The Role of the Family in Mountain Pastoralism—Change and Continuity
Ethnographic Evidence from the Western Italian Alps

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The distinctive features of mountain pastoral families in the past, and their adaptations to environmental and economic constraints, have been the subject of many comparative studies. Less effort has been invested in exploring the role of the family in today’s pastoral economy and identifying structural and cultural continuities within the dramatic changes of the last decades. Our ethnographic fieldwork in several valleys of the Italian Western Alps revealed that, contrary to some expectations, families do retain a central economic and productive role and are instrumental in keeping pastoral farming alive. Some present-day herders belong to families that have continuously engaged in pastoralism for a long time; in other cases, younger generations have returned to pastoral work their parents abandoned for jobs in industry or the service sector; in still other cases, “new highlanders” have turned to pastoralism and become the heirs of local pastoral knowledge. Family structures have changed considerably, and their size and composition as well as their entrepreneurial choices depend on a delicate balance between market demands, domestic strategies to keep or attain the right household size and composition, and the availability of local resources. Access to communal resources to which some pastoral families are entitled by their local origin may prove crucial to the success of their enterprises.

Keywords: Mountain farming; family structure; mountain pastoral systems; new highlanders; tradition; ethnographic research; Western Italian Alps.

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The Return to Mountain Pastoralism

The demography of the Alps is changing in unexpected ways. After more than a century of unbroken population decline, there are signs of a trend reversal in the French and now also in the Italian Alps (Pascolini 2008; Cognard 2010; Corrado et al 2014; Steinicke et al 2014). Growth is due more to net migration than to a positive natural balance between births and deaths; this return to the mountains would have been scarcely imaginable only a couple of decades ago. This is especially the case on the Italian side of the Western Alps, which had become a sad emblem of mountain depopulation and abandonment: several studies based on population statistics collected at the municipal level demonstrate that a tendency for mountain villages in this area to gain inhabitants, while not universal, is widespread (Corrado 2010; Dematteis 2011; Löffler et al 2011; Beismann et al 2012; Bender and Kanitscheider 2012).

The severe population decline throughout the 20th century in the French and Italian Alps and many parts of the Swiss Alps was linked to the collapse of mountain agropastoralism, which appeared irreversible and was a product of decreasing economic viability combined with a negative image of life and work in the Alps. There can be little doubt that in this respect, too, things are changing: The Alpine natural and social environment is no longer perceived as backward and inhospitable, but rather as a place of opportunities for those who possess the right skills. Estimates based on the 2011 Italian general population census suggest that no fewer than 3000 men and women under the age of 35 have chosen to embrace pastoral livelihoods, largely in the mountains (Battaglini et al 2013: 44). This tallies with the widely held notion that young shepherds escaping city life are the main protagonists of the repeopling of the Alps.

Although it is tempting to credit the reversal in demographic trends to the renewed interest in mountain pastoralism shown by young men and women, there is a danger of oversimplifying the matter. To avoid this danger, the relationships between the two processes will have to be carefully scrutinized in order to establish, first of all, the extent to which young pastoralists are new
inhabitants and are therefore contributing to demographic recovery. Other questions also need to be explored to shed light on these interrelated changes. One such question concerns the role of families.

The role of the family

The distinctive features of mountain pastoral families in the past, and their adaptations to both environmental and economic constraints, have been the subject of a substantial comparative literature (see the review by Derouet et al. 2010). A pioneering cross-cultural analysis by Nimkoff and Middleton (1960) was apparently the first study to detect an association between pastoral or agropastoral modes of agrarian production and a prevalence of extended or joint family households. Subsequent investigations have ascertained that this association was especially visible in mountain areas, where animal husbandry and agriculture were most likely to be combined and crop fields were usually separated from summer pastures by considerable distances. Large, structurally complex households were better suited than nuclear families to working spatially separate resources and meeting the conflicting demands on time and labor arising from the need to synchronize agricultural and pastoral work (Webster 1973; Vincze 1980). In the Alpine area, as in other mountainous regions of Europe, a strong relationship has also been found between transhumant sheep pastoralism and various kinds of extended or joint family household (Viazzo 2010).

Fewer efforts have been made to evaluate the role of the family in today's pastoral economy and identify structural and cultural continuities within the dramatic changes of the last decades. Two different but related issues need to be investigated. The first concerns the socio-demographic characteristics of families that are currently practicing pastoralism in the mountains. Household size shrank consistently all over Europe during the 20th century, and the Alps are no exception. Figures are especially striking for the Italian Western Alps, which historically were a stronghold of joint family organization (Viazzo 1989: 229–244; Albera 2011: 215–224). Recent data reveal marked disparities between the southwestern and the northeastern sectors of the Alpine crescent, with the Italian Western Alps returning particularly low values, mostly below 2.2 individuals per household (Kanitscheider 2008: 124–125), which indicate that large coresident domestic groups cannot be expected in any significant number. Nevertheless, it would be useful to see whether people engaged in pastoralism still require, and receive, assistance from relatives to a greater extent than those with other livelihoods. If this should turn out to be the case, then local people who can presumably rely on kinship networks for help would appear to enjoy a more advantageous position than “new highlanders” who have to look for other sources of support.

Another crucial issue concerns the role families play in transmitting both tangible and intangible resources. It is a common saying that “shepherds (or herders in general) are born, not made”—meaning that both the professional skills and the economic assets required to practice pastoralism are almost exclusively passed down within families. Clearly this assumption does not sit comfortably with the equally common belief that the revival of pastoralism in the Alps is mostly to be credited to young men and women moving from the plains to mountain villages. Finally, the significance of vested rights in local resources accruing to individuals as members of autochthonous families should also be gauged. If these rights should prove important, one would be forced to conclude that outsiders wanting to settle in the mountains to start pastoral activities are at a disadvantage.

Little help can be expected from official sources to clarify these issues. Both geographers (Löfler et al. 2011; Steinicke et al. 2012) and sociocultural anthropologists (Zanini 2013a, 2013b) have recently demonstrated the usefulness of ethnographic fieldwork to collect the fine-grained information required to gain in-depth understanding of major processes that are changing the demographic face of the Alps. An ethnographic approach is all the more necessary when studying families in mountain pastoralism today, as it offers virtually the only way to go beyond the level of official statistics and get a close-up of the composition of pastoral households, the mobilization of kinship networks, and the ways that tangible and intangible resources are transmitted.

Methods and research setting

Evidence on the composition, lifestyle, and economic prospects of pastoral families in the Italian Western Alps has been collected through ethnographic fieldwork as part of two projects. The first, Sustainability of Pastoral Farming in North-Western Italian Alps, coordinated by the University of Turin and financed by the Piedmontese Regional Government (2011–2013), was a research and development initiative to devise policies to promote pastoral livestock breeding in the northwestern Italian Alps. Also drawing on previous work by Verona (2006), about 100 interviews were conducted with shepherds in several localities of the Piedmontese Alps, and 5 videos documenting the seasonal movements of transhumant shepherds were made. This material provided essential information to be used in public debates and further individual interviews on problems in pastoral systems in the Western Alps.

An ethnographically more intensive approach was adopted in a study of mountain farming that was part of the project Cultures and Languages of Alpine Piedmont (2011–2014), carried out by the University of Turin and some local institutions. Interviews were supplemented by participant observation focused on property and land use.
rights, the management of mountain pastures, and the transmission of economic assets and technical skills both inside and outside families and local communities. This paper is based on data from the three Waldensian valleys—the Pellice, Germanasca, and Chisone Valleys of Western Piedmont—so called because they are inhabited by a mixed population of Catholics and Waldenses, a religious group that originated in the south of France about 1170 through the preaching of Peter Waldo and eventually settled in the Cottian Alps, a mountain range on the Italian side of the southwestern Alps (Figure 1). The memories of men and women who have retired from mountain farming and the life histories of virtually all those currently engaged in agropastoral activities were recorded. When possible, relatives were also interviewed, thus enabling researchers to reconstruct the multigenerational stories of some 15 pastoral families.

Change and continuity

A quick impression of at least some of the transformations experienced by mountain pastoralism in the Italian Western Alps can be obtained through a comparison of 2 censuses of pastoral families and their animals taken in one of the Waldensian Valleys 100 years apart. As shown in Table 1, in 1914 the Italian geographer Giorgio Roletto found that the 13 high-altitude summer pastures (alps) in the Pellice Valley hosted more than 11,000 head of livestock; a century later, less than half that number remained. This decline was solely due to the severe decrease in the number of sheep and goats

FIGURE 1 The Western Alps and their subdivisions; fieldwork was mostly conducted in the Cottian Alps. (Maps by Luca Battaglini, subdivisions based on the International Standardized Mountain Subdivision of the Alps)
The number of cattle actually rose by nearly 40% as a result of farmers’ growing propensity to rear relatively high-producing dairy cows for traditional cheese making. This choice has frequently led to farming intensification and/or overgrazing of more favorable areas and the abandonment of areas less suitable for large ruminants.

The most striking figure to emerge from Table 1 is the dramatic fall in the number of families using the alps, which dropped by over 90% from 210 in 1914 to 18 a century later. For most of these families, pastoralism—and the production of cheese, especially the traditional seasoned cottage cheese that is typical of this valley—is the principal or sole activity. However, 4 families also run holiday farmhouses, 1 family owns a cheese factory, and some members of virtually all pastoral families may from time to time turn to seasonal or temporary work in other sectors.

Taken together, these statistics indicate profound changes. In 1914 each family possessed on average 4 head of cattle and 50 sheep and goats, and it was customary that 2, 3, or possibly more related families exploiting the same alp joined forces. In the early 20th century (Roletto 1918: 93) and up to the 1960s, each household contributed a member to form a group of herders (parti) charged with tending the animals and processing the dairy products. Today, the few families significantly engaged in pastoralism have to cope with much larger numbers of animals and must themselves supply the required labor or recruit it from outside.

Changes equally or more drastic than those summarized in Table 1 have occurred in many parts of the Western Alps. As far as families are concerned, however, we may wonder whether some continuities also exist—or, in a different vein, whether today’s pastoral families display some distinctive features as to size, composition and division of labor by gender and generation.

Both extensive and intensive research carried out within the framework of the 2 projects have shown the presence of different models of pastoral activity management linked to several variables. Labor requirements appear to depend on the species involved in livestock enterprises (cattle, sheep, or goats) and what they produce (milk, meat, cheese, or a combination of products). There are signs of a renewed interest in small-ruminant raising, especially among young people and their families in less favorable mountain areas that had been abandoned, who now raise sheep and goats and produce meat and dairy products because of their increasing commercial value. The workforce will accordingly vary in size and be recruited within the family or outside it (and even from far away, eg immigrant herders from Eastern Europe). A recurring feature is, however, the pivotal role played by the family.

### Table 1

| Summer pasture (alp) | 1914 | | 2013 |
|----------------------|------|---|------|
|                      | Families using alp | Cattle | Sheep | Goats | Families using alp | Cattle | Sheep | Goats |
|                      | Families using alp | Cattle | Sheep | Goats | Families using alp | Cattle | Sheep | Goats |
| Gard                 | 7     | 84  | 364  | 159  | 1     | 0    | 203  | 0     |
| Cougis               | 7     | 25  | 309  | 110  | 1     | 42   | 156  | 0     |
| Subiasc              | 5     | 43  | 631  | 142  | 1     | 0    | 32   | 0     |
| Giuliani             | 23    | 88  | 1539 | 264  | 1     | 98   | 506  | 58    |
| Bancet               | 9     | 50  | 538  | 111  | 1     | 57   | 101  | 49    |
| Crousenna            | 16    | 51  | 934  | 170  | 1     | 90   | 429  | 21    |
| Prà inferiore        | 26    | 119 | 1234 | 312  | 2     | 274  | 719  | 10    |
| Prà superiore        | 25    | 85  | 1322 | 249  | 2     | 79   | 330  | 76    |
| Roussa               | 11    | 28  | 489  | 64   | 2     | 48   | 383  | 0     |
| Piss della Roussa    | 16    | 87  | 139  | 141  | 1     | 151  | 590  | 43    |
| Giana                | 44    | 82  | 879  | 60   | 2     | 176  | 614  | 90    |
| Ciabrarèssa          | 14    | 58  | 256  | 96   | 1     | 73   | 0    | 0     |
| Chiot la Sèla        | 7     | 50  | 135  | 81   | 2     | 94   | 16   | 84    |
| Total                | 210   | 850 | 8769 | 1959 | 18    | 1182 | 4079 | 431   |

*Source: Roletto 1918: 87.

*Source: Local Veterinary Services, Pellice Valley (data acquired in 2013).*
Small as it is, the sample of 15 families that was the focus of the in-depth study conducted in the Pellice Valley, and especially in the 2 municipalities of Bobbio (44°48′00″N 7°07′00″E, 732 m) and Villar (44°48′00″N 7°10′00″E, 664 m), is quite revealing in this sense. If we first look at families as sets of kin by blood or marriage (or cohabitational relationship) who live together under the same roof, we discover that these 15 households, accounting for over 80% of the families engaged in pastoralism in the valley, have a mean size of 3.87 members, significantly larger than the estimates of 1.83 and 2.02 members for Bobbio and Villar, respectively (ISTAT 2012), and that they range in size from 2 to 7, very much in accordance with the number and kinds of animals they breed. No less than 7 out of 15 pastoral households are not nuclear in structure; 6 of the 7 are 3- or 4-generational. One household consists of a married couple in their 50s, their 2 adult daughters and the elderly parents of both husband and wife; another highly complex domestic group includes a married man and his wife, the wife’s mother, the couple’s adult son, a daughter and her partner, and a grandson. In 2 small households, young adult men live with their grandparents. Both size and structure set pastoral households apart from most other households in the Pellice Valley.

The importance of kinship and marriage ties is further demonstrated if we look at families as work groups made up of relatives who may not live together but who collaborate, sometimes only on a temporary or seasonal basis, on specific pastoral tasks (Figure 2). Both protracted observation in the Pellice Valley and the information obtained through interviews reveal that pastoral households tend to rely on relatives, and to a lesser extent on friends and neighbors, rather than on wage labor. This preference appears to have largely (although not exclusively) economic reasons and is a useful reminder that a pastoral enterprise can be difficult or impossible to start and maintain for people who cannot count on the support of a kin network. Some of the younger adults in the pastoral households in our sample are actually “new highlanders” who have joined these households by marrying the children of middle-aged couples, thus strengthening the family labor force and at the same time gaining access to crucial resources. It seems no accident that the only pastoral family consisting entirely of “new highlanders” is a small household possessing just 40 dairy goats and running a holiday farm.

By suggesting that families engaged in pastoralism display a set of features that make them distinct in contemporary Alpine society, these findings bring to light significant continuities with an agropastoral past in which large and complex households worked spatially separate resources. It might even be argued that in the Italian Western Alps, which have witnessed a shift from a mountain farming system mostly oriented toward self-sufficiency to a market-oriented pastoralism that cannot afford a massive recourse to salaried labor, large families and effective kin networks rooted in mountain communities are even more necessary today, for young local people and “new highlanders” alike, than they were in the past.

Evidence that the family as a supraindividual economic and decisional unit remains crucial to the survival of pastoral farming in the Western Alps is also interesting because it contradicts or at least qualifies a
widespread view—powerfully endorsed by European newspapers and semipopular magazines—that the current return to or maintenance of agropastoral activities is essentially the cumulative product of individual choices to settle in the mountains. Most seemingly individual choices encountered during our research actually depended on the support offered by the extended family. Spouses or partners were the most involved in decision-making, since their refusal to join the enterprise would have jeopardized its chance of success, but other relatives—ancestors and descendants—were also consulted, and their support often proved essential.

**Multiple paths to pastoralism**

While this family dimension is common to most decisions to maintain or take up a pastoral way of life, those decisions were reached by many different paths. A pattern we repeatedly encountered is that of a young couple with school-age children, helped in agropastoral and domestic activities and child care by the elderly parents of one of the spouses. This pattern is made especially economically viable by elderly people’s access to pensions and their accumulation or preservation, over the years, of farmland, stables, barns, and other agropastoral assets. This often also happens with elderly people who have worked in sectors other than farming. Another pattern involves middle-aged parents who are still working and whose children work on the same farm; here, a priority is to reach a balance in which duties are rationally divided among household members, according to the number and kinds of animals and lands owned, so that profits are adequate for everyone. These farming units tend to be more dynamic, as they are more likely to invest in enlarging the business and to experiment with innovations—such as direct sale of cheese on local markets, production of alternative dairy products (eg yoghurt or mozzarella cheese), or running a holiday farm—in order to diversify their activities. At the opposite pole are families whose young members are not interested in carrying on farming, a condition which restrains investment and innovation.

We encountered a number of young local men and women who returned to pastoralism after their parents had abandoned it for jobs in industry or the service sector while remaining in their native mountain villages. These young people’s parents may have provided the necessary material assets, but their grandparents provided the pastoral knowledge. This is a significant example of a tradition that appeared irreversibly broken but was revived thanks to this generational bridge. “New highlanders,” especially those who enter local families through marriage, may also benefit from this transmission channel.

**Institutional constraints and opportunities**

In addition to intangible assets such as traditional skills, and more obvious tangible assets such as land and buildings, other assets are transmitted within families—most notably rights to collective resources. The case of the Waldensian valleys illustrates the effects of policies adopted by local institutions in this regard.

In these valleys, municipalities own the upper zone of alpine pastures, while most buildings located at middle altitudes are privately owned and passed down from one generation to another. Dairy farmers rent the communal pastures from the municipality, tenancy agreements last several years, and residents (basically members of local families) have a preemption right. This system allowed the consolidation and maintenance of alpine pastures even when the exodus from mountain areas was at its highest; most of the expense of building roads or bringing structures up to standard was incurred by the municipalities with the intent of benefiting local communities.

While this institutional background is common to most of the Italian Western Alps, municipal policies vary as a result of local debates and compromises (Bailey 1973), and these local variations may significantly affect the ways pastoralism is practiced. Policies recently favored by some municipalities in the Pellice Valley have departed markedly from those enacted in the other Waldensian valleys (Chisone and Germanasca): their exclusivist emphasis on residents’ preemption rights explains why in the Pellice Valley alpine livestock farming continues to be practiced only by local families and by “new highlanders” who have married into these families. Such a situation prevents, or severely hinders, the integration of herders from outside, who are often suspected of practicing an intensive and rash exploitation of lands to which they have no ties. This small-scale contrast between adjacent valleys bears intriguing similarities with the much larger-scale one between the structurally closed communities of the Eastern Alps and the more open communal structures of the Western Alps, whose significance has long been noted (Mathieu 1998: 129–148). Since it can only be observed through detailed local analysis, it is often overlooked. Yet it can significantly affect access to communal resources, which may prove crucial to the success of pastoral enterprises.

**Conclusions**

Ethnographic fieldwork in several valleys of the Italian Western Alps has revealed that, contrary to expectations, families retain a vital role in the management of pastoral activities. While the pastoral system has undergone major transformations, households display complex structures reminiscent of those that existed in the past, which point
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REFERENCES

Albera D. 2011. Au fil des générations. Terre, pouvoir et parenté dans l’Europe alpine (XIVe–XXe siècles), Grenoble, France: Presses Universitaires de Grenoble.  
Bailey FG. editor. 1973. Debate and Compromise. The Politics of Innovation. Oxford, UK: Blackwell.  
Battaglini L, Porcellana V, Verona M. 2013. Restare, tornare, resistere: storie di giovani pastori nelle montagne piemontesi. In: Varotto M, editor. La montagna che torna a vivere. Portogruaro, Italy: Nuova Dimensione, pp 41–54.  
Beismann M, Löfler R, Walder J, Steinicke E. 2012. Neue demographische Prozesse und deren Konsequenzen in den italienischen Alpen. In: Varotto M, Castiglioni B, editors. Di chi sono le Alpi? Appartenenze politiche, economiche e culturali nel mondo alpino contemporaneo, Padua, Italy: Padova University Press, pp 230–239.  
Bender O, Kanitschelder S. 2012. New immigration into the European Alps: Emerging research issues. Mountain Research and Development 32(2):235–241.  
Cognard F. 2010. “Migrations d’agglomération” et nouveaux habitants dans les moyennes montagnes françaises: de la recomposition sociale au développement territorial. L’exemple du Diois, du Morvan et du Sérinonais [Thesis], Clermont-Ferrand, France: Clermont Université–Université Blaise Pascal. http://tel.archives-ouvertes.fr/tel-00675737; accessed on 2 August 2014.  
Crorado F, editor. 2010. Riabitare le Alpi. Nuovi abitanti e politiche di sviluppo. Genoa, Italy: Eidon.  
Crorado F, Dematteis G, Di Giola A, editors. 2014. Nuovi montanari. Abitare le Alpi nel XXI secolo. Milan, Italy: Franco Angeli.  
Dematteis G, editor. 2011. Montanari per scelta. Indizi di rinascita nella montagna piemontese. Milan, Italy: Franco Angeli.  
Derouet B, Lorenzetti L, Mathieu J, editors. 2010. Pratiques familiales et sociétés de montagne, XVIIe–XXIe siècles, Basel, Switzerland: Schwabe.  
ISTAT [Italian National Institute of Statistics]. 2012. Bilancio demografico anno 2012 e popolazione residente al 31 dicembre. http://demo.istat.it/bil/2012/index.html; accessed on 28 January 2014.  
Kanitschelder S. 2008. Average household size. In: Tappeiner U, Borsdorf A, Tasser E, editors. Alpenatlas/Mapping the Alps. Society, Economy, Environment. Heidelberg, Germany: Spektrum Akademischer Verlag, pp 124–125.  
Löffler R, Beismann M, Walder J, Steinicke E. 2011. New demographic developments and their impact on the Italian Alps. In: Borsdorf A, Stötter J, Veuillet E, editors. Managing Alpine Future II. Vienna, Austria: Verlag der Österreichischen Akademie der Wissenschaften, pp 382–393.  
Mathieu J. 1998. Geschichte der Alpen 1900–1990. Umwelt, Entwicklung, Gesellschaft. Vienna, Austria: Böhlau.  
Nimhoff MF, Middleton R. 1960. Types of family and types of economy. American Journal of Sociology 65(3):215–225.  
Pascolini M, editor. 2008. Le Alpi che cambiano. Nuovi abitanti, nuove culture, nuovi paesaggi/ Die Alpen im Wandel. Neue Bewohner, neue Kulturen, neue Landschaften. Udine, Italy: Forum.  
Ricci. 1918. Ricerche antropogeografiche sulla Val Pellice. Florence, Italy: Ricci.  
Steinicke E, Cesè P, Löffler R. 2012. In-migration as a new process in demographic problem areas of the Alps. Ghost towns vs. amenity settlements in the Alpine border area between Italy and Slovenia. Erdkunde 66(4):329–344.
Steinicke E, Čede P, Löffler R, Jelen I. 2014. “Newcomers” nelle regioni periferiche delle Alpi. Il caso dell’area di confine tra Italia a Slovenia nelle Alpi Giulie. Rivista Geografica Italiana 121(1):1–20.
Verona M. 2006. Dove vai pastore? Pascolo vagante e transumanza nelle Alpi Occidentali agli albori del XXI secolo. Scarmagno, Italy: Priuli & Verlucca.
Viazzo PP. 1989. Upland Communities. Environment, Population and Social Structure in the Alps since the Sixteenth Century. Cambridge, United Kingdom: Cambridge University Press.
Viazzo PP. 2010. Pastoral and peasant family systems in mountain environments: comparative evidence from the Italian Alps. Itinera 29:245–264.

Vincze L. 1980. Peasant animal husbandry: a dialectic model of techno-environmental integration in agro-pastoral societies. Ethnology 19(4):387–403.
Webster S. 1973. Native pastoralism in the South Andes. Ethnology 12(2):115–133.
Zanini RC. 2013a. Dynamics of the population and dynamics of the memory of an alpine community on the border. Journal of Alpine Research–Revue de Géographie Alpine [online] 101(3):1–11. http://dx.doi.org/10.4000/rga.2254.
Zanini RC. 2013b. Ripopolamento alpino e riduzione della disparità. Spunti per un approccio antropologico multiscale. Histoire des Alpes–Storia delle Alpi–Geschichte der Alpen 18:239–251.