

Temporalities of Inequality and Timeframes of Development
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In this paper I discuss what I think of as the “modalities of time” involved in a development project in the High Atlas Mountains, Morocco. By “modalities” I mean the understandings of time held by the different actors involved, but also the timeframes relevant to various social dynamics impacted by the project. Max Gluckman discussed such timeframes in terms of “structural duration,” the period of time over which a given social institution (or “structure”) can be sensibly comprehended (Gluckman 1968). This seems esoteric, but it simply means that we cannot understand something like an electoral process without attending to at least one entire electoral cycle, and we cannot understand the dynamics of household life without attention to something like the three generations for the institution to emerge, grow, and die, the time it takes to allow one person to pass from dependent infant to productive adult to dependent grandparent or great-grandparent. Households will be a particular focus of this paper, but the point for now is that *all* social processes are manifest in time in specific and specifically relevant ways, and development projects –as social processes—are no exception to this rule. My ultimate point will be that the potential hazards of the sudden changes wrought by development efforts can be better predicted and more easily ameliorated with attention to the structural durations of the processes that will be affected. This is more complicated than it sounds, however, as we will see in the example below.

The Context of Place and Time

Tadrar is a small village of just over two hundred people in the mountains south of Marrakech. It sits at about 5,000 feet above sea level in very rugged country. While it rarely rains, there is an unusually abundant supply of water thanks to the 13,000 foot peaks above the village, which trap significant snow in the winter and release it down into plunging rivers through the long, dry summer. Villagers survive in this forbidding environment through irrigated farming –mostly barley and maize, but also walnuts, almonds, some vegetables, and more recently fruit trees. They compensate for an extreme shortage of land through the tireless application of labor -- a classic case of agricultural involution (Geertz 1963, Boserup 1965). In Tadrar irrigable land –anything flat, in fact, from fields to houses or roads-- is laboriously *produced*, so my main research focus has been the organization of labor.

The labor involved in irrigation is obviously crucial to life in Tadrar. In addition to the work involved in the distribution of water to more than 1,100 irrigated fields, the terraced plots have to be built and rebuilt when they fall down or are washed away, irrigation canals have to be constantly repaired, temporary dams need to be built when the water level falls too low in the river, and various sorts of holding tanks have to be constructed to store up enough water that it can be effectively released through the canals. Canals are built of rock and mud, and they leak quite badly, so water has to be sent through them in discrete pulses so as to maximize the amount that actually ends up in the more distant fields, more like blood in your veins than water in your domestic American house. Irrigation in Tadrar thus involves a complex synchronization of men, rock, and water, an orchestral organization of matter and energy in very precise timeframes.

Where irrigation does not occur, on the hillsides above the canals, we see mostly barren rock and spiky shrubs that barely survive the depredations of the swarming goats. Outside of a

few government-policed ecological reserves the parts of these mountains unquenched by human redirected water are lunar, forbidding, and lifeless. The areas below the level of the canals offer a striking contrast: densely vegetated, verdant, these are anthropogenic forests crammed in the narrow canyons, alive with the sounds of birds and frogs, dripping canals, children playing in the river, girls singing as they work. The labor of the villagers brings life to these canyons.

When I first visited in 1994 there was no road to Tadrar, only a mule path. Consequently there was no government school, no electricity, no reliably potable water. It was a 17 kilometer walk down 2,000 vertical feet to the nearest paved road, and another several kilometers beyond that to the nearest weekly market. Things have changed dramatically since then, however, mostly because of a dirt road the villagers built to allow trucks access to the upper part of their valley. This makes travel to market easier (and thus allows the production of marketable crops) and it makes circular migration much easier and more effective, adding cash to the village economy. Another source of change has been a number of Peace Corps projects and, the case I will discuss here, a World Bank funded attempt to cement one of the main irrigation canals.

This origins of this project are murky, but I believe they can be located in two distinct events: the establishment of the Toubkal National Park (which includes the peaks above Tadrar) and the arrival of Ryan Russell, locally known as Khalid, a Peace Corps volunteer. Toubkal Park had been nominally, bureaucratically established many years earlier, but there was no real manifestation of it in the mountains. However, along with some other conservation areas in Morocco, it caught the attention of World Bank funding people in the mid-1990s and they drafted a plan to conserve the ecological resources of these mountains, among them the endangered Barbary sheep. The villagers who use the high pastures for summer grazing of their non-endangered goats were to be compensated in this plan for restrictions on their traditional grazing rights, and the project described below is in some sense part of this compensation. Obviously “compensation” involves social transaction in time, as in the inescapable temporality of “the gift” (Mauss 1990 [1950]:36).

Thus, in the mid-1990s the people of these isolated valleys of the High Atlas built themselves a connection to the world economy – a rough, dangerous, but serviceable road. There were also propelled to the center of an international “national park” building agenda, one that would be filtered through state agents and agencies, as well as international NGOs like the German GTZ and the American Peace Corps. Ironically, the village of Tadrar itself would not have been greatly affected by the park, however, as few families ever used the high pastures (only three of the 29 households ever them, and while I was living in the village in 1998-99 only one family bothered to make the long walk up with their herds.) Nevertheless, through a curious chain of events Tadrar became amongst the first in its entire watershed to benefit from World Bank largesse connected with the effort to render the Park viable. This happened through the serendipitous arrival of Khalid, “the bringer of water,” who served to focus exogenous attention on the poor villagers of the Agoundis Valley.

Khalid manifest the best of the Peace Corps ideal –he was sober, perceptive and energetic, arrived with good French, had a background in Arabic, and showed real determination to learn the local Berber dialect. He also knew something about development, so instead of pontificating on his ideas for change or attempting to transcendently commune with the natives, he held a series of meetings with the men of Tadrar about what sorts of projects they would like to see. With Khalid’s help and encouragement, and using picture cards and an endless series of meetings, the villagers drew up a list of a couple dozen projects –from medicine

to kill the mites in their bees, to a public bath for the women—and they set about prioritizing the list. The top priority was cement for the longest canals, Issreran and Taforikht.

It is easy to see why this would be a priority. Not only does canal maintenance absorb tremendous effort, but the rock canals can be quite dangerous. Men irrigate night and day when the water is low, and the men move from field to field by walking in the canals. Sometimes canals collapse under the weight of the men, as they did once to me. I managed to grab a tree branch and swing myself to safety, but if I had not been so quick or so lucky, I would have fallen a couple of stories straight down into the rocks of the river. Still, despite the obvious advantages of a cement canal, I was concerned about the prioritization of the canal project for a couple of reasons.

First, it seemed to me that the leaking canals served broad economic purposes in that bushes and grass grew in “public” land below the leaky canals, land that could not be farmed, and poorer families in particular would harvest these resources to feed to their cows. This turned out to be a red herring. The men actually designed the new, leak-proof cement canal to leak in auspicious places by leaving small slits in it.

It turned out to be more difficult to engineer a solution to my second worry. From my work on land ownership it was clear to me that some households owned significantly more fields on these canals than others owned, and I feared that making the canal more efficient would exacerbate local inequalities in land ownership. This seems a petty concern in a village where everyone is very poor, but part of my research has involved examining inequalities within putatively “egalitarian” circumstances. Thus motivated, I asked one man why the villagers did not opt instead to give priority to a women’s bath (a *hamam*) or a medical clinic, and his reply was instructive. “Look,” he told me, “with a cement canal we can make money. With money we can buy a *hamam*, medicine –whatever we need. There is no money here. What we need is money.” Evidently it is not only the World Bank that sees development as an embrace of the cash economy. However, as we will see, different villagers had different ideas about how to turn a cement canal into spend-able cash.

The Project is Funded

I happened to be in the village in 1999 when the World Bank representative came to Tadrar to discuss the project and the disbursement of funds for it (and I’ve written on this elsewhere). I also happened to be there when he returned in the summer of 2004 to assess the impact of the then near-completed project, and I answered a few of his questions about how I saw the thing working out. What follows, then, is my reconstruction of what happened between these two moments, mostly as told by my friend and principal collaborator in Tadrar, Abderrahman Ait Ben Oushen.

I should say first that Abdurrahman was the main reason I worked in Tadrar (he welcomed me enthusiastically when I had been traveling in the region in 1994), and he was the main reason Khalid ended up working in Tadrar (he had welcomed Khalid equally enthusiastically). So Abdurrahman is not a “typical” villager (if there is such a thing); he has long been actively interested in the outside world. He taught himself some Arabic by listening to the radio and he had even worked on French and English from time to time with visiting tourists or other guests. Unsurprisingly, then, Abdurrahman also became a prime facilitator of development aid. He acted as translator (from Arabic to Berber) in the initial meeting when the World Bank representative came to visit (indeed, he hosted the meeting in his home), and for

much of the project Abderrahman served as “*rais*,” “president” or “leader,” in charge of the implementation.

In his version of events, the Bank had agreed to spend the money for cement and rebar to rebuild the canal Taforikht. There were a number of important specifications, such as the number of meters from the river the canal could legally begin (50 meters is Moroccan law, and is meant to ensure that no village simply dams the river and desiccates downstream villages) and the amount of rebar to build into the cement. At first enthusiasm for the project was high and everyone “worked together” on the canal. This is the point of this kind of “participatory development” --the agency provides the capital for materials and local people give of their labor. However, cooperation soon broke down and the men decided to arrange a proper labor rotation. Normally, this involves consolidating the village households into five groups and requiring a certain number of laborers per group over the term of a project. The groups are nominally based on lineage relatedness, but they are interestingly skewed to ensure “fairness” between lineages and “fairness” between households. Some households, for instance, have but one able-bodied man (the patriarch) and he cannot ignore his private irrigation obligations to work on communal projects, so larger, labor-rich households are grouped with labor-poor households in what appears to be a long term labor exchange between groups imagined to be “related.” I have written on this elsewhere; in my other work I emphasize the temporal frames (or structural durations) over which labor exchanges can be seen as “fair.” In this case the groupings are obviously unfair over the course of one project, but might be seen as fair over a longer time period.

In the canal cement project, however, the organization was done somewhat differently than it was for other projects. Instead of working by time, the villagers decided to allot responsibility by distance, with the different groups being responsible for a certain number of meters. Each group could finish their section when they had time, and once done the next group in the rotation would take over. Nominally there are three lineages (or *ighsan*, bones) in the village. These are typically divided into five work groups because one lineage is so much bigger than the others. (Lineages are comprised of eighteen, five, and four households respectively.) The most powerful lineage is descended from one man who had four sons. For the purposes of communal labor it is divided into two main parts (with two sons of the apical ancestor in each) plus one residual group of families who broke with this lineage before the apical ancestor came to dominate the village in the early part of the 20th century; the other two lineages are genealogically intact.

With the canal division this arrangement shifted. Not only did the organization change from a responsibility for specific amounts of time to responsibility for certain distances of built canal, but the number of groups changed from five to seven. The largest lineage had responsibility for eighty meters (four groups of twenty, representing the ancestors of the four brothers), and the one other set of households imagined to be in this lineage had ten meters. Thus one “lineage” comprised a total of five groups unto themselves. The other two full lineages comprised two more groups and had only ten meters each in the rotation. This sounds bewildering, but the point is that the Ait Yous, the Ait Baj and the Idzdo lineages think of themselves as equal partners in village affairs. In this case, the Ait Yous came away with 70 of 90 total meters of canal. That does not seem equal.

It is possible that two of the three lineages had managed to shirk their share of the labor responsibilities. But it is much more likely that the most powerful men in the village had managed to get the World Bank to supply cement for a canal upon which they had the most

fields. This sort of thing is not uncommon. Locally powerful men manage to bend development to their own ends such that development projects end up exacerbating and concretizing local social inequalities. Still, there must have been something in this arrangement for the comparatively disadvantaged households in that they agreed to do any work on the project at all. What *was* in it for them, why these fiercely egalitarian men were willing to support a project that seemed sure to raise the already powerful to even more advantageous positions, is somewhat of a mystery.

But the mystery is not without clues. Early in the project Abdurrahman, the overseer of the undertaking, grew very ill. He ended up in the hospital in Marrakech for some time, and when he returned to the village he found that he had been voted out of his position as *rais* and his nephew, Hamad, voted in. Hamad was a newly independent patriarch in that his father had just died. (All men serve their fathers until death, thus men only become fully, functionally adult at the death of their fathers.) By Abdurrahman's account, his nephew and some accomplices began "eating" cement and rebar, using less than the specified amount of steel in the canal and making the walls thinner. Both Abdurrahman and his son took me on a tour of the canal and showed me the place where Abdurrahman had ceased to be in charge. It is true that the canal looked less solidly constructed beyond this point, and it is also true that when I visited the newly constructed end of the canal it was clear the specified amount of rebar was not going in. Abdurrahman claimed that the state agents in charge were unhappy that he, Abdurrahman, was no longer *rais*, but that there was nothing he could do about it. He did not seem anxious to place himself between his nephew's evidently popular policy of skimping on the project and divvying up the rewards, and the Moroccan state agent's desire to see the project proceed according to World Bank specifications.

In 2004, when the development agent was back to look over the project, none of this was said. The agent was taken on a tour of the canal (along with his wife and some friends who were visiting with him) and nobody noticed the change in canal construction. Undoubtedly they were focused too intently walking along it, as to fall could have been lethal. At the end none of the outsiders noticed that the part under construction was clearly being built with less rebar than should be there, and what rebar was used was spaced farther apart than originally designed. The inattention of the World Bank agent was a relief to many. I kept quiet. Even Abdurrahman was not anxious to prove his own moral worth at the cost of angering the Bank and jeopardizing future projects.

The World Bank was not necessarily satisfied with the outcome of the project, however. The agent asked me bluntly how the new canal had impacted the village, whether it "saved time." I explained that it did not save any time presently because there happened to be plenty of water in the river that year. The canals were full, there was no irrigation rotation (as there would be in drought years), and there was so much water to go around that nobody need worry about how to get water to their fields. The cement may have kept men from having to rebuild the previous mud canal if it had broken, but the time they spent working on the cement canal was far more than would have been necessary even had the old rock and mud canal collapsed.

This was not the answer the development agent had hoped for, as "saving time" seemed central to the Bank's objectives with the project. From the perspective of the villagers, however, they had just survived seven years of drought (by their reckoning), so the fact that they had a rainy year was welcomed, but this hardly meant that one should not be prepared for another prolonged drought. There was thus significant disagreement between the Bank and the villagers over the timeframe over which the canal could be understood to be "useful." Farmers evidently

think in both short and very long term cycles of surfeit and scarcity; urbanites are less attuned to the long term vagaries of meteorological conditions, and are less sensitive to their lethal nature. The Bank agent apparently thought of agriculture in Fordist terms; the villagers saw themselves as embedded in the temporalities of a deeper ecological rhythm.

Discussion

I think there are a number of lessons to take from this story. Some of them are obvious. Subsistence farmers are conceptualizing their new canal in terms of long term survival. They are seeking to minimize risk rather than maximize production, they are, in Eric Hobsbawm's words, "working the system to minimum disadvantage" (in Scott 1985:301). The Bank agent is thinking somewhat differently. For him the point is to allow fewer men to do the same job, with the eventual outcome of having fewer men (and women) in the mountains, and thereby decreasing the human pressure on the physical environment. Mountain villages are picturesque, and useful for the goals of ecotourism, but only at population densities lower than had been reached by intense exploitation of agricultural and agropastoral resources. Indeed, farming barley on the side of a mountain is not an especially rational thing to do (in the neoliberal sense of rational, anyway) and the Bank agent is probably right when he predicts that with the opening of the road the mountain economy will change to fruit production for the market. Men need only be in the village periodically to harvest fruit; it is much less labor intensive than grain. Comparative advantage seems to predestine an economic shift in Tadarar. In this sense critics of development are probably right that it serves to release cheap labor from the subsistence economy, labor that flows out of the mountains like the melting snow and ultimately benefits national elites and multinational capital.

There are two slightly more subtle points I want to make, however, one concerning time and "corruption" (Hamad's "eating" of cement and steel), and one concerning the nature of the labor "freed" by development efforts. Both reveal problems with certain assumptions made by scholars and by well-intentioned people in the development industry.

First, Hamad. It seems clear that there was some village consensus that skimming materials was a reasonable thing to do otherwise the various groups working on the canal (including Abdurrahman's own group) would not have gone along with it. The canal seemed shoddily constructed *the entire length* after the change in leadership; all groups seemed to be participating in this subtle "resistance" to state mandates about how to build a canal. Still, before he fell ill Abdurrahman seems to have been able to hold together a different consensus; it seems he was able to cajole people into state-sanctioned "proper" behavior. Why would he do so and how would he accomplish it? My supposition is that Abdurrahman thinks of his relationship with the Moroccan state, and to a lesser degree with the World Bank, in much longer terms than his fellow villagers. Again, Abdurrahman worked hard to get both an anthropologist and a Peace Corps volunteer to live in the village, and these efforts seemed to have paid off in terms of attracting the attention of the state and of development agencies. By 2004 Abdurrahman—and only Abdurrahman—had been given funding to start a tourist guest house. He was even, eventually, featured on national TV in a short segment on ecotourism. This is a dramatic transformation for an illiterate barley farmer and former shepherd. Abdurrahman is an ambitious man with long term vision.

His nephew Hamad has no such vision, and no real expectation of a long term relationship with these particular powerful outsiders. Abdurrahman could hold a consensus

together by promising long term general improvements in village welfare if people would abide his vision and keep the State happy in the short term by proving reliable stewards of state money. Once Abdurrahman was out of the picture, however, there was nobody in the village who thought it very likely they would ever see the Moroccan state take an interest in their village again, much less the World Bank. Short term pragmatism looks much different than long term economic rationality. Hamad –and the rest of the village with him— figured that they had this one chance to benefit from international largesse. It seems to have made better sense to spread the wealth around, and to take the short term benefit of the cash that could be had from black market cement and steel than to follow the rules and hope the other side would reward the good behavior. This may have seemed especially sensible to the two lineages who had very little land on the canal in the first place. Indeed, when the inspection came the Bank did not seem to notice whether the villagers had “behaved” or not, so the gamble seems to have paid off. We might even surmise that some of the cement and steel may have been used to bribe local officials, men who were likely to be around after the Park officials and the NGOs had gone away. This is another sort of long term plan. Attempts may have been underway to nurture new, durable relationships with local power brokers more likely to be around in the future.

If attention to the timeframes of development is one lesson we may take from this short example, another concerns the social units under consideration. To begin, outside agencies had no end of trouble trying to constitute the village as a village for the purposes of development. That is, “the village” traditionally operated without any leader or mechanism for deciding upon one. The whole idea of leadership was suspicious to men who thought of the village assembly – the *tajmaat*—as an arena of open discussion amongst all men, where even the extreme deference of age based authority might be somewhat, sometimes suspended. The State needed someone to deal with, however, someone to sign papers, someone to act as representative, so the State and international agencies demanded a leader, and in essence produced a leadership crisis as they produced leaders. The villagers offered Abdurrahman as *rais*, a word translated as “president” but which is also the man who leads the men when they sing and dance at weddings. They empowered him but were very keen to limit his power, also, in effect undermining in some cases their own unanimously elected leader. It is easy to see why this would seem baffling to outsiders.

Even more practically problematic than constituting the village as a political unit is the failure of most scholars and development schemes in this region to attend to the long term nature of household dynamics. Clearly life in Tadarar is based on the household –an institution that is more than a cluster of lonely rational actors, an institution wherein people do not “rationally maximize” their own benefits, but give selflessly over very long time periods for the benefit of others. The bad news about this is that eminent scholars agree that economic understandings of the household are limited at best. Amartya Sen, winner of the 1998 Nobel Prize in economics, writes that “Inequality inside the household is one of resource-use and of the transformation of the used resources into capability to function, and neither class of information is well captured by *any devised notion* of ‘income distribution’ within the family” (1992:122-123, emphasis added). While the focus on “resource use” may be more apposite for non-agricultural, non-subsistence oriented households, the basic idea that within households people have motivations that cannot be reduced to self-interest confounds liberal economic theory at its core. Deidre McCloskey (also an economist, and a neo-liberal one) puts the issue in broader perspective in a discussion of free trade, writing “Suppose a big part of the economy—say the household—is, as the economists put it, ‘distorted’ (e.g., suppose people in households do things for love: you can see

that the economists have a somewhat peculiar idea of ‘distortion’). Then it follows rigorously (that is to say, mathematically) that free trade in *other* sectors (e.g., manufacturing) will *not* be the best thing. In fact it can make the average person worse off than restricted, protected, tariffed trade would” (2002:17 emphasis original).

In Tadrar households are not “a big part” of the economy, *they are the very basis of production and consumption*. Thus, without taking up the “free trade” part of McCloskey’s argument, we can still say that because the economy of Tadrar is based in and on households, economic theories devised to understand globalization or development are of little use in understanding village level dynamics. And since villages are where development is “happening,” i.e. villagers are on the productive frontier of capitalist expansion, it would seem we have few theoretical tools in conventional economics to understand why or how the capitalist system expands into previously less capitalized areas. The awkward truth is that since economics takes itself as the discipline best positioned to explain to the rest of us how the economies work, and since expansion is key to how the capitalist economy works, and since capitalism expands precisely in places like Tadrar that are organized entirely through households, and since economists admittedly have no idea how household economies work, we are in dire straits for understanding the single most significant dynamic in our contemporary social world.

The issue is not, I should add, whether villagers exhibit “rational” economic behavior or perform “utility maximization.” All people “maximize” in the sense that they choose between options. The point is that “In the same environment in which a capitalist firm rationally decreases production, a peasant household [for instance] rationally *increases* its output. The difference in response stems not from any supposed contrast in emphasis on material versus nonmaterial values, but from the fundamentally different ways in which capitalist and peasant household economies are institutionalized” (Donham 1999:25-26 emphasis added). Here we are not discussing a peasant economy, but the principle holds. What is “rational” cannot be deduced from models that do not take account of how Moroccan villagers exchange labor within and between households over very long time periods, and how they work actively to promote political egalitarianism (among men, at least) at their local level.

In Tadrar the labor freed by World Bank development is not going to be “free” in the capitalist sense of the term. It will be controlled by the patriarchs. Thus, the World Bank is simultaneously stoking the fires of international capitalist expansion by freeing rural labor from rural society *and* consolidating the power of a few rural patriarchs who will control how that labor is deployed in the wage labor economy. The rural patriarchal order and the capitalist economy are not points on a trajectory (with the former succumbing to the latter) but are currently productions of the same, State level and international interventions

I will end by saying that I am not a rabid critic of development, and that in the case of Tadrar many outside interventions have been very much welcomed, and have done much good. From potable water to a diesel powered grain mill to solar hot water in the mosque to the structural stability facilitated by abundant cement: villagers are very happy that the outside world has decided to bless them with “aid,” even if they do not usually understand the strictures attached to this aid or, sometimes, the motivations behind it. Indeed, some of the change in Tadrar I have facilitated myself, with my own money or through grants I have written. Thus, I would like to think of myself as a critical interventionist rather than a hypocritical non-interventionist, and that is spirit in which I present this paper. What I have tried to highlight in are the complicated and unpredictable ways that outside interventions impact local life, hardly a

novel point. But in particular I want to call attention to the way that the struggle for survival in Tadrar (and I presume elsewhere) is accomplished through *long term* social reciprocity, political economic engagements grounded in households and spread out over many, many years. Understanding the timeframes local actors are using in their calculations can render their behavior less mysterious; understanding how our own economic assumptions are embedded in the frenetic temporal order of which we are a part may help us to render our own behavior less bizarre –and less problematic-- as we meddle in the world of poor farmers.