Arranging the Bones: 
Culture, Time and In/equality in Berber Labor Organization

David Crawford 
Fairfield University, Connecticut

This paper examines the organization of collective labor for irrigation canal maintenance in a High Atlas village, an organization that compensates for the fluctuation of available labor over the domestic cycle of individual households. Such labor transactions between households are accomplished by employing several different, and seemingly incompatible, cultural logics: a tradition of division by five, an emphasis on the importance of agnatic kin, a belief in the natural authority of elder over younger men, and an ideal equality among all men. Empirically the groups forged by villagers are fair and unfair according to different specific types of equality under consideration and, especially, the temporal framework employed. This integration of different forms of inequality and the importance of timeframes to their operation bears on anthropological and economic theory, and the practical aims of development.

Keywords: inequality, Berbers, labor organization, household dynamics, development

Introduction

The village of Tadrar\(^1\) is an assemblage of mud and stone houses etched into a mountainside ninety kilometers south of Marrakech. It sits 1,500 meters above sea level in a valley carved by a small river, the Agoundis. All 212 residents of Tadrar speak Berber,\(^2\) most of them exclusively, and they support themselves growing barley, almonds and walnuts in more than a thousand small, steeply terraced plots. These small plots are irrigated by an elaborate canal system that draws water from far up the valley and distributes it via seven main canals with innumerable offshoots and ditches. As of 1998 the canals were constructed purely of rock, mud and a few logs; the engineering is impressive. Using nothing but hand tools and gravity villagers effectively transport a continuous supply of water across several kilometers of precipitous mountain while the river that sustains the operation surges from a trickle in the late summer to a torrent in the early spring.

This paper focuses on the organization of collective labor by which this canal network is maintained, an organization known locally as the k\(\text{hams}\), from the Arabic for ‘five’. In the simplest terms this involves dividing the adult men of the village into five work groups. These five k\(\text{hams}\) work groups are isomorphic with –but not the same as—the three ig\(\text{hsan}\) of the village, Berber for ‘bones’ or lineages. The social operation that animates the k\(\text{hams}\) is thus the ‘arranging of the bones’, the transmutation of three lineages (comprised of twenty-seven independent households) into five working k\(\text{hams}\), or fifths.\(^3\)

Such arranging solves several practical problems. First and most fundamentally, households must be assembled into larger units because they cannot contribute to the communal labor pool at the same rate over the course of their lifetimes. The organization of households into larger groups allows for families at the peak of their productive power to compensate for relatives at more vulnerable points in the domestic cycle. Lineages –the primary, locally sensible way to reckon relatives-- cannot be used for this amalgamation because they are too unequal...
demographically. The largest lineage contains more than four times as many households as the smallest, and thus a rearranging of the ‘bones’ is necessary to create viable work groups that are seen to be balanced or ‘fair’. Both household and khams organization facilitates the transfer of labor across time spans longer than any individual maintenance project, or, indeed, any individual life. The organization of these transfers depends on a matrix of practical and cultural logics that integrate various temporal patterns and social levels of inequality.

Theoretically the khams division provides us with a lens through which to view two sets of issues of scholarly contention, the vexed but essential integration of equality and inequality (especially across time), and the practical importance of accounting for this (in development schemes, for instance). As Amartya Sen has argued, questions of equality always concern the equality of some particular thing: equality of some sort is accompanied by inequality of another (1992:viii). The khams is no exception to this rule, and I will argue that the socially just, integrative functions of the institution are accompanied by a consolidation of power in the hands of the best-situated members of the most fortunate lineage. The way this is accomplished --the combination of several different logics of equality and inequality-- suggests that the khams is both the product of, and framework for, practice.

This is of more than academic significance. Because the khams is now being encouraged as an efficient and equitable system by ‘outside’ actors, there are material and theoretical issues at stake that extend beyond this small corner of Morocco. The World Bank, the Peace Corps, and Moroccan national agencies are working with the people of Tadrar on projects ranging from school construction to the creation of a potable water system. In these projects the outside agencies generally provide most of the money and supplies, while the people of Tadrar provide the labor. Not surprisingly, villagers use the khams divisions to allocate responsibilities for this labor. Such interventions amplify the local effects of the khams, skew its long-term function of equalizing some household differences, and lend a transnational dimension to the arranging of the bones. The khams is a case study that reveals a way that different notions of inequality are integrated. It shows how political and economic processes are driven by the temporal rhythms of social life, but are actualized through cultural valuations of different kinds of fairness. The khams thus affords an opportunity to ventilate academic discussions of inequality with ethnographic data, and examine the operation of culture in practical life.

Equality and Authority

The ethnographic core of my argument involves a single village, a social unit important because it functions as an irrigation collective. This is not to deny the porous nature of village boundaries or the importance of migrants to the economy of Tadrar, but for the purposes of canal maintenance the village is the relevant social unit.4 Importantly, the village is constituted by other, even more fundamental social units - households, or tikatin (sing. takat). Most tikatin have a nuclear family at their core and “because people accept the meaningfulness of the family, they enter into relations of production, reproduction and consumption” (Rapp and Ross in Lem 1999:105). Family is a larger category than takat, however, and the latter term presumes people who share an oven (literally a takat), which is to say specifically the people who pool their labor and have a share in the rewards. Sometimes family members live in different tikatin and sometimes tikatin contain individuals who are not family members. Most often takat members live together, but shepherds or migrants outside the village are still considered part of a takat if they return their wages to the village and if they can rely on their takat for support in the event
they lose their outside work. Everybody in Tadrar knows who belongs to which takat. It is not an ambiguous category.

The central dilemma in organizing communal labor for the requirements of the canal system lies in the dynamics of households. Households are not isomorphic or static. They are shaped differently and have different needs and abilities at different points in their lifecycles -- like the individuals who constitute them. Just as we cannot ask young children to do the same work as teenagers or adults, households at their inception cannot contribute to the village as households in their prime can. Simply, households cannot contribute equal amounts of labor because they do not have equal amounts to contribute; indeed, some have absolutely nothing to contribute at a particular time. The transfer of labor across time for the purposes of communal projects requires social institutions larger than the individual household. This is not unique to Tadrar.

Cultural understandings of equality and authority facilitate this fundamental household labor exchange, and these lie at the base of the khams system. Ideally, all adult men are thought to be ‘equal’ to one another. Each should have an equal weight in village affairs, but should also be master of his own household. This is not to say that women and younger men lack their own domains of control, or that such relatively disempowered people lack ingenious forms of resistance to various types of authority. The point is that men within a household are organized in a clear hierarchy according to age (especially fathers over sons), while adult men in general are seen to exist in hypothetical equality to one another.

This is partly what has allowed Berbers to be celebrated as ‘egalitarian’. There has traditionally been little sense of overall village ‘authority’, nobody to force men to toe any particular line, though this is not to say that there were not political powers beyond the village level. Today, it is important to note, the central state is (seemingly) omnipresent in Morocco and its influence extends into the most remote corners of the kingdom. The region of Tadrar has a caid, the local representative appointed by the government, and he is the final arbiter of disputes, with the power to fine and even jail those he determines to be in the wrong. There are also various elected and appointed officials and assistants to the caid who are sometimes sought to adjudicate disagreements.

Still, intra-village conflicts invariably involve related men whose relatives are not keen to allow powerful, but largely ignorant outsiders to intervene. Villagers are especially reluctant to seek outside intervention in delicate, highly localized and ethically complicated labor exchanges. The caid may be called to deal with theft or disputes over rights to land -- which usually involve clearly specifiable property, contracts or ownership. The caid is unlikely to be called to pass judgment on labor relations within a village because these involve what James Scott terms ‘métis’, ad hoc and malleable forms of knowledge embedded in local experience and, in this case, kinship dynamics (1998:311). States and state agents are infamously clumsy handlers of the rights and responsibilities connected to such localized practical knowledge. The khams is enforced through social pressure, especially the dominance of elder men, and is significantly bolstered by appeals to the fairness of the operation.

**Bones and Fifths**

The villagers of Tadrar organize communal labor by putting a set of cultural concepts to work, by employing what they see as the natural basis of gerontocracy and patriarchal authority to preserve an egalitarian ideal between household heads. In schematic terms, this involves
arranging the village households into five groups and charging each with providing four men for the duration of any communal project. The particular men representing any group may come and go during a day or over the duration of a project, but the group as a whole must provide four adult men for the job until the work is completed. The negotiations over which men will represent each fifth (and who will do what job) are conducted within the fifth. The main complicating factors are thus who is grouped with whom in a fifth, and how to exercise authority within it.

Ideally each fifth would comprise an ighs, a lineage, and the patriarch of the lineage could decide which of his sons and grandsons was going to work on any given day: which man to send shepherding, which to irrigate, and who would attend to communal canal maintenance. In this way the khams frees patriarchs from having to compel fellow patriarchs to work—an unacceptable and largely impossible task—and allows each man to lord over his own descendents, a perfectly legitimate exercise of authority. Unfortunately, biology and history have not cooperated. As Table 1 shows, the three lineages, the ighsan in Tadrar, are so demographically unequal as to require significant rearranging for any practical purpose; we cannot simply ask that each ighs provide a given number of workers without eliciting claims of unfairness.

Table 1: Lineages (Ighsan or ‘Bones’) in Tadrar

<table>
<thead>
<tr>
<th>Ighsan (sing. Ighs)</th>
<th># of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ait Yous</td>
<td>18</td>
</tr>
<tr>
<td>Id Hamad</td>
<td>5</td>
</tr>
<tr>
<td>Idzdo</td>
<td>4</td>
</tr>
</tbody>
</table>

However, even if ighsan themselves cannot be used to divide labor, the ideas that underpin them are still useful. As we will see, the logic of the khams divisions is congruent with the ‘natural’ organization of the bones, or lineages, of the village. The analytical issue is the extent of the match between the ighsan and the khams, one dependent on the political skill of the men negotiating the organization. Viewing Table 1, and given the goal of ‘fairness’ in communal labor allotment (among equal household heads, at least) the question seems to be what to do with the Ait Yous. Dividing them into thirds would bring the average number of households in line with the other two ighsan, and would yield the fifths that are culturally desirable, but which Ait Yous households should be grouped together? The question is not purely mathematical, but partly genealogical and most centrally political. Today nobody in Tadrar readily describes himself as being Ait Yous, but rather as a member of the Ben Ouschen, Lukstaf and Arbuz families. Nobody I questioned could specify the exact point of division between these three branches of the Ait Yous, but all asserted they were separate. Only one man was interested enough in the connection to explain that the Ben Ouschen, Lukstaf and Arbuz families were in fact related, and to speculate how.
Table 2: Historical Ighsan and Contemporary Lineage Affiliations

<table>
<thead>
<tr>
<th>Historical Ighs</th>
<th>Contemporary Lineage / Family Name</th>
<th>Sublineage Affiliation (if any)</th>
<th># Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ait Yous</td>
<td>Ait Ben Oushen</td>
<td>Ait Ali</td>
<td>3</td>
</tr>
<tr>
<td>Ait Yous</td>
<td>Ait Ben Oushen</td>
<td>Ait Hussein</td>
<td>3</td>
</tr>
<tr>
<td>Ait Yous</td>
<td>Ait Ben Oushen</td>
<td>Ait Bil Qas</td>
<td>1</td>
</tr>
<tr>
<td>Ait Yous</td>
<td>Ait Ben Oushen</td>
<td>Ait Haj Ouahman</td>
<td>7</td>
</tr>
<tr>
<td>Ait Yous</td>
<td>Lukstaf</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Ait Yous</td>
<td>Arbuz</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Id Hamad</td>
<td>Id Baj</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Id Hamad</td>
<td>Ohomo</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Id Hamad</td>
<td>Belaid</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Idzdo</td>
<td>Idzdo</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

As Table 2 demonstrates, dividing the Ait Yous into Ben Oushen, Lukstaf and Arbuz families helps, but does not solve, our problem. The three families remain manifestly unequal in terms of labor power. Even lumping the Lukstaf and Arbuz together and opposing them to the Ben Oushen still leaves us with too many Oushen for a balanced division of labor. Somehow, to get anything like equality in the khams labor groups, we will need to do more than lump people together who may not feel related (such as the Arbuz and Lukstaf families). We need to create a division within a group of people who do view themselves as related, people who can and do trace their ancestry to a single man only a few generations ago, and who all have the same last name stamped in their government identity cards. We have to divide the Ben Oushen.

The sublineages listed in Table 2 are the obvious choice for such divisions, but before examining how the people of Tadrar—and most especially the Ben Oushen—actually undertake to divide themselves, it is worth acknowledging that the Id Hamad ighs is also conceptually partitioned. The Id Baj, Ohomo, and Belaid lineage members could not confidently explain their connection as Id Hamad, but they do accept themselves as related. The Id Hamad have the right basic demographic dimensions to form a fifth in the khams divisions, and so the question of the fairness of an internal division (or a larger association with another lineage) does not readily arise. Simply, a lineage that is conceptualized as such—as biologically integral, however vaguely—needs no justification in the minds of the people of Tadrar. It is when known lineages are subdivided along lines that follow one branch of a genealogical tree rather than another that charges of unfairness and political opportunism arise. This will become clearer in a moment.

For now, note that only the Idzdo remain both an undivided ighs, an acknowledged lineage, and a viable khams group for the purposes of communal labor.
Table 3: The Khams Divisions

<table>
<thead>
<tr>
<th>Khams group</th>
<th>Lineage (or Sublineage)</th>
<th>Total # of Households</th>
<th>Total # of Adult Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Ait Ali (Ben Oushen)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Ait Hussein (Ben Oushen)</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>6</td>
<td><strong>13</strong></td>
</tr>
<tr>
<td>II.</td>
<td>Ait Bil Qas (Ben Oushen)</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Ait Haj Ouahman (Ben Oushen)</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>8</td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>III.</td>
<td>Lukstaf</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Arbuz</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>4</td>
<td><strong>10</strong></td>
</tr>
<tr>
<td>IV.</td>
<td>Id Baj</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Ohomo</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Belaid</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>5</td>
<td><strong>9</strong></td>
</tr>
<tr>
<td>V.</td>
<td>Idzdo</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>4</td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Table 3 illustrates the khams divisions in Tadrar for most sorts of communal labor. In terms of households we see that the five groups are not very equal. The first khams group has six households, the second eight, then four, five and four households respectively. Having one labor group with twice as many households as two other groups would seem to indicate a breach of the main operating principle of fairness. However, this organization has advantages. First, it follows genealogical lines. The Ben Oushen as a whole are bisected, but none of the four Ben Oushen sublineages are internally divided. Since each of these four sublineages descends from one of the four sons of the original “Oushen”,12 each at least began with approximately one fourth of the original Oushen landholdings. In terms of property, then, the khams division approximates one notion of equality, at least among the Oushen.

Second, the household heads within the khams groups are brothers, half brothers, fathers and sons, or patrilateral parallel cousins—close blood relationships with clear lines of authority over descendents, all of whom are in the same khams group. This means that each subsection of the first two khams groups can operate with the logic of a patrilineal descent group, or very nearly so. Also, if we look at the total number of available adult men in each khams group there seems more balance than at the level of households. This is primarily because the seven Ait Haj Ouahman tikatin average fewer than two men per household. Since these seven households have only as much land as the one Ait Bil Qas household, we see that the labor rich/property poor are joined with the property rich/labor poor.

In sum, the khams seems to achieve several kinds of fairness and manages to organize labor groups in ways that make use of culturally naturalized patriarchal and gerontocratic authority. While retaining the logic of the bones, patrilineal relatedness, khams groups are nevertheless organized so as to have approximately the same number of able-bodied men available. All that is necessary is to group some families into putative lineages, and break the
one large, intact lineage into a set of sublineages. In some cases, rich sublineages like the Ait Bil Qas (a single household) are paired with fecund but resource-poor households in sublineages such as the Ait Haj Ouahman. In all cases, khams groups allow for labor to be consolidated at levels beyond the household, and thus allow households at vulnerable points in their cycles to be assisted by ‘relatives’, a category that in Tadrar begins with blood relations on the father’s side. This amounts to a sort of labor tax on more powerful households in order to assist people unable to contribute to the communal labor pool at any particular time.

**Qualifying Inequality**

The khams appears designed to ensure fairness over time, and in fact it does ameliorate differences between weaker and more powerful households. However, this does not mean that we ought to categorize it as essentially fair or, based on this, characterize Berber culture or society as being ‘egalitarian’ in anything other than a relative sense. Several forms of inequality remain embedded in the khams and, more interestingly, some forms of inequality are in fact exacerbated by it.

Perhaps the most obvious injustice concerns property ownership. My neighbors in Tadrar admitted significant differences in the amount of land owned by different khams groups, assertions that seem born out by the data in Table 4. The parts of the Ait Yous ighs who are not Ben Oushen (the members of Khams III), seem to be worst off, with approximately half the number of fields and less than half the total time for irrigation as their fellow ighs members (who comprise Khams I and II). Clearly, as a whole the division of the Ait Yous into two Ben Oushen parts and one non-Ben Oushen part, benefits the Ben Oushen. The division follows genealogical lines and is in some local sense ‘fair’ because of this. In another sense, however, the constituents of Khams III—the three Arbuz and one Lukstaf families—are significantly disadvantaged. They own much less than a fifth of the village fields, but are required to do a fifth of the labor to maintain the communal canal system. They are quite willing to expound on this inequality, which is to say that the members of Khams III are not mystified by their position in the khams system even if they lack an idiom to effectively challenge it.

**Table 4: Comparative Land Ownership and Irrigation Time**

<table>
<thead>
<tr>
<th>Khams</th>
<th># of Fields</th>
<th># of Irrigation Days per Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>252</td>
<td>95.48</td>
</tr>
<tr>
<td>II.</td>
<td>215</td>
<td>90.30</td>
</tr>
<tr>
<td>III.</td>
<td>122</td>
<td>40.23</td>
</tr>
<tr>
<td>IV.</td>
<td>343</td>
<td>62.28</td>
</tr>
<tr>
<td>V.</td>
<td>206</td>
<td>51.76</td>
</tr>
</tbody>
</table>

There are significant differences within khams groups too. We will examine the case of Khams I in a moment, but it is worth noting first that within the Idzdo, who are the only intact ighs who comprise a khams (Number V in Table 4), the wealthiest household has 85 fields and over 28 irrigation days, while the two poorest households have half as many fields and a quarter as much irrigation time. The integrity of an ighs, or lineage, is no guarantee of fairness in the khams. People with more land obviously benefit more from the canal system than people with less land, yet there is no attempt that I could discern to make labor obligations congruent with land ownership. The application of a logic of ‘fairness’ was limited to making lineages
"balanced". It was not employed in matching contributions to canal upkeep with benefits from this essential piece of communal property.

A second objective injustice lies in the fact that young men do a disproportionate amount of the male gendered work. This should be equitable over the long term if young men grow up to inherit the right to command the labor of the next generation, but this is demographically impossible. A rising population and a finite land base ensures emigration. Many young men, and especially younger brothers, will have to leave the village and thus will never be able to take advantage of the system they have supported with their labor. While each brother ostensibly has rights to shares of the father's property equal to all his male siblings, by the time a father dies the oldest son has in practice usually been acting as paterfamilias for some time. Second and third sons are often the ones sent out to work in the plains or cities to return money to the household. This is especially true once grandchildren are old enough to fulfill labor requirements in the village, and thus it is hard for all sons to claim rightful shares of property once their father dies. What seems to happen is that an arrangement is made by which the oldest son agrees to pay the others for their parcels of land. This is rarely possible given the limited potential to generate cash in the subsistence-oriented economy of the village. There are cases where disagreements over land payments between brothers have been litigated sporadically for the lifetimes of the brothers. Villagers find it shameful that seventy-year-old brothers take each other to court over land rights, but it is easy to see why this happens. Not all old men reap a reward for the labor they invested in the canal system when they were young.

Thus there are inequalities in the benefits of the khams between owners of more or less land, and between eldest brothers and their younger brothers and sisters. The khams division does nothing to address these, but neither does it create or worsen them. There are other ways this institution does exacerbate existing inequalities, however, and we will examine one of these in detail. This involves Khams I in Table 3 -- the combined Ait Ali and Ait Hussein.

According to most informants, the Ait Ali are the most powerful lineage in the village, and by their own admission Ait Ali are well-positioned in many ways. Two of the three Ait Ali households listed in Table 3 are headed by half-brothers, both sons of Ali, the youngest son of the original Oushen. The grown son of one of these brothers heads the third household. He has set himself up in business in the village, selling soap, oil, and other necessities to his fellow villagers on credit. I had no way to find out for certain how well off this man was, but he 'bought' his way out of at least some communal labor requirements by providing tea and sugar for the workers. One reason this man was able to begin a separate household before the death of his father is that there are enough other descendents available to work the household property.

In fact, the main households of the Ait Ali -- headed by the father and uncle of the shopkeeper-- are two of the five wealthiest households in the village by all methods of my accounting. This is partly because Ali -- the apical ancestor of the Ait Ali -- was the youngest son of the original Oushen. Ali inherited a quarter of the Oushen land that his brothers Hussein, Bil Qas and Ouahman received, but also got the portion left to the fourth, and last, surviving wife, Ali's mother. In this way the Ait Ali ended up with slightly more land than the other Ben Oushen lineages despite a normative equality between the four branches. Moreover, one of the two main households (the uncle of the grocer, not his father) inherited property from his mother (as the only son of the last surviving wife of Ali) as well as the woman he married, an Idzdo. This woman was able to claim her land because she married inside the village, and had only one male sibling, a half-brother who is mentally retarded. Upon the death of his parents, this half-brother came to live with his sister in the Ait Ali household into which she had married, in effect
transferring this man's Idzdo land to an Ait Ali household. This Idzdo man retains his legal rights to property, but because he eats all his meals with his sister, in effect his land and his considerable contributions of labor are transferred into one household of the Ait Ali. As we will see, the head of this household has considerable importance in the village as he has the time to work with development agents. He was also my main informant.

Table 5 Inequality within Khams I: Ait Ali and Ait Hussein Property and Labor

<table>
<thead>
<tr>
<th>Khams I</th>
<th># of Fields</th>
<th># of Irrigation Days/ 90</th>
<th># of Adult Men</th>
<th>Men Required for Khams/ Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ait Ali</td>
<td>188</td>
<td>56.20</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td>Ait Hussein</td>
<td>64</td>
<td>39.28</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

In addition to their advantages in land ownership, the Ait Ali have a total of nine adult male laborers while the Ait Hussein, the other sublineage of Khams I, have only four. This is probably not a coincidence. Land requires laborers, but laborers require land to feed them and families without adequate property tend to be smaller. When it comes time to devote labor to communal work on the canals, however, the khams obligation is divided equally between the two unequal sublineages. Two men are called from the Ait Ali and two from the Ait Hussein. Not surprisingly, while the Ait Hussein acknowledge the genealogical sensibility of this, they grumble nonetheless about its fairness. The Ait Hussein lack a cultural means to directly challenge the labor allotment, but they do grouse that the Ait Ali are 'rich'. The Ait Ali, for their part, accuse the Ait Hussein of being lazy and attempting to shirk their responsibilities. It is easy to see how this would come about. Half of the total Ait Hussein male labor force is siphoned off during any communal project, while the Ait Ali contribute less than a quarter of their male labor resources. This allows the two Ait Ali patriarchs to have one son spend his time working as a grocer and to send other sons to work for wages outside of the valley. This diversity of income is impossible or at least difficult for the Ait Hussein, who will need their male labor to irrigate their own fields and meet public demands for labor. The more communal projects undertaken in the village, the more disproportionate are the Ait Ali benefits. They have more land than anyone else, thus their total advantage from any 'village' project is greater while their comparative labor input is far smaller.

This is one example of how the khams system exacerbates inequality in one time frame and ameliorates it at another. Weak, single households with only one male worker are grouped together to allow them to survive, to maintain their public responsibilities without missing their household obligations. This seems to make things more 'fair'. But khams groups do not have to be assembled as they are. It would be conceivable, for instance, to let the Ait Ali stand alone as a khams group and contribute four laborers from the nine they have available—a proportion of labor and land in line with all other khams groups. Comparing the Ait Ali of Table 5 to the various khams levels in Table 4, we see that the Ait Ali by themselves have more fields than one complete khams group, and more irrigation time than two khams groups. They have exactly the same number of laborers—nine—as two other khams groups, yet they do not form a group on their own. The Ait Ali are joined with the Ait Hussein, and thus split their labor obligations with them. The Ait Ali successfully maintain the tradition of generating five labor groups by using a genealogically sensible, segmentary division that is 'fair' in some ways, and quite unfair in others.
Implications

The primary goal of this paper has been to describe the organization of collective labor in Tadrar, but there are some theoretical implications worth examining. Mostly these coalesce around the two central points I hope to have drawn from the khams organization: 1. the essential integration of equality and inequality (that I have sought to express in shorthand as ‘in/equality’), and 2. the importance of different temporal frames of reference to this integration. These points initially became clear to me through the influence Amartya Sen’s work.

Sen has argued cogently that ‘every normative theory of social arrangement that has at all stood the test of time seems to demand equality of something --something that is regarded as particularly important in that theory’ (Sen 1992:12). This has been criticized as a general proposition, but seems to fit the Tadrar data well. In any case, the economic literature on inequality is vast and cannot be reviewed in the space allowed. The issue I hope to raise is what anthropology can gain from Sen’s insights, and what the khams ethnography can do for theories of in/equality.

First, we see in Tadrar several different notions of equality enmeshed in a single social arrangement. It is not the case that a single, culturally accepted notion of equality determines the shape of the system, and in fact the vibrant aspect of the khams stems from the negotiations over which aspects of equality should obtain in a given timeframe or at a particular social level. The patriarchs involved in the khams are seen to be equal --but manifestly are not-- and the particular social arrangements they form depend on political maneuvers. The fifths are maintained as ‘balanced’, for instance, but the Ait Ali manage to contend that they should only comprise half a fifth despite their demographic equality to other whole fifths. Sen’s contention that ‘ethical reasoning, especially about social arrangements, has to be, in some sense, credible from the viewpoint of others’ (ibid.:17) is well taken; legitimacy would seem necessary for political operations to succeed where force is not a viable option. However, this does not address the combination of different forms of ethical reasoning in a single social formation. The khams is a social arrangement that makes use of a variety of forms of in/equality. Theoretical equality between lineages (the boundaries of which are contested) and between individual patriarchs is grafted to acceptable inequalities between older and younger men and between some larger and smaller households. This suggests the importance of considering how normative theories --in the plural-- are assembled to facilitate social action.

This in turn points to the relationship between ‘normative theories’ and culture. Lamont et al have shown how North Africans living in France explain racism and their disadvantaged position in French society by employing their own ‘particular universal’ notions of equality (2002:390), notions different than those held by the majority French population. The implication, however, is that multiculturalism is the root cause of the differences; they are not internal to ‘a’ culture. The different notions of equality employed in Tadrar are intra-cultural (rather than a case of culture clash) and thus contradict conceptualizations of culture as essential or ‘primordial’ (in Samuel Huntington’s sense) or as ‘an ethnographic algorithm’ (as Geertz accused Goodenough of believing). In other words, ‘It is not the origin of its elements but the way they are synthesized that is the specificity of a culture’ (Friedman 1997:81). The culturally dependent but active synthesizing of social formations in Tadrar --the politicized arranging of the bones-- should not be mistaken for an integrated cultural form that is ‘enacted rather than acted’ by living people (Roseberry 1989:10).
A second theoretical point involves the importance of time, which seems underemphasized in Sen’s work. For example, in the conclusion to his treatment of inequality Sen writes, ‘...it is important to come to grips both (1) with the diversity of human beings ... and (2) with the plurality of relevant ‘spaces’ in which equality can be judged.... The demands of equality in different spaces do not coincide with each other precisely because human beings are so diverse. Equality in one space goes with substantial inequalities in others’ (1992: 129). While accommodating this important point, the example of the khams suggests also the overwhelming importance of time that must be figured into such conceptual ‘spaces’, especially the temporal rhythms of biological and social reproduction.

For instance, central to a notion of equality involving sons working for their fathers is the presumption that the next generation of sons will do the same, in effect demanding at least three generations to articulate the relevant notion of fairness.20 Similarly, organizing households into fifths allows families to exchange labor over the organic lifecycle of their households rather than the duration of a project or another fixed temporal unit. A.F. Robertson has written of ‘rival temporal schemes of evolution and history’ (1996:591) and has suggested that ontogeny—the human lifecycle—is the vital missing link to explaining how culture mediates between biology and history. This point is central to understanding the khams, where labor dynamics within households drive labor exchanges between households—exchanges that can be culturally construed as ‘fair’ only in certain timeframes, only over decades and even lifetimes. A weakness of this study of the khams in Tadrar is that I could derive no information on the history of the institution. A synchronic study (of only fourteen months) can only infer the salience of particular long-term timeframes of fairness and their importance to the social operation of in/equality, but I hope to have drawn this inference convincingly.

Still, whether or not these particular conclusions are correct, temporality is clearly central to the operation of the khams—and to social theory more generally. Manuel Castells writes of contemporary struggles for ‘control over time’ and of projects seeking ‘revolutionary temporality’ (1997:124). Anthony Giddens has argued that people ‘in different cultures experience time differently’ (1987:144), and ‘in the connection between “organization” as a problem of the bracketing of time-space, and “organizations” as specific features of modern culture, we find issues of the foremost importance for the social sciences’ (ibid. 165). This ‘foremost importance’ involves explaining the way ‘Western’ society is actualized through new productive organizations of space and (especially) time under conditions variously labeled ‘network society’, ‘late modernity’, ‘globalization’, or ‘global capitalism’. To this end Giddens identifies ‘three interlacing forms of temporality’, including the ‘durée of day-to-day life, expressed in reversible time’, 21 ‘the durée of the lifespan of the individual’, and ‘the durée of institutions’ or the ‘longue durée of which Braudel speaks’ (1987:144-45). Castells writes of ‘clock time’, ‘timeless time’, ‘glacial time’ and issues of ‘spatiotemporal evolution’ (1997:126-127), while Bourdieu points out the importance of ‘the rarest and most precious thing of all... namely, time’ to processes of contemporary social distinction (1994:281). This sociological desire to grasp the ‘new’ sorts of temporal arrangements related to globalized capitalist production would seem likely to benefit from a comparative understanding of time in subsistence economies, or economies less articulated with the global market. And this may send us back to revamp some prematurely discarded ideas from social anthropology.

To take only a couple of examples, Max Gluckman wrote in 1968 that ‘various institutions have different structural durations, and their “intermesh” has to be analyzed’ (1968:233). If we burnish Gluckman’s suggestion with more recent concerns over agency, the
centrality of gender, and especially power, we have something very close to what I argue about the organization of forms of inequality through time, and perhaps some purchase on what Giddens means by ‘interlacing forms of temporality’ (1987:144). Meyer Fortes too made the case for different ‘functions of time’, and he did so in a way that bears comparison to current sociological thinking, citing ‘mere duration’, ‘continuity and discontinuity’, and ‘genetic or growth processes’ as categories of temporal function (Fortes 1970 [1949]:2). It is not possible here to pursue a full explication of these issues, but we can make a modest assertion: if the contemporary world system relies either on unprecedented, culturally specific understandings of time or, more fundamentally, new forms of time, it would seem useful to examine such understandings or forms vis-à-vis other contexts. In the article cited above Giddens avers ‘oral cultures do not monitor the conditions of their own reproduction’ and that ‘tradition, combined with the needs of practical adjustment to the material environment, are the main elements guiding overall system reproduction’ (1987:154). The Tadrar case suggests something quite different: an intense, reflexive monitoring of at least one sort of institutional arrangement, and the importance of historical contingency, local politics and kinship relations to its reproduction. The kham material makes a strong case that ‘tradition’ is far too stolid a word to capture the complex, politically vexed and active integration of inequalities involved in social reproduction.

Finally, the experience of development in Tadrar illustrates that these issues are of more than academic relevance. The Moroccan government built a school in the village the first year I did fieldwork, 1998. The groups of men charged with leveling a spot on the mountainside so that the school could be built were organized according to the kham. The Peace Corps funded a potable water project and purchased pipe used to bring clean drinking water down from a spring several thousand feet above the village. Again, a form of the kham was used to assemble the groups of laborers who dug the pipe into the rock and helped build the water storage tank. These sorts of projects were continuing as I completed fieldwork. Tadrar is located on the borders of the Toubkal National Park, and as the World Bank pursues the Morocco Protected Areas Project more money is coming to be available to improve local conditions, beginning with the canal system. The money will arrive from outside, but the labor is organized from within.

These outside agents and agencies have their own notions of equality, their own framing of what counts as fair, and their own timeframes of operation. The Peace Corps volunteer, for example, worked hard to ensure that all the households of the village would be equally served by the new water system. He sometimes had to put himself in the way of attempts by powerful families to secure advantageous access to the water (attempts they certainly could justify as ‘fair’ in some way), and he sometimes found himself in the middle of disputes. Eventually, working with the villagers, the volunteer managed to ensure that the seven village taps were located to serve everyone, if not equally then at least, to him, something close to it. Four years later, in summer 2002, all but two of the taps had been capped and the water piped into private houses—many, but by no means all, of the houses in the village. One kind of inequality (people living different distances from the spring where water had traditionally been gathered) was replaced by another (people living different distances from the taps), which was again altered to the present unequal situation where some people have private water in their houses and some have to walk and fetch it from a tap. All this ignores inequalities in the number of daughters available to fetch the water in the first place.

What the volunteer could not foresee or forestall was what the villagers would do with the water system once it was built. He was also unable to overcome the inequalities intrinsic the labor organization through which the water system was built, one based on the kham. The
khams allotments allowed some men the time to politick about where the main water lines would be located while others were off working on installing the pipe itself. The installation of these main lines was significant in that one led to an empty hillside owned by the Ait Ben Oushen, an area slated by the villagers (or the majority Ait Ben Oushen, anyway) for future development. One large house is now built in this area while below it some of the main opponents of the plan still have to fetch water by bucket from a tap several dozen meters from their house.

This does not mean that the Peace Corps volunteer did a bad job; certainly everyone benefits to some degree from the new water system and the villagers are very thankful for it. The young women have even produced songs of praise about the American ‘bringer of water’. Still, for our purpose the point is that the cultural ideas of fairness held by the volunteer were unlikely to match that of the villagers of Tadrar, and the volunteer had to fight for some forms of fairness important to him while accepting some local notions of fairness in order for the project to proceed. Such discrepancies in conceptualizations of fairness would seem to characterize many development projects, or indeed any cross cultural interaction. We may even see notions of in/equality as the vital core of our cultural beliefs. The lesson to learn, again, is that we are rarely dealing with a simple case of equality versus inequality, but of different standpoints on what counts as equal, differently integrated forms of in/equality, and different timeframes over which such standpoints make sense.

Ironically, perhaps, such interventions in Tadrar are amplifying some inequalities in the khams and causing it to have more significance under ‘globalization’ than in the ‘traditional’ context. It should not surprise us that the main person with the time to deal with development agents (and the time to deal with me and my research questions) was from the Ait Ali. He was among the small subset of men who were candidates to become part time politicians, men at the peak of their household productive potential, who had land to farm and sons to farm it. As a landed patriarch at the apex of his cycle of domestic production my main informant was fortunate to be largely free from manual labor; he was more fortunate still to be from Ait Ali, whose advantageous khams position freed up yet more time for political work. Not everyone in a position of political advantage has the ambition to seize it, of course, but my main informant made full use of his time to oversee—and shape—both my research and all development projects undertaken in the village.

In this way state and international interventions in Tadrar have served to strengthen some local social inequalities. Such interventions operate in a limited temporal frame and are geared towards singular transformation rather than the recurrent management of shared property. How one would avoid this, how, in Scott’s words, to ‘favor reversibility’ (1998: 345) is unclear, but would certainly depend on understanding the cultural frameworks by which in/equality is integrated into social arrangements, and coming to terms with the timeframes over which these are expressed. The practical significance of such understanding may provide support for the idea that social anthropology is ‘still worth the trouble’ (Godelier 2000), and may allow us to find ‘new equilibriums’, new configurations of justice, rather than merely lamenting the ‘vulnerability’ of indigenous structures (Berque 1978:175-176).

Conclusions

Because land in Tadrar is scarce, households cannot easily expand and contract their productive property as they grow and decline; instead households must adjust labor/land ratios through social amalgamation and dissolution. One key modality for this is called the khams.
This socially useful organizing principle is primarily invoked to assemble the labor to maintain the communal irrigation system, but it is also employed to certain other ends. Simply, in terms of canal maintenance, the *khamis* involves dividing village households into five groups and requiring four adult men from each group to work on a maintenance project until it is complete. Not so simply, the groups draw on the logic of patrilineal relatedness and the culturally sanctioned authority of older males over their descendents. Thus the *khamis* is in essence a mode of transacting labor—through time and across household boundaries—that takes advantage of one cultural value (patrarchal authority) to achieve another (equality among household heads).

The fifths are modeled on biological patrilineages (*ighsan* or *bones*), a logic of sodality and cooperation that is locally sensible, though the actual composition of the fifths departs from the ideal in intriguing ways. At several levels these arrangements are ‘fair’, they allocate obligations more or less equally between recognizably similar social units. In other, and perhaps even more interesting ways, the division is clearly not fair—it favors oldest sons and the wealthiest families and, I argue, helps a few households to consolidate their position at the top of a subtle political and economic hierarchy. Both the ‘fair’ and ‘unfair’ aspects are dependent on the timeframe of the judgment—not merely the social location of the observer, but the temporal frame of the observation. This suggests that self-reflexive anthropologists need attend not only to the unintended effects we have on what we observe (the social Heisenburg principle) and our partial understandings of what we observe (in both senses of ‘partial’), but also the temporal framework of our assessment. This last point receives less attention than the first two and, while not explored in depth here, would seem to have implications for economic theory, development practice, and social theory generally.

What is clear is that the present configuration of the *khamis* is more than usually significant because it is being put to work for an array of novel, one-time projects that require a great deal of the villagers’ effort. This is of more than theoretical interest. Village projects supported by the Peace Corps, the World Bank and the Moroccan state are now being undertaken using the same *khamis* system employed for canal repair. Thus we have national and international uses for the *khamis*—and national and international inflections of its transactions of labor. The arranging of the bones has found new purposes, and curious new forms of significance, in the global village.

Acknowledgements

Fieldwork for this paper was conducted in 1998-99 with support from the Near and Middle East section of the Social Science Research Council (SSRC) and the American Institute of Maghrib Studies (AIMS). Research would not have been possible without the help of many people, but most especially Abderrahman Ait Ben Oushen and Latifa Asseffar. Earlier drafts of this paper were helpfully and rigorously vetted by anonymous readers at *Etnos*, as well as participants at the Wissenschaftskolleg zu Berlin’s Summer Academy 2002, in particular Pascale Ghazaleh, Lucette Valensi, Saskia Walentowitz, and Mandana Limbert. Elvin Hatch, Ramon Guardians, Richard Chenhall and Mark Schuller also offered advice and encouragement, and Hillary Haldane did this plus helped make my prose readable. Sandy Robertson provided consistent inspiration, and pointed me towards the core of the argument many years ago.

Notes

1 A pseudonym.
2 ‘Berber’ (people and language) will be familiar to most readers. Today some cultural activists prefer the term ‘Imazighen’ for Berber people (sing. Amazigh) and ‘Tamazight’ for the general Berber language. Villagers in Tadrar know themselves as ‘Ishelhin’ (in Berber) or ‘Shleuh’ (in Arabic), both of which refer to the southernmost
group of Berber speakers in Morocco, those who speak Tashelhit. For simplicity of presentation I have chosen here to use the term 'Berber', which is sanctioned by at least some cultural activists. See Sadiqi (1997).
3 While at the time of fieldwork there were 29 households in Tadrar, only 27 are considered here. This is because two households moved to the village as shepherds; they own no land and are not normally part of the kham system.
4 For a critique of such village level studies see Marcus (1995).
5 This is not to say that only productive members are accepted into tikatin. Very young children and the elderly also belong to tikatin, as do mentally retarded and physically disabled individuals. The minimum size of a takat is a husband and wife; the maximum in Tadrar is seventeen people.
6 See Robertson (1991) for a theoretical review of the centrality of household dynamics to larger social forms and to social life generally, and Lem (1999) for a recent and particularly engaging ethnographic treatment of such interactions.
7 Women are vital to village labor generally, certainly to household dynamics, and the differences between male and female labor is a main axis of inequality in the village. Women’s labor is not considered here for reasons of space and for analytical simplicity; they are peripheral to my argument about the internal dynamics of the kham. For specific information on the role of women’s labor in Tadrar readers may see Crawford (2001b). For material on the role of women in Moroccan rural society generally see the edited volume by Belarbi (1996), particularly the annotated bibliography assembled by Tourya Temsamani, and Kasriel (1989). For a broader treatment of women in Morocco and the Maghrib see Charrad et al (1996), Mernissi (1989, 1997), Kapchan (1996), Lazreg (1990), Maher (1974), Sadiqi (1995), and Skalli (2001).
9 The Goundafi, a family of powerful despots, dominated this region from about 1850 to departure of the French in 1956, albeit in different ways before and during the Protectorate. They made no claim to saintly power, in contrast to the mode of authority made famous by Gellner, who writes ‘The egalitarian traits of tribal life, the symmetrical diffusion of power, the elective nature of leadership - these are only made possible by the unsymmetrical, egalitarian saints’ (1969:29).
10 As Fleuret notes, “it is convenient to distinguish between maintenance of the canal infrastructure and management of the water within it” (1985:110). See Ilahiane (1996:97) for references concerning the relationship between irrigation allocation and social organization in Morocco. See also Rachik (1990:98) and, for Tunisia, Bédoucha (1986), especially chapter seven. The kham is employed exclusively for repair rather than use of infrastructure.
11 The importance of fifths to different forms of Berber social organization has achieved considerable ethnographic attention. See Hart (1981:35), Mahdi (1999:54), and the article and bibliography assembled by Camps in the Encyclopédie Berbère (1984:1958-1960). My informants stressed the importance of the number five to Islam (five daily prayers, five pillars of the faith) rather than the five fingers of a hand (afous). Five has no absolute authority, of course, and Mahdi (1999:47) shows lineages assembled into three groups, or atlat, in an area very near Tadrar.
12 This man was originally known as Mohammed Ait Yous, but he was nicknamed ‘the oushen,’ or ‘the jackal’ for his ferocity and cunning in warfare. He was the local official of the Goundafi caid, and therefore the most powerful man in the valley. His descendants were known as the ‘people of the oushen,’ or Ait Ben Oushen.
13 Size, soil quality, proximity to a canal, shade from trees, and other factors make measuring productivity in terms of fields difficult. My methods for calculating property ownership are explained in detail in my Ph.D. thesis (Crawford 2001b). Here I rely only on a count of irrigated fields and, more usefully, the number of total irrigation days in a ninety-day cycle owned by each household, lineage, and kham group.
14 There are four cycles for the seven main canals, two with a nine-day rotation and two with a ten-day rotation. For convenience I calculated rights to irrigation time using a ninety-day common denominator. Most households own at least some land in all of the four major rotations.
Interested readers can begin with the more than forty pages of references Sen provides (1992:153-197). It is notable that the interests of contemporary economists center on inequalities of wealth, income and “opportunity” rather than labor organization.

See also Lamont and Fournier (1992).

This is Adam Kuper’s casting of Huntington’s notion of ‘primordial cultural identity’ (1999:3). See also Huntington (1997).

Geertz makes this point, however, only a page after writing of culture as an ‘acted document’ (1973:11), a conceptualization that seems to share with the ‘algorithm’ metaphor the idea that culture enjoys a sense of integrity prior to action.

See Gluckman (1968:222) for more on this.

This notion of reversible time is taken from Lévi-Strauss (1968).

On issues of time, social order and modernity see also Giddens (1984) and several passages in Hutton and Giddens (2000:1-51).

Lagnawi makes the specifically Moroccan case for this position, asserting that tradition is opposed to the spirit of initiative, that such a ‘patriarchal society’ is stagnant, circular, and lacks individuation, and that rural Moroccans exist only for the group (1999:18-20).

I have written elsewhere on aspects of these development projects. See Crawford (2001a; 2002).

Bibliography


