worth noting that two independent range studies reveal only small and temporary effects of overgrazing on a few low pastures close to the village and no negative effects on wild animal populations (Wegge 1988; Butz 1989; Knudsen 1992, 34). In the section that follows I wish to reformulate the typology developed to describe herding considerations in Shimshal into a set of conceptually integrated ideal types of resources that may have more general relevance to resource use in indigenous communities.

Instrumental and Symbolic Ecological Resources

INSTRUMENTAL AND COMMUNICATIVE ACTION

Community, whatever its other characteristics, is first and foremost a set of social and cultural relations. It consists, at the least, of a set of frequent social interactions grounded in shared meanings and values. It follows, then, that *community sustainability* has as much to do with social and cultural persistence and reproduction as it does with economy or ecology. Indeed, the latter is largely dependent on the former, so that even when we are concerned primarily with the sustainable economic use of ecological resources, we need to consider its foundation in shared meaning and social interaction. Bebbington expresses this interdependence well:

> ... the generation and use of [technical] knowledge requires that the people involved (such as farmers or scientists) have a common tradition allowing shared interpretations and communication. That is to say it depends on their sharing common bodies of hermeneutic knowledge (Bebbington 1991, 15; see also Busch 1978).

Habermas' (1984) distinction between instrumental and communicative action helps to conceptualize that link. In his theory of communicative action, Habermas develops the argument that members of all communities are occupied daily in two types of agency. First, we are all engaged in agency to achieve specific instrumental outcome: to get to work, to make money, to meet people, to extract produce from pastures, etc. He calls activities geared toward achieving technical goals *instrumental action*. But Habermas claims that we are all also engaged continually in the struggle to understand one another, to negotiate a set of common meanings, to reach an intersubjective understanding. This struggle comprises *communicative action*. Communicative action occurs as individuals challenge and eventually accept the legitimacy of one another's arguments, in terms of one or more of three validity claims, which Habermas describes as exhaustive and irreducible: truth, appropriateness, and authenticity. While I am unconvinced that these validity claims are either exhaustive or irreducible, or can ever result in truly intersubjective understanding, I do think Habermas' conceptualization of these two action-orientations, and especially the relationship between them, is useful for understanding resource-use considerations in Shimshal (Butz 1995; Giddens 1982; Fraser 1987; Honneth and Joas 1991).

Central to the proposed reformulation of community sustainability is Habermas' contention that instrumental

Table 4
Instrumental and Symbolic Resources

Instrumental action Instrumental resources	Communicative action Symbolic resources	
Ecological artifacts that contribute to material well being	Material resources with special symbolic significance	Meanings that relate to the ecological environment, but which have no material manifestation
Agricultural lands, herds, implements, land use practices, allocation schedules	Specific places, varieties of animal, scenes, landscapes	Folk history / mythology, metaphors, superstitions, senses of place, rituals
The products of instrumental action	The products of communicative action ... the meanings that constrain instrumental action	
Consumption-oriented	*Conservation-oriented*	

and communicative action are integrally related (Giddens 1982), and especially that instrumental action relies on prior and ongoing communicative action. It is through communicative action that communities negotiate both the rules for decision making and specific decisions themselves. The products of both negotiations shape instrumental action: the first determines what is accepted as appropriate instrumental action; the second, what is considered to be successful. In this way, Habermas conceives technical activities as the outcome of instrumental action, but as determined communicatively. At the same time, the technical success of instrumental action may be used to validate further communicative action.

Communicative action – this continual challenging, arguing, and validating – seems like a lengthy and arduous process. What makes it less problematic, especially in small face-to-face communities, is the existence of an intersubjectively shared *life world*, which consists for Habermas of a loose and shifting set of nonproblematic background convictions that provide the foundations for what we consider to be true, appropriate, and truthful. Life world is therefore the symbolic context for determining the rules of decision making. The shared assumptions of life world ease communicative action. But the relationship is not one-way, because communicative action constantly validates, alters, and reproduces elements of life world by calling the unquestioned into question and requiring its validation. This occurs as individuals attempt to use the convictions of life world to validate their claims. In short, shared life world underlies communicative action even as communicative action rationalizes life world.

INSTRUMENTAL AND SYMBOLIC RESOURCES

Much of the life world shared by members of territorially based communities is likely to be bound up in a shared experience of and in place. People whose history in a place spans many generations are likely to share certain orientations toward that place which are reproduced through communicative action and which are represented in things that exist at the intersection of local meaning and local knowledge, like pastoral cycles and folk histories. These shared orientations may be important symbolic determinants of indigenous instrumental resource-management strategies. Indeed, my work in Shimshal leads me to suggest that they can be imagined as symbolic ecological resources, distinct from the instrumental resources more commonly recognized in sustainability literature. What I mean by these two types of resources and their relationship to instrumental and communicative action, is summarized in Table 4 and discussed below. The argument I develop in this section overlaps with that offered by Bebbington (1991) in his application of Habermas' theory of knowledge-constitutive interests to understanding indigenous agricultural knowledge (IAK) in Ecuador. He states:

> ... mutual understanding and interpretation, the participation in and reproduction of a common cultural tradition, are also presupposed in indigenous knowledge, as in formal scientific knowledge. *The way indigenous farmers practice agriculture is mediated by frames of meaningfulness and interpretation* .... It is not only that interpretive systems influence the process by which IAK is built up: IAK also becomes part of a wider set of symbols and meanings that has material existence in the landscape .... The IAK practiced concretely in the field thus also *becomes a sign by which a people reads and so understands its identity and its relationship with its past* [... and, I suspect, *with its place*] (1991, 16, emphasis added).

Instrumental resources are the things that contribute to the material maintenance of a social group. In an indigenous agricultural community such as Shimshal they consist of agricultural lands, herds, seeds, land use practices, resource allocation schedules, and so on; those things commonly classified as artifacts. Instrumental resources are initially the products of instrumental action;

that is, they owe their existence to instrumental action (e.g., a meadow becomes the instrumental resource we call a pasture through instrumental action). But they are also the objects of instrumental action, in that much instrumental action is geared toward their use.

Geographers conventionally conceive environmental resources as the 'substances, organisms and properties of the physical environment ... which [human groups] have the knowledge and technology to use and which provide desired goods and services' (Rees 1986, 408). What I have described as instrumental resources accords well with this more general definition. But as Rees' definition implies, resources (in contrast to mere natural attributes) are products of society, imbued with significance, value, and usefulness. And some resources may claim these essential attributes separately from their instrumental usefulness, or even without direct instrumental utility. We can call these symbolic resources.

Symbolic resources are the meanings community members attribute to their physical environment and to the sets of practices by which they use instrumental resources (see Berkes and Folke's (1992, 2) related, but less place-oriented, notion of 'cultural capital'). They are of at least two main types: first, material ecological resources that have some special symbolic significance apart from their technical or instrumental utility (e.g., specific places or varieties of animal, specific agricultural practices, landscapes, scenes, irrigation channels); second, meanings, beliefs, and convictions that relate closely to the ecological environment, but which have no direct material manifestation (e.g., folk histories, myths, metaphors, rituals, superstitions, collective affinities). Symbolic ecological resources represent intersubjective understandings of place; place-oriented elements of life world renegotiated through communicative action. They are the products of communicative action, reproduced and transformed through validity claims, particularly of normative appropriateness and authenticity, but also through claims to technical efficacy. In addition, symbolic resources comprise the meanings that inform and constrain the identification and use of instrumental resources.

In Shimshal instrumental considerations provide motivations toward consumption of material ecological resources in the short term, and symbolic concerns motivate villagers toward conservation of ecological resources and their meanings. Thus, symbolic considerations provide Shimshalis with an important impetus to use pastoral resources sustainably. These empirical tendencies in Shimshal may be understood in terms of the relationships between instrumental and communicative action and instrumental and symbolic resources outlined above. Instrumental action is geared first and foremost toward technical success (Thompson 1983, 281), which occurs through the consumption of instrumental resources (achieving the technical ends of feeding the family, increasing wealth, etc.). In Shimshal instrumental action originates mainly in the household.

Communicative action is geared primarily toward reaching understanding (Thompson 1983, 281). The capacity to reach intersubjective understanding is enhanced by the reproduction of a shared life world, which is facilitated by the conservation of symbolic attributes of the environment that provide meaning. Reproducing a shared life world is primarily a responsibility of village-level organization. But symbolic resources cannot be conserved independently of instrumental resources, because environmental meanings inform instrumental activity and reside in instrumental resources and their use. Symbolic resources are to instrumental resources what communicative action is to instrumental action: they provide the context within which instrumental resource uses are validated; they place constraints on the appropriate exploitation of resources; and they ensure that instrumental resources are used in a way that sustains the meanings upon which a community in place is based.

If the argument for identifying these two types of resources and their connection to instrumental and communicative action is sound, then it is also reasonable to suggest a general proposition that has some significance for the practice of sustainable development: it is difficult to maintain sustainable instrumental resource use if symbolic resources are, or become, devalued or disconnected from instrumental resources. In other words, the motivation to conserve disintegrates when life-world-based symbols lose their effectiveness as constraints on instrumental action. Two brief examples from Shimshal illustrate how development agencies, with their emphasis on strategic-instrumental rationality, might facilitate such a process of disintegration.

External Interventions to Shimshal's Pastoral Cycles

AGA KHAN RURAL SUPPORT PROGRAMME (AKRSP) HERDING INITIATIVES

The Aga Khan Rural Support Programme (AKRSP) has been involved in Shimshal's development since 1983. It is a nongovernmental organization that encourages communities throughout northern Pakistan to develop village organizations, which then oversee communal development projects, initiate savings programs, and liaize with AKRSP training and extension staff (Khan and Husain 1984;

Table 5
Potential Symbolic Effects of an AKRSP Herding Initiative

AKRSP Initiative	Potential Symbolic Effects
• Reduce herding of yaks, sheep, and goats, because they are less marketable than cattle	• Sheep and goats, and especially yaks, are significant symbolic resources; they help to define Shimshalis' shared self-identity, they figure prominently in Shimshal's folk history and ritual identity, and they help to solidify and justify Shimshal's existence as a community in place.
• Reduce use of highest pastures as a consequence of reduced yak, goat, and sheep herding, and because they divert labour from agricultural production in the village	• The alpine pastures (especially Pamir, Lupgar, and Ghujerab) have deep symbolic significance as repositories of history and mythology, indigenous identity, sense of place; the pastures have to be used and maintained in an appropriate state (not a wild state, which Shimshalis would consider degraded) for their symbolic significance to be maintained; in addition, the pastoral cycles that use these high pastures as their most important component have ritual significance as repositories of meaning and knowledge.
• Increase cattle production, because cattle are more marketable than yaks, sheep, and goats	• Cattle are recent imports to Shimshal and have little symbolic significance; they are perceived as weak and fragile, and not sufficiently 'Shimshali'.
• Increase the use of low- and mid-altitude pastures, because cattle thrive at lower altitudes, and because their use need not divert much labour from the village overnight	• Represents a disruption to symbolically and ritually significant pastoral cycles; more intensive grazing will likely degrade their attractiveness and value as high places; degrades an important distinction between village and pasture labour and lifestyle; disrupts symbolically significant gendered division of labour.
• Stall feed cattle, to promote rapid growth, and to increase the efficiency of labour	• Confuses the relationship between two central spheres of Shimshali life, meaning, lifestyle, experience; devalues the instrumental significance of high places; disrupts gendered divisions of labour; cuts Shimshalis off from the experiences that largely define shared indigenous identity.
• Irrigate and fodder-crop low- and mid-altitude pastures, to increase their meagre carrying capacity, and to provide fodder for stall feeding in the village.	• Aggressive improvements improve the pasture but destroy the place; much of pastures' symbolic significance lies in their difference from the agricultural village; irrigation and cropping reduces that difference, and makes pastures less indigenous places.

World Bank 1987, 1990). One of the objectives of AKRSP interventions is 'to virtually revolutionise livestock farming in the region by making it more commercially viable' (AKRSP 1992, 51). At the time of my visits in 1988 and 1989, Shimshalis were aware that AKRSP personnel wished the community to adopt such an objective. These perceptions were substantiated in my informal conversations with AKRSP personnel. Several AKRSP documents hint at such a scheme by emphasizing the importance of stall feeding, manger construction, improved low pastures, improvement of fodder crops, elimination of free grazing in villages, and reduced pressure on alpine pastures (Husain 1987; World Bank 1990, 51–53; AKRSP 1992, 51–69), but none that I have seen outline a formal policy for revolutionizing livestock herding. Shimshalis, always eager to use their resources more profitably, felt they should consider AKRSP suggestions. Table 5 summarizes the AKRSP initiative and sketches a crude outline of likely impacts on symbolic resources.

AKRSP personnel argue that the key to a more profitable pastoral economy lies in gradual shifts from sheep, goats, and yaks to cattle and from extensive transhumant herding to smaller pastoral cycles and stall feeding. These shifts would make the community more economically viable in an increasingly market-oriented regional economy and thus, presumably, more sustainable. But this argument betrays a preoccupation with strategic-instrumental rationality. Each stage of the AKRSP initiative threatens to degrade Shimshal's symbolic resource base and disconnect instrumental resource use from its source in indigenous meaning. The result is likely to be a pastoral economy which is less meaningfully embedded in the place Shimshalis have created, with commensurately fewer indigenously valid constraints on the exploitive use of instrumental resources.

Such a scenario leaves the community with a choice. First, they can attempt to construct new indigenous meaning – a new set of symbolic resources – around new instrumental practices. Bebbington (1991, 17) suggests, from his research in Ecuador, that this can be done in three ways: indigenous communities may respond to outside-initiated instrumental change by *replacing* old meanings with new ones, *reinterpreting* prior meanings, or *incorporating* new technical activities into old systems of meaning. But each of these strategies would take time and each would involve a great imaginative effort to construct an acceptable continuity with a newly reconstructed past. Shimshalis, increasingly exposed to regional society and economy, are struggling with such efforts even without the added interventions of NGO assistance. Any of these changes may represent an indigenous and communicatively validated life-world shift, but always with the threat

of a corresponding loss of meaning (Habermas, 1984) which comes from subordinating the symbolic / instrumental to the merely instrumental. This threat is increased if, as in Shimshal, the technical changes remove indigenous communities from the places in which much of their symbolic context resides. A movement in that direction would bode ill for ecological sustainability, as the history of modernization amply documents.

The second option is to reject the initiative – and risk offence to AKRSP – and develop indigenous instrumental changes more attuned to symbolic resources and shifts in them, but which still exploit growing opportunities to market livestock outside the community. This is the path most Shimshalis are taking. In autumn 1989 Shimshali households imported more than 30 yaks from across the Chinese border, at an expense in excess of Rs 270,000 ($14,000). This is the first purchase of yaks from outside the community in many years. As such, it is one indication that many Shimshalis remain strong in their commitment to a pastoral economy based on extensive use of high-altitude pastures.

THE THREAT OF KHUNJERAB NATIONAL PARK

The large purchase of yaks in 1989 is an especially striking indication of Shimshalis' resolve to maintain a pastoral economy based on alpine pastures in light of a second threat to Shimshal's symbolic domain.

Khunjerab National Park was created in 1975 after a brief field survey in 1974 by field zoologist George Schaller. The park's primary purpose at the time it was created was to protect the habitats of rare species of Asian mountain wildlife, especially the endangered Marco Polo sheep (*Ovis ammon polii*) (Knudsen 1996). In keeping with this purpose, it was designated an International Union for the Conservation of Nature and Natural Resources (IUCN) Category II park, defined as including 'one or several ecosystems not materially altered by human use' which visitors may be allowed to enter 'under special conditions for inspirational, educative, cultural and recreative uses' (IUCN 1985, in Nelson 1987, 294; see also Thorsell and Harrison 1992).

Schaller (1980, 98) suggested that the Khunjerab National Park be delineated roughly as follows:

> I felt that northeastern Hunza would make a perfect national park. On a map I drew a line from the Sinkiang border southward past Dhi and across the mouth of the Ghujerab Valley, then eastward to bypass the village of Shimshal, and again southward as far as the crest of the Shimshal drainage, and finally eastward to the Sinkiang border.

Current official boundaries, as outlined in a statement by the Northern Areas' Conservator of Forests, are similarly open to a variety of interpretations:

> The Khunjerab National Park extends over an area of 877 Sqr. miles and [is] located on the Upper Khunjerab and Shimshal Valley on the extreme North of the Northern Area stretching between [the] Pak-China border. The Northern and Eastern boundaries follow the Pak-China border. The Southern boundary traces the divides between the Upper Shimshal Valley and the Hisper glaciers. The Western boundary includes Dih Valley and [the] mouth of Khunjerab Valley running East to West along the divides between the Upper Shimshal Valley and Hisper glacier (Goodman Bell 1989, 151).

The park's 2300 square kilometres have been interpreted by administrators to include most of Shimshal's pastoral territory (Figure 2), as well as the communal pastures of six other villages (Knudsen 1992, 98). However, as the rigid standards of a Category II Park have not yet been enforced, Shimshal continues to graze its pastures as always.

In the late 1980s Pakistan's National Council for Conservation of Nature (NCCW) and the World Wide Fund for Nature (WWF) began preparing a new plan for park management, which threatens to halt villagers' 'illegal' grazing within park boundaries (see Goodman Bell 1989). Affected communities have joined in opposition to the park. Their opposition has taken two main forms. All villages other than Shimshal are prepared to accept some form of fair compensation for their loss of access to traditional pastures (*Civil Case File no 64* 1990; Knudsen 1992, 100). Shimshal alone is unwilling to relinquish access to its pastures under any circumstances, a position the community justifies with instrumental and symbolic arguments: first, by emphasizing the great size of the territory under threat of appropriation, the community's exceptional economic reliance on herding, and a corresponding lack of access to the economic opportunities provided to other communities by their proximity to the Karakoram Highway; and second, by outlining the community's historical and current symbolic attachment to parts of the territory under threat.

The issue is complicated by a growing awareness among interested parties that even the assumed dimensions of the park are merely unverified interpretations of Schaller's original vague description of possible park boundaries (Mock 1994) and by the state's contention that indigenous villages have no legal claim to their pastures in any case (see Knudsen 1992, 1996 for a description of

the continuing struggle between indigenous villages and the Pakistani state; also Sidky, 1993). The publication of studies which indicate that grazing and indigenous hunting, especially by Shimshalis, are insignificant factors in the degradation of wildlife habitats or the decline in wildlife populations (Wegge 1988; Butz 1989; Mock 1990; Knudsen 1992, 1996) and that Shimshal's pastoral and cultivated agricultural economy will be disrupted irrevocably by the loss of its main pastures (Wegge 1988; Butz 1989, 1993; Mock 1990) contributes a further complication. This especially true, since Blumstein (1994), a wildlife biologist with considerable field experience in the Khunjerab region, maintains that while Shimshalis may not have caused the degradation of wildlife in their territory, their current grazing and hunting practices may be threatening already decimated populations.

Of these reports, Mock (1990) alone discusses the potential impact of a rigid interpretation of park guidelines on Shimshal's (and other villages') shared identity and sense of community. After documenting the central symbolic role of high pastures and other 'wild' high places in terms similar to those I use above, Mock notes:

> ... herding remains too central to the Wakhi [the people of northern Hunza] for them to abandon it. It is an economic necessity for them and *also a cultural necessity; a source of identity and pride*. Hence cash subsidies to replace herding income are not acceptable. Nor is redistribution of pastures. All available pastures are utilised and fit into a careful system of local management. (1990, 15–16; emphasis added)

The typology of indigenous ecological resources outlined above provides the beginnings of a theoretical grounding for Mock's concerns. Compensation packages (cash subsidies and redistribution of pastures) result from a strategic-instrumental view of pastoral resource use and *may* be appropriate for those communities whose indigenous life world and herding practices have been transformed by prolonged access to motorized transport. But they neglect completely the importance of Shimshal's symbolic pastoral resources for constraining and informing instrumental resource use and their importance to the reproduction of a meaningful community in place. Shimshalis would have to develop ways of using any new pastures they are granted in a symbolic vacuum. Indigenous symbolic constraints on sustainable use are less likely to be implicit in Shimshalis' perception of these new pastures.

In this circumstance appropriate use is likely to become merely materially efficacious use. Shimshalis recognize these concerns in conversations and in their united rejection of offers of compensation. Their comments also suggest a deeper concern that the loss of their high pastures may demoralize Shimshalis, degrade their shared status as a ritual congregation, and literally uproot and disorient them. As one Shimshali expressed poignantly 'if they make national park, Shimshal will be a tomb' (Knudsen 1992, 101). Another villager echoed those sentiments more forcefully: 'first they can kill us, then they can come and make a national park' (Knudsen 1992, 101).

Conclusion: Community Sustainability and Symbolic Ecological Resources

Field research in Shimshal indicates that community members make pastoral resource-use decisions on the basis of two main sets of interwoven considerations. Instrumental considerations motivate villagers to consume pastoral resources, while symbolic considerations provide an impetus toward their conservation. The result, in Shimshal at least, has been the sustained and meaningful use of instrumental pastoral resources.

Habermas' theory of communicative action, especially the formal relationship he posits between instrumental and communicative action, provides a theoretical framework for developing Shimshal's decision-making concerns into an ideal typology of ecological resources, which may be used to develop a better understanding of the effects of instrumental development initiatives in Shimshal and beyond. Specifically, I have argued that symbolic resources, geared to communicative action (the conservation and reproduction of meaning), manifest communicative rationality, and that instrumental resources, geared to instrumental action (the consumption of artifacts for material purposes), manifest strategic-instrumental rationality. Symbolic resources comprise the meanings that inform and constrain the identification and use of instrumental resources. As such they provide a context for the sustainable use of instrumental ecological resources. The rationale for conceptualizing instrumental and symbolic resources as distinct ideal types is purely heuristic; it permits the introduction of strong conceptions of place, identity, and meaning into considerations of community sustainability and ecologically sustainable development.

This ideal typology of instrumental and communicative resources provides a foundation from which to evaluate two potential institutional interventions to Shimshal's pastoral economy. We see that the agencies responsible

for these interventions are preoccupied with instrumental resource use and ignore indigenous symbolic resources. The result is that each assumes that one set of instrumental resources is as good as another, and by implication, that one set of places is as good as another.

In places like Shimshal such as assumption is patently incorrect, because Shimshal's resources and places are as much symbolic as they are instrumental; they are symbolic of community and its reproduction in place. In other words, symbolic resources and the places that manifest and represent them are *constitutive* of community. The outcome of the initiatives discussed above, if successful, is encapsulated in Dani's use of the terms *alienation*, which he defines as a process whereby 'people in the mountains become separated from the resources they formerly managed', and *annexation*, where 'hill and mountain cultures, economies, and societies become formally attached as secondary units to that of the plains' (Dani, Gibbs and Bromley 1987, 3; see also Dani 1986). These two processes weaken the bonds among local meaning, place, and resource use. The interpretations offered above suggest that both AKRSP and the sponsors of Khunjerab National Park function as agents of the alienation and annexation Dani describes.

If the example of Shimshal holds more generally and indigenous communities can be described as being constituted through symbolic meanings in place, then both place and the meanings attached to instrumental resources and practices must be recognized as more than merely contextual. Agents of development, and students of community sustainability, must consider what the terms *indigenous* knowledge and *indigenous* practice really signify: ecological knowledge and activities symbolically and instrumentally embedded in the places and life worlds out of which they developed and which they help constitute. That conceptualization would allow the community sustainability movement to being searching for, and working with, indigenous motivations toward conservation. In addition, in attempts to facilitate community sustainability, it would begin to give adequate emphasis to the notion of *community* as a set of shared place-oriented meanings and interactions.

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