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Trading capitals? Bourdieu, land and water in rural Uzbekistan

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In this paper, we use Pierre Bourdieu's concepts of capitals and fields in the context of a transitional rural economy. We investigate ways to adopt these concepts for the study of land governance, in an attempt to gain new insights in post-socialist transition. By means of an in-depth study of land and water reform in two Uzbek villages, we reveal the intimate connections between access to water and access to land in the Uzbek rural economy, as well as the wide variety of strategies used by farmers to secure access to these resources. It is argued that the increased importance of the political field, in combination with its increased volatility and the dismantling of Soviet local governance, led to opacity in the conversion rates of capitals, to a bet on land as safe haven, and an ambiguous status of money.

Keywords: land and water governance; post-Soviet agriculture; social capital; Bourdieu; Uzbekistan

1. Introduction: Bourdieu and transitional societies

Although Pierre Bourdieu's theory of capitals and fields for a long time was perceived principally as sociology of the French society, during the last decade the importance of his work for economic questions and for other societies has been positively re-evaluated. According to Swedberg (2010, p. 74), Bourdieu should be credited with proposing not one but several strands of economic theory, amounting to a proposal for a paradigm shift, and allowing us to take into account the role of power, the history of the economic actors' strategies and the social structures they are embedded in.

Considering the applicability of the theory in the context of developing and transitional societies, concerns regarding the historical specificity of Bourdieu's conceptual frameworks, applied by himself mainly on French society, were raised by Calhoun *et al.* (1993, p. 66) and Painter (2000, p. 256), among others. However, others noted Bourdieu's earlier work in North-African anthropology, and pointed out that the critics usually referred to one work (*Distinction*) and highlighted the

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relevance of his theories to the understanding of (post-) colonial economic transitions (Calhoun 2006, Lardinois and Thapan 2006). Development studies (e.g. Westermann 2007, Sakdapolrak 2007, Etzold *et al*. 2009) picked up some of his concepts, both in theoretical and empirical studies.

Bourdieu's theory, marked by the dialectics of structure and agency, by negotiations over access to resources, draws attention to a variety of different forms of capital serving as resources that actors trade on in those negotiations. For that reason, it is not so strange that Bourdieu's thought drew the attention of many scientific observers of post-socialist transition, especially those who were critical of the neo-liberal recipes the West sought to impose (Eyal *et al*. 2000, Burawoy 2001, Lampland 2002, Derluguian 2005, Outhwaite 2007, Eglitis 2011; see Verdery 2003 for a more comprehensive overview of the older literature). Eyal *et al*. (2000) found post-socialist countries the ''ideal testing ground'' (p. 96) for Bourdieu's theories. The puzzling question of continuities in transition, of certain groups, networks, classes, clans, families, departments and professions that seemed to thrive in chaos, created a demand for theories that could grasp the variety of assets, transactions, institutions and social structures that structured the socialist economy, and hence its transformation (cf. Burawoy 2001). Much of this Bourdieu-inspired research dealt with macro issues of competition over state assets and the state itself, often under the heading of elite-rule (e.g. Eyal *et al*. 2000, Verdery 2003, Stoica 2004, Pop 2007). Many sought a formula for capital conversion that could explain a broad range of transitions, starting from the assumption that, under socialism, economic capital was less important, giving more prominence to cultural capital and political capital, and that old networks with political access under transition could convert that into economic capital, that could in turn be used to control politics (Verdery 2003). Such a search for the post-socialist condition, presented as a variant of capitalism (Eyal *et al*. 2000), as a marginal capitalism (Burawoy 2001), or as something different from capitalism (Derluguian 2005) was criticised for missing the complexity of regionally different path-dependencies under transition; starting from a socialist world that was more regionally differentiated than taken for granted, less uniform and less planned in every regard (Ruble 1995, Allina-Pisano 2008).

We would argue that this is not an indictment of the work carried out under the Bourdieu flag (which elucidated many macro aspects of political transition and the interweaving with the economic realm), nor of the theory itself. As Outhwaite (2007), Blokker (2005), and others, argued, complementary types of study are necessary at the regional and micro-level. Anthropologists such as Verdery (2003), Humphrey (1998), Allina-Pisano (2008) and others contributed to this line of work, but mostly did not engage with Bourdieu. Without being able here to present a Bourdieu-inspired framework that can integrate micro and macro analyses of capital conversion in post-socialist transition, we believe we can contribute to such future endeavour, by means of our micro-analysis of economic competition and capital conversion in a village in the region of Khorezm, in western Uzbekistan, an analysis which we embed in a broader reflection on regional transition. We focus on competition over access to land and water, as these are the main resources in a rural economy dominated by irrigation agriculture. In the absence of open market mechanisms and the presence of a wide gap between formal and informal co-ordination mechanisms (Allina-Pisano 2008, Van Assche and Djanibekov 2012), competition can be described as continuous negotiation and translation. We will analyse these negotiations in terms of an exchange and a transformation of capitals based on Bourdieu's theory.

The paper is structured into seven parts. This theoretical introduction is followed by a short introduction to the area. Next, there is a report on methodological aspects (Section 3) and a conceptualisation of Bourdieu's thoughts in the context of everyday life in Khorezm, Uzbekistan (Section 4). Section 5 assesses the process of reconsolidating farmland along the lines of Bourdieu's concept of capital. Section 6 highlights processes of the conversion of one form of capital into another and for the management of land and water resources. The paper concludes with a final discussion.

2. The study area and its rural economy

Water is an essential factor in the irrigated agriculture of Khorezm province, Uzbekistan. Located in the western part of Uzbekistan, at the Turkmen border, the arid climatic conditions between two deserts make the Amu Darya River the main water source. As one of two main rivers feeding the Aral Sea, the river sustained agriculture in the region for millennia, and city life since at least 600 BC (Tolstov 2005). While the Russian conquest of the latter 19th century did not greatly alter local economies and landscapes (O'Hara 2000), the Soviets introduced large-scale irrigation infrastructure for cotton monocultures, and almost all water from the Amu Darya was diverted into a sophisticated irrigation network. In other words, access to water made the land valuable; the combination of land and water created the value of both.

During the Soviet era, the network of reservoirs, canals and drains was planned, created and maintained by the state. In formal communications during the field research for this paper, the egalitarian, rationalist ideology of Soviet economic policy was confirmed, as was the primacy of the state, and within the state, the centre (Moscow). However, the state under communism was not a monolithic entity and Soviet economic planning, in practice, depended on the actions, initiative and co-operation of numerous actors (Veldwisch 2007, Maandi 2009, Van Assche and Djanibekov 2012). Full state control, central planning and complete equality therefore existed only in the realm of ideology.

In Khorezm, the irrigation and drainage system, the land reclamation it enabled, and, further on, the emergence of profitable cotton agriculture, should be understood against this background. Large canals, dams and reservoirs are indeed persisting testimonies of a communist ideology championing the conquest of nature by man, but they also testify to a myriad of power relations between actors motivated by very different things. Smaller canals, drains and reservoirs are more the product of local initiative than of central control, often at the level of the collective farms, the kolkhoz (Humphrey 1998, Gambold-Miller and Heady 2003, cited in Trevisani 2008, p. 54, interviews).

The access to the farm management positions was mainly linked to the investment in and wise use of 'good relations' (social capital) that was embedded in patron-client relations (Trevisani 2007). Once in the position of a farm manager, the system of central distribution of agricultural inputs (water, fertilisers, machines etc.) offered good opportunities to deepen and extend the networks (Lindner 2007).

Since independence in 1991, Uzbekistan's agricultural sector has been deeply marked by state-driven processes of institutional restructuring and reform. While in the early years, and with regard to the resource land, this entailed the subdividing and 'privatising' of large collective farms into smaller production units (10–25 ha)

(Lerman 2008, Trevisani 2008, Veldwisch 2008), in November/December 2008 and January/February 2009 farmland was reconsolidated again (75–150 ha per cotton-wheat farm), followed up by a second wave of further reconsolidation in early 2011 (Djanibekov *et al*. 2010). This process of reconsolidating farmland forms the empirical starting point of this paper.

While the respective president's decree (No. UP-4041 of 20 October 2008) literally highlights the aim to re-distribute the land to the most productive farmers, the political motivation for this decree remains unclear. Nevertheless, three underlying paradigms appear likely: (1) to ease irrigation water management by catering for bigger farm plots only; (2) to facilitate the exercising of direct state control over cotton and wheat production by reducing the number of farmers; (3) to assure economies of scale. While the aim to ease the burden on infrastructure and co-ordination (Djanibekov 2008) and to improve overall efficiency (FAO 2003, Lerman 2008) seems valid, at the same time it created an unstable situation, where access to land and water is constantly negotiated among different stakeholders.

3. Data and methods

Empirically, this paper is based on an in-depth survey of farmers[1] from one Water User Association (WUA) in Khorezm, named Ashirmat. The WUA is composed of two former kolkhozes and covers the area worked by two villages situated at the tail end of the irrigation system. This material is framed by a series of additional interviews, and extensive field observations in the period 2008–2011, in the same villages, in neighbouring villages and at the regional centre, Urgench. For reasons of privacy, we will not mention names or use direct quotes. In 2008, 50 farm leaders from Ashirmat WUA were interviewed, among them 38 cotton farmers and 11 farmers who persisted after the land consolidation of late 2008. In 2009, all remaining 21 cotton and wheat farmers of Ashirmat and two other WUAs were surveyed. In 2010, 20 interviews in Ashirmat, in combination with 30 interviews with officials and experts in Urgench and 20 interviews with farmers, officials and experts in other WUAs, assessed the present state of land governance, after the first wave of land consolidation. Regarding the second wave of land consolidation, in early 2011, we only have preliminary data, based on observations and short interviews.

We focused on those farmers that persisted during these times of change, looking for recurring patterns of action characterising their adaptation strategies, and for their use of various resources in order to get access to the vital resources, land and water. The analysis uses GIS as a boundary tool (Oberkircher 2011b) to ground the insights gained by interviews, surveys and observation in the physical environment, and to determine the various roles of that physical environment in the negotiation process over resources. There are two datasets concerning farm size in the case study WUA: GIS cadastral data (a); and land size stated by the farmers in surveys of 2008 and 2009, (b). Comparing both reveals a significant difference. According to the statements in the survey, nearly all farmers manage less land than registered in the cadastre. For the 2008 survey data, the difference averaged approximately 16%, but reached extreme values of 65% underestimation. The reasons for this underestimation can be technical, which refers to failures in the mapping process, or related to farmers rationale and perception of their land, as discussed later. The difficulties and challenges faced by (social science) research in Uzbekistan are furthermore well documented by Wall and Mollinga (2008), Wall and Overton (2006), Hornidge et al. (2011) and Oberkircher (2011a).

4. Bourdieu's theory of practice and rural livelihoods in Uzbekistan

An agricultural livelihood is based on natural resources, which, through the process of agricultural production, are combined, invested and finally converted into a product with added value that can be exchanged for the desired outcomes; be it consumption, reproduction or reinvestment (Bebbington 1999). However, getting access to the natural resources requires itself investments of other forms of capital, each with different availabilities, exchange rates and specific opportunities of investment, and in interaction with other actors (i.e. input supplier, land owner, salesmen). This interaction of different actors that trade forms of capital and compete about access to resources is understood in the context of this paper as a social field in the sense of Pierre Bourdieu (Bourdieu 1987b, Bourdieu and Waquant 2006). In the following, we will consequently employ three core concepts of Bourdieu's theory: social field, habitus and the forms of capital (economic, social, cultural and symbolic).

4.1. Social field

In Bourdieu's theory, the social world is organised into different fields that are the sites of social struggle and strategy of various actors (Painter 2000, p. 244). One of these fields is the economic field. According to Swedberg (2010, p. 74), the economic field "determine[s] the operations of the market" and structures the interaction between the economic actors (e.g. farmers, state agencies, input suppliers, etc.). In his later writings (e.g. Bourdieu 2005a) firms are presented as the main actors in the economic field, but looking at his whole oeuvre, customers, state actors, unions, are considered economic actors. In the economic field, Bourdieu sees both supply and demand, both value creation and value destruction as socially constructed, in an on-going turmoil that hinges on the strategies of actors, on existing cultural valuations and on the pattern of linkages between the various fields (politics, religion, economy, law). For Bourdieu, the structures of the economic field that are evolving in this manner are both the pattern of actors and the pattern of rules, or institutions (Outhwaite 2007). Not only do firms replace each other in positions of prominence, but also the structure and interactions of firms change over time, as does the relative importance of the firm as such vis-à-vis other forms of organisation (cf. Blokker 2005). Actors come and go, and so do definitions of actors.

So, a field is also an arena in which different actors take positions in the competition for resources and power (see Figure 1; Bourdieu and Waquant 2006, p. 127, Sakdapolrak 2007). Fields are conceived as semi-autonomous systems, that structure, but do not determine, the behaviour of actors, and whose structures are also continuously changed, by means of these actor-driven strategies and because of changing impulses from the other fields (in which actors do the same job). For Bourdieu, the state is not opposed to the economy (Bourdieu 2005a). The political field also plays a special role, as its impact on power-relations in society at large makes the other fields highly sensitive to shifts in politics (Eyal *et al.* 2000). The structuration of economy, law, science and education cannot be understood without reference to politics (see below).

If we sketch the structure of the economic field in Uzbekistan, we must start by mentioning that the state is a powerful actor that tries to strictly frame agricultural practices by means of law, resource management and state procurement of cotton and wheat.

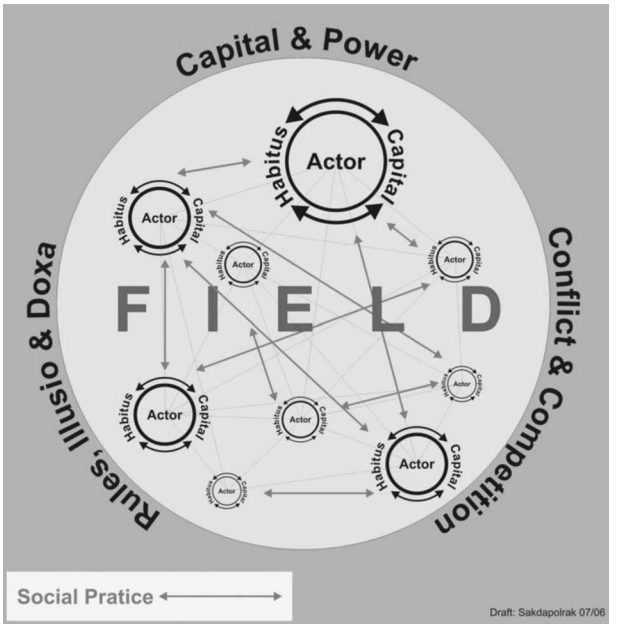

Figure 1. Scheme of negotiations on practices in the social field. Source: Sakdapolrak (2007).

Yet, now as under Soviet times, the monolithic character of the state is often overstated, and rules, norms and institutions governing the social field are: (1) often not determined by one central authority; (2) a multiplicity of partially overlapping and inconsistent rules; (3) a complex mix of formal and informal rules. It is not only that 70 years of Soviet agriculture have taught locals to evade state norms and rules perceived as overly strict, unfair or unrealistic, but also that the process of rulemaking and rule implementation is laden with ambiguity and uncertainty.

Under Soviet rule, the rural actors that dominated both politics and economy were the collective farms (Kolkhoz and Sovkhoz), although the formal descriptions of governance show a much more complicated organisational structure. On paper, various ministries, planning organisations and implementation organisations all contributed to the functioning of the rural economy (Trevisani 2008, Van Assche and Djanibekov 2012), and so did the local and regional executive branches (politics steering economy). In practice, the roles of all these were secondary to the collective farms, organisations that de facto represented local government (Allino-Pisano 2008), local economy and law (hard to distinguish from politics). After independence, the collective farms first persisted for a while, before being transformed in processes of parcelling, privatisation and then consolidation (see below). Local and regional executives (*hakims*) became more important in the functioning of the economy. For reasons detailed below, money is not the only medium of economic transactions.

Private ownership of land does not exist, but privatisation waves did produce a class of large farm 'owners' (fermers), who have both economic and political clout (Veldwisch 2007, Djanibekov 2008, Trevisani 2008). In addition, there are owners of small farms, people with only a private garden (*tomorqua*), labourers for the fermers, and migrant workers (Oberkircher *et al*. 2011). These last categories do not seem to have political or economic influence, and their activities have been dramatically

remoulded over and over again since independence, by a series of political interventions (cf. below), and by the shifting balance of power between fermers and local executives. To fill in this initial presentation of the structures of the economic field, we have to mention the agricultural support organisations (machines, fertilisers, pesticides), who generally lost importance in the rural economy since independence (Shtaltovna *et al*. 2011). Last but not least, there are various networks (cf. below) that structure economic interactions: family networks, patron-client networks, clan networks; often overlapping and hard to distinguish in their actual functioning.

All these can be considered 'actors' in the economic field of rural Khorezm (and rural Uzbekistan at large). Since some of them are not supposed to exist, and others are functioning differently from their official roles, it is not easy to observe the actual structure of the field, in terms of actor configurations. This is not just a matter of methodological problems in research. Because of the pathway of transition taken, there are structural reasons now to evade observation (Wall and Overton 2006, Van Assche and Djanibekov 2012). The same applies to the other aspect of structure: the rules of engagement, or the institutions shaping economic transactions.

4.2. Habitus

Habitus is described as a set of internalised beliefs and attitudes that are developed by living and socialising in a specific environment (Bourdieu 1987a, 1987b, 1997, p. 59). According to Bourdieu, the habitus produces recurring patterns of behaviour, without determining that behaviour. Habitus is not simply the manifestation of social structure at the individual level, but it represents rigidity in practice that derives from social structures (the structure of the field) and from personal and group histories navigating and interpreting those structures (Bourdieu and Waquant 2006, p. 156). Habitus hence embodies an individual path in negotiating access to resources, while the structure of the field can be interpreted in institutionalist terms as a structure engendering both individual and collective dependencies (Ostrom 2005). Swedberg (2010, p. 75) noted that Bourdieu's economic habitus seeks to understand the reason behind economic actions, instead of the rational calculus that is propagated by classical economists.

Growing up in a similar environment creates similar patterns of beliefs and attitudes, which enable people to (inter-)act within the field by ensuring the understanding of the mutually accepted customs of interaction. The environment, the social field, is characterised by shifting relations of power, differential endowment of capitals, changing conflicts, on-going competition and sliding patterns of co-operation between actors, utilising and re-negotiating a set of formal and informal rules (see Figure 1).

While all these features of the environment are subject to change, habitus does not change in full accordance with the environment. Habitus might change faster than many features of the environment, but in many cases it can be conservative, reflecting adaptations to older environments, or simply codes of conduct that are perceived to be timeless, i.e. evading the requirement of adaptation (Bourdieu and Waquant 2006, p. 164).

In Khorezm, Soviet collective agriculture certainly shaped socialisation regarding agricultural affairs. With Bourdieu, habitus is influenced by the position of individuals in relation to influential actors of the field (Bourdieu 2005b, Bourdieu

and Wacquant 2006). In general, those individuals (and groups) who were in better positions in the Soviet period have developed mechanisms to defend the interests and position of their group. In times of change, e.g. during de-collectivisation, they may benefit from these mechanisms, in the form of social relations and internalised 'ways to act'. People in Khorezm use the phrase 'he is a businessman' to express the ability of a person to make successful business using all forms of capital.

It can be noted that 'the farmer' did not exist under collective agriculture, and that the current farmers, running their enterprises in an environment that is only privatised in name, often got into these positions because of old hierarchies and the capital distributions associated with them. The district *hakims*, the local political executives, did exist under the Soviets, but their position became much more prominent after the dissolution of the kolkhoz, and the disappearance of the powerful kolkhoz directors. This new role entailed greater powers, but also greater risks for the *hakims*, exposing them to high expectations by higher politics. Their self-identification could not be studied directly (with a few exceptions) but, if we can read their actions, also in their case the habitus varies markedly, reflecting old hierarchies and old loyalties, as well as new and shifting power-relations.

Linking a reflection on habitus in Khorezm to our initial presentation of the structure of the economic field a bit more precisely, we can point out first that collective farming in Khorezm did not start from a situation of sedentary agriculture. It also did not start from a shared national, or often even ethnic, identity. Khorezm was sparsely inhabited by semi-nomadic groups when the Soviets started collective agriculture. Villages were small, not long lasting in the dynamic landscape (cf. supra) and many people lived in small hamlets in extended families, a structure that provided a home base for small-scale agriculture in combination with pastoral forays into the semi-desert and saline marshes (Tsvetinskaya *et al*. 2002). 'Uzbekistan' did not exist under the Khiva khanate, nor under Tsarist Russia, and both political and ethnic identifications were quite diffuse and layered, according to the scattered evidence we have (e.g. Munis Khorezmi 1999 (1829)). Schooling was limited. In general, the coming of kolkhozes in Uzbekistan was simultaneously the coming of Western style education (Fitzpatrick 1979), the construction of villages within the kolkhoz community, the emergence of modern forms of economic organisation and local governance, and, last but not least, the configuration of Uzbekistan as a unity, first as SSR, then as an independent country.

We mention this to underline the simultaneous reinvention of many aspects of social, political, economic and cultural life in Khorezm under early communism. While some anthropologists (e.g. Collins 2006) emphasise the re-constitution of older identities (ethnicities and clans) during kolkhoz formation (by means of re-institutionalising and politicising them), most observers, and our own work, suggest that overall this was a period of frantic reconfiguration of identities, of actors and institutions within fields, and of fields vis-à-vis each other (Humphrey 1998, Allina-Pisano 2008, Van Assche and Djanibekov 2012, interviews). This is very different from the slow differentiation of the economic field in the West, which Bourdieu analyses in a Weberian fashion, as a product of actors, institutions and mentalities that came together in an autonomous merchant economy.

'Habitus', we believe, has to be understood in that context. Because of all the simultaneous changes, people could not rely on acquired and internalised skills and strategies; there could be no fit between habitus and field that was felt as natural. New roles were defined, there were new institutions; new skills were required and

new forms of political representation, so not much of the habitus of locals drawn into the new kolkhoz structures was useful. It had to be reinvented (interviews). Depending on the local conditions, people from many different areas were brought together in the new farms (this was more outspoken in the Syr Darja area), and this made it even harder to rely on old habitus. One important exception was the early management cadres, usually engineering-minded professionals that often came from either Western or Westernised parts of the USSR (Feldbrugge *et al*. 1985, Fitzpatrick 1979, R.S. 1955). Their habits and mentalities proved useful in the new environments they helped to create.

The habitus of most rural residents in Khorezm was thus largely formed by a history of kolkhoz life. A kolkhoz had a clear hierarchy, with kolkhoz directors at the top (*rais*), assisted by a technical management team (an agronomist, a land surveyor/planner, an accountant, a hydro-technician, a party representative) and presided over a number of mid-level positions ('brigadiers', and book-keepers), and the workers, *kolkhozniki* (Feldbrugge *et al*. 1985, Humphrey 1998, Allina-Pisano 2008). Careers were possible inside the kolkhoz, and it was also possible to climb the ladder moving around, from farm to farm or from farm to executive and ministry, and back again (Verdery 2003, Lampland 2002, interviews). We argue that, in terms of habitus, these differences might have been the most important ones carried over to the new regime: the difference between management and the rest, in many cases (but not entirely) the same as the difference between identification with a local community (however new), and a career exposing oneself to more diverse influences in the Soviet structures. The 'businessmen' – habitus is now – usually linked either to this Soviet management habitus (cf. Eyal *et al*. 2000, Lampland 2002, Stoica 2004), or to positions in multifunctional clan networks (in turn overlapping with old elites).

4.3. Capital

While the habitus strongly influences the motivation of an actor, his/her actions are facilitated by the use of capital. Bourdieu distinguishes five forms of capital: economic, social, cultural, symbolic and political capital (Bourdieu 1983, 1987a). Economic capital comprises financial assets, as well as natural resources that embody or enable economic value. Social capital comprises all assets that spring from membership of a group, ranging from the advantage of mutual recognition and understanding to powerful networks and legal privileges. Cultural capital for Bourdieu has three different forms: material (possessing the right objects), immaterial (the right type of education, upbringing, knowledge, values, taste) and institutional (reinforcing the value of material and immaterial capital; Bourdieu 2005b, p. 53). Symbolic capital represents additional authority given to one of the other capitals by means of a recognised position of superior knowledge, power or wisdom. Finally, political capital is that which allows the individual to take advantage of public services or goods, and that which enables the individual to use the power of politics for her own advantage. With reference to the validity of his theory in Soviet countries, Bourdieu regards political capital as the primary principle of distinction and social disparities in so-called 'class-less' societies (Bourdieu 1998, p. 28). The political field determines the conversion modes and rates of capitals in the other fields.

For Bourdieu himself, an important field of analysis was the richness of modes of conversion between those forms of capital. For him, the forms of capital are distinct,

in the sense that they are subjected to different rules and modes of conversion, and in the sense that they cannot be simply seen as different manifestations of economic capital. But, at least in the capitalist societies he studied, economic capital had a primacy because conversion to economic capital was the goal of most deployments of the other forms of capital (Bourdieu 1983, 2005b, p. 70). Competition over resources, driving the negotiations (the games) in the social field, is in the end a competition over economic capital. In socialist and post-socialist societies, we argue that primacy has to be re-examined, because of the legacies of informal arrangements and exchange, and the different role of money in Soviet and post-Soviet economies. The study of transitional societies might have proven that the power and meanings of money have greatly increased after socialism (Ruble 1995), but it also showed that, in the diversity of transitional pathways, the role of the other forms of capital varies widely (Allina-Pisano 2008, Elster *et al*. 1998).

In the field of the rural economy of Uzbekistan and Khorezm, land is the major asset and land markets are not open. The formal lease arrangements presented as 'privatisation' are often not upheld by local governments. Economic capital, be it under the form of money, products or natural resources, is not that useful in acquiring land. We will demonstrate later that money enters the equation in different manners, but direct purchase is not possible. Private gardens are purely private, and can be sold. Peasant lands (so called *tomorqas*) are formally owned by rural households and are, to a certain extent, protected from state intervention. All other lands with agricultural value remain in the hands of the government, and long-term lease contracts do not rule out their cancellation (Veldwisch 2008, Djanibekov *et al*. 2010, Oberkircher 2011b, Van Assche and Djanibekov 2012).

This allots non-economic forms of capital (social, cultural, symbolic, political capital) a more important role than in market-based economies. In addition, water, a second essential natural resource for Khorezm agriculture, cannot be bought easily. Water is formally owned by the state and water delivery to the fields is organised by Water User Associations, according to state plans for each farm and area. However, various informal types of water control tend to be more important (Sehring 2009). A good relation to the *hakim* or *shura* (the head of the village administration), for example, can be converted in preferential delivery of irrigation water. A way economic capital can be converted into better water access runs via a technology bypass. This is the case when rich farmers buy a modern pump to ensure their irrigation even if water levels in the canals are too low to irrigate by gravity.

In short, in the case of Khorezm, economic capital, and certainly not the sub-form of financial capital alone, does not guarantee access to land and water (Abdullaev and Mollinga 2010). Furthermore, rules of conversion between the different forms of capital are subtle and ambiguous, because of the pervasive difference between formal and informal institutions. In the following sections, we investigate more deeply the application and conversions of different forms of capital in gaining access to water and land. Specific attention is paid to the strategies of farmers trying to survive the land consolidation wave of 2008–2009.

5. Forms of capital in Khorezm WUA

5.1. Access to water

The lands in Ashirmat, despite their location in the same landscape and that they share the same climatic conditions, nevertheless differ greatly on the micro-scale:

These differences in the landscape, as illustrated above, translate into different values for farming:

- Distance from the irrigation canal (Figure 2c) and distance to the point of entrance of the main canal into the WUA (Figure 2a) determines the cost of water: the longer the distance, the harder it is to get water to the field, and the higher the chance that others will have taken more water to your detriment. If one's lands are further from the canal, more pressure is needed, more capital expenditure, to guarantee water delivery.
- The elevation of the fields (Figure 2b). Low fields have a lower soil quality as the proximity of the groundwater table provokes capillary rise, increasing salinity. However, they also make water access easier, since fields can be irrigated by gravity or the lifting height for pumps is smaller and the cost for fuel is, hence, lower. The area of the former Zaribdor kolkhoz in the west of the WUA is lower than the former Ibragimov kolkhoz in the eastern part. This results in lower soil fertility, on the one hand, but easier access to water via gravity on the other.[2]
- Soil quality differs within the WUA (Figure 2d). Soil bonitet, an aggregated parameter for soil quality, shows the best values in the central area of the WUA, while there are lower values at the head of the WUA's irrigation system in the east, and especially in the western edge of the WUA towards the desert. Bonitet values, as present in official maps and documents, do not translate directly into perceived land value, since all farmers and officials know that these values were not precisely measured to start with, and since the values have not been measured frequently enough. Real bonitet can change from year to year (particularly due to salinity), while the official number can be 25 years old. However, there is often local knowledge among experienced farmers with regard to the quality of land within the WUA. As Veldwisch (2008) described, sometimes lower soil quality is even an advantage since it reduces the probability that the fields are arranged under the state plan in order to produce cotton or wheat, and farmers can grow more profitable crops such as rice.

From a farmers' perspective, the physical conditions of the leased land constitute a part of his economic capital. In order to get the crops grown, the farmer needs to invest additional forms of capital to get water to his fields. This may be more economic capital in the form of pumps and purchased electricity or further agricultural inputs, but also social capital, for example, maintaining good relations with a water manager that may result in an extra ration of water.

Looking at farmers' perceptions of their water situation, it also becomes clear that farmers at the physically least favoured locations (i.e. farmers As8, As4 or As21, see Figures 2 and 4) could irrigate as they wanted by finding ways to substitute the lack of economic capital, in the form of natural resource endowment, by other means (Figure 4). As mentioned above, one strategy is the investment in pumps, to lift water from the canal in times of low water levels. In Ashirmat WUA, on the one hand, large fixed pumps that were installed during the era of the collective farms are used for irrigation. As Figure 3 shows, especially rich and influential farmers acquired new big, fixed pumps (see section 4.2).

In addition, many farmers own smaller, petrol-driven, mobile pumps that they use in a very flexible manner whenever/wherever needed.

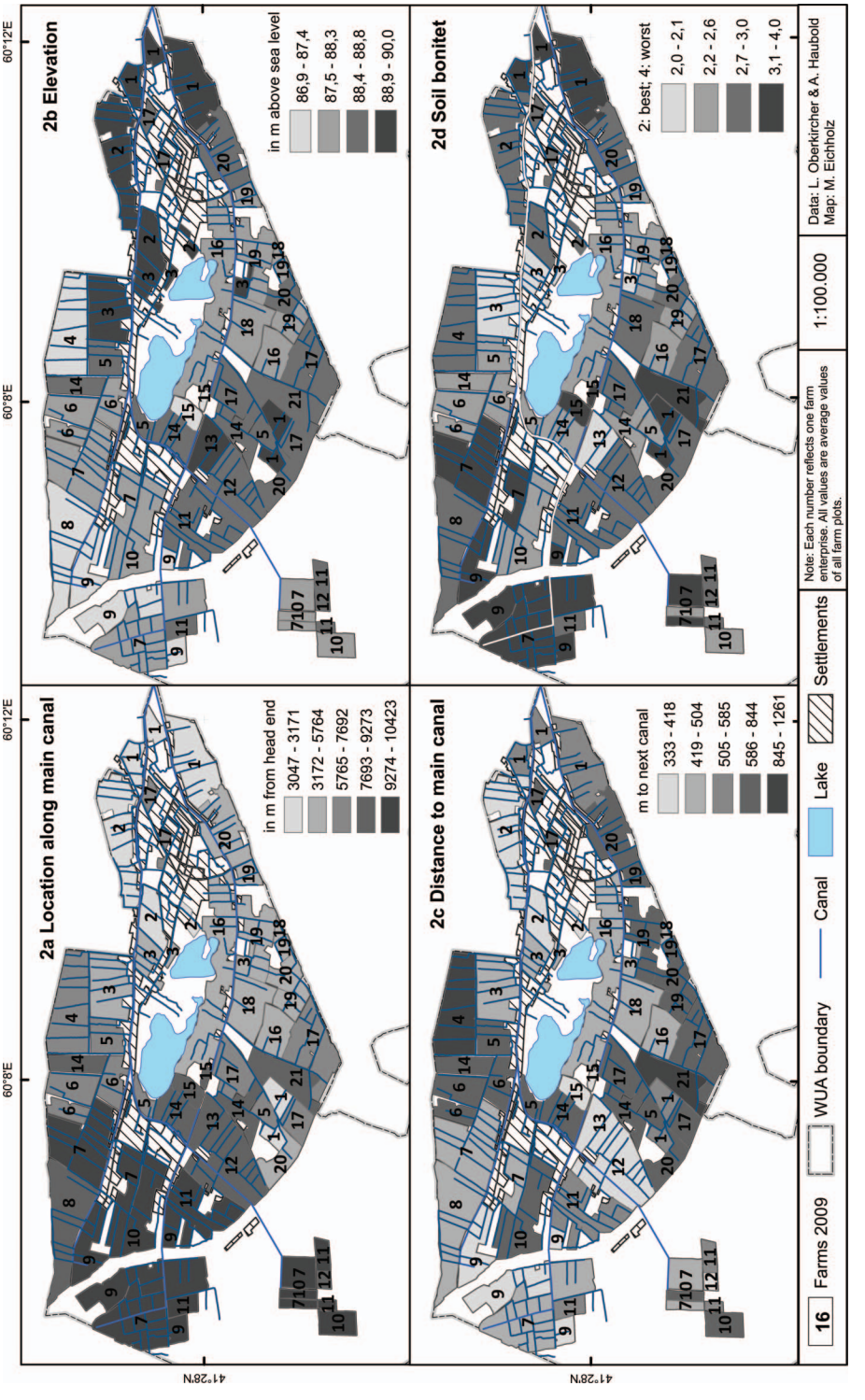

Figure 2. Economic capital: physical conditions of agriculture in Ashirmat WUA.

A technological solution is not the only one, given that (a) pumping is not always technically feasible, and (b) not affordable (acquisition and operation). Moreover, there are soft mechanisms to obtain water that refer to the investment of social capital. Visiting an authority that has a say in water management is such a strategy for water scarce times: of the 21 surveyed (surviving) farmers, 17 would go to the WUA chairman to request water, 14 to the neighbourhood leader (*shura*) and 10 to the district *hakimiyat*. Apart from this, six of the farmers stated that they approach authorities and 'upper people' together with other farmers.

Recapturing the situation regarding access to water, we can say that the differences at the micro level, in the location of the parcels and quality of the soils,

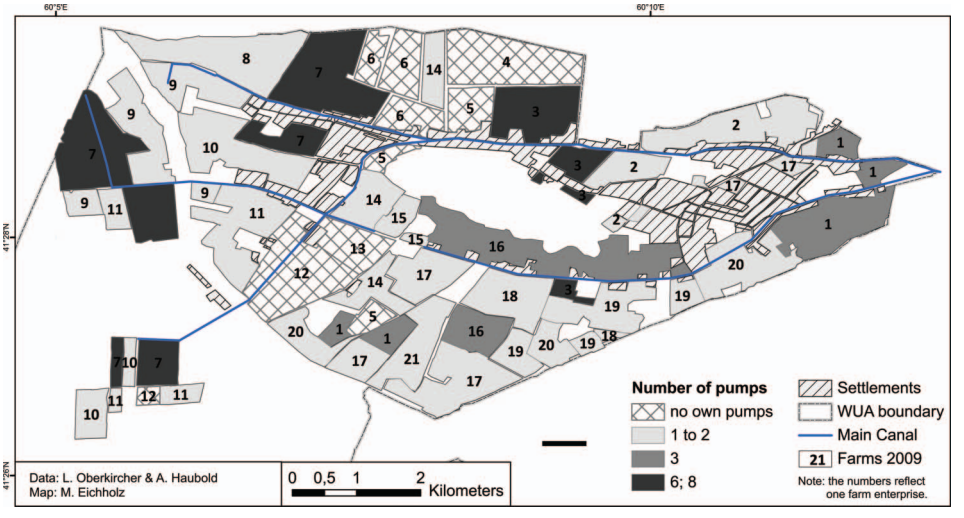

Figure 3. Technological capital: number of pumps by farms.

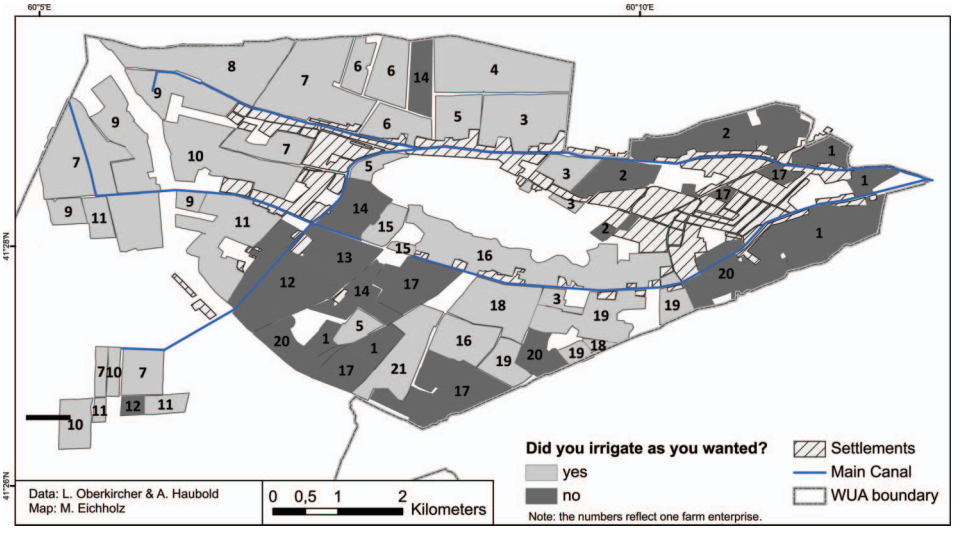

Figure 4. Result of capital conversion: farmers' satisfaction with irrigation.

create a broad spectrum of water needs and water accessibility. Scarcity and overabundance of water can change quickly over time and in space. This already indicates the need for a flexible system of water management, allowing for fast and localised adaptation. This coincides with the variety of strategies farmers use to get access to water. That variety of strategies involves a multiplicity of communication channels, which can also be associated with the still unclear succession of the kolkhoz hierarchy: it is not always clear who is responsible for what, and who can get things done. This multiplicity of addresses, in combination with the difficulty of just buying water, leads to a variety of forms of capital deployed to make sure the water gets where it is supposed to.

Regarding this variety of capitals, we observed not only the use of economic capital (money) to acquire technology to solve the water problem, but also the use of social capital (belonging to the same family, the same village, the same ethnic group, the same network), cultural capital (showing an appropriate knowledge of the water situation, knowledge of the networking game), political capital (utilising proximity to local politicians), as well as symbolic capital (using either their own, or their connection's prestige, rooted in community roles or in old Soviet functions). It is also clear that economic capital, in the form of money but also in the form of agricultural products, played an accompanying role in many transactions and negotiations that deployed the other forms of capital. This accompaniment of money or food (often rice) cannot be reduced to 'corruption', since sometimes it is part of traditional exchange rituals, and sometimes it is the only payment (in the absence of a functioning taxation system).

5.2. *Access to land*

Apart from the access to water for irrigation, the Uzbek specific conditions of getting access to land set up a second game in which farmers employ their capitals. Since independence, there were several reforms in Uzbek rural land governance. Djanibekov *et al*. (2010) described this transformation process in four stages. In the first stage, lasting from 1992 to 1997, not much change in the production system occurred, as the former state-owned sovkhozes were transferred to collective farms (kolkhozes). In 1998, collective farms were transformed into shirkats (agricultural co-operatives) and small areas were given to individual farm enterprises. This process was accelerated with the reform of 2002 that led to the complete break-up of the collective farm and the redistribution of land (leases) among many small producers. The result was a strong increase in farm enterprises, a decrease in average farm sizes as well as in productivity and yields. The fourth stage of the farm restructuring started in late 2008, when farmers with less than 30 ha were forced to cede their land to larger farms.

The reasons for the land consolidation process were multiple: increasing the productivity by economies of scale; improving the fit between land holdings and the Soviet water infrastructure; and reducing the costs of co-ordination and control of the state procurement system for cotton and wheat (Djanibekov *et al*. 2010, Van Assche and Djanibekov 2012). The co-ordination of water management could also be simplified that way; dealing with fewer farmers simplifies the operation and control functions of the irrigation and drainage systems. The WUAs, largely based on old units of (kolkhoz) water infrastructure, and barely fulfilling their role as participatory water management units, were expected to improve their functioning

when lands were merged in patterns closer to these old units (Veldwisch 2007, Trevisani 2007, 2008, Djanibekov *et al.* 2010, 2012). Moreover, the system of input provision (fertiliser, machines, insecticides), still based on Soviet models, could hardly cope with a large number of farmers, and forced these farmers even more to resort to a wide variety of strategies (and forms of capital) to acquire the necessary inputs (machines were particularly problematic in the first years after privatisation): relying on family and clan networks; barter; pooling resources; putting pressure on, or buying officials; importing; or, when possible, buying it in parallel circuits.

In the following paragraphs we will analyse the effects and the process of the consolidation process in Ashirmat WUA. We will focus on the intertwining of land and water as essential resources for agricultural production, and on the deployment of various forms of capital in gaining access to these. Ashirmat WUA is composed of two former kolkhozes: Zaribdor and Ibragimov. While the Ibragimov kolkhoz is situated at the head end, where the irrigation water from the main canal enters, the Zaribdor kolkhoz is situated at the tail end of the irrigation canal on the western edge of the WUA.

Figure 5 shows the distribution of farmland in 2008, when 76 cotton and wheat farmers were counted. The average size of their farms amounted to 25 ha according to GIS cadastre maps.

After land consolidation in October 2008, only 21 farmers remained, managing an average of 115 ha (Figure 6). Abdullaev and Mollinga (2010) identified three leading actors with strong positions within the village: the chairman of the Machine Tractor Park (MTP), the chairman of the rural council (the *shura*), the chairman of one of the former kolkhoz (*rais*). Their influence is rooted in the access to crucial information, financial resources and decision-making situations, as well as to the regulating technologies of the water infrastructure. However, in each WUA and district the situation will differ slightly, depending on the re-distribution of positions, roles and knowledge after kolkhoz break-up. In such social constellations and in line

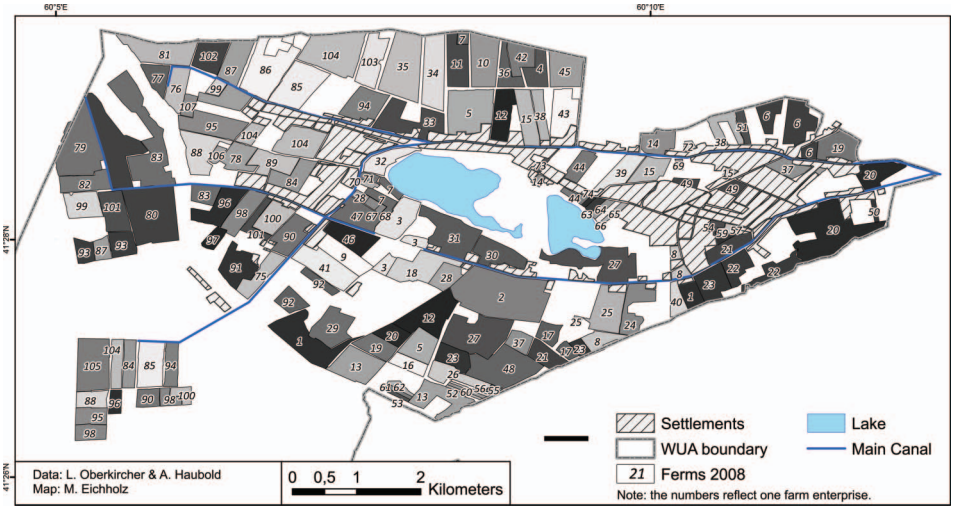

Figure 5. Farm boundaries in 2008.

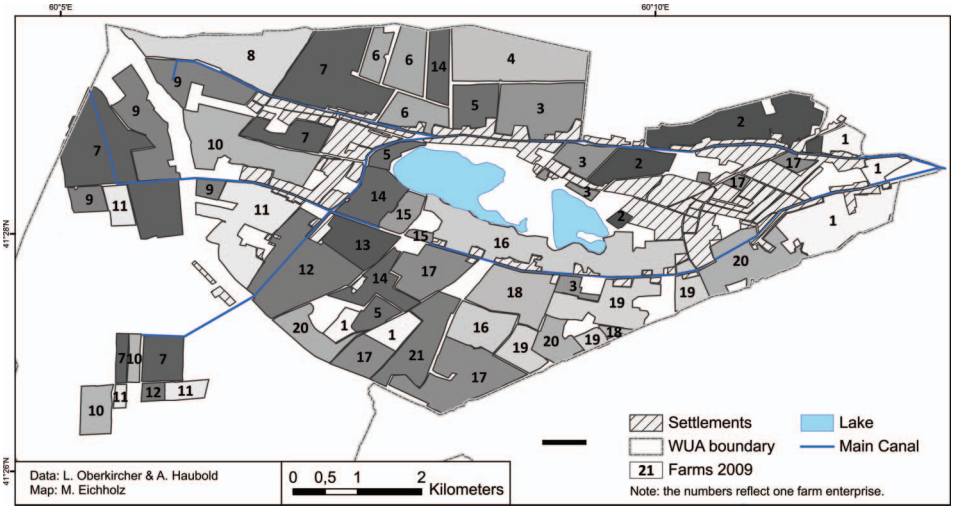

Figure 6. Farm boundaries after the land consolidation of 2009.

with research on patron-client-relations (Kaufman 1974, Bearfield 2009, p. 68), authority only rarely amounts to direct command. Even for influential people it is paramount to keep an eye on shifting political relations, and on the wise use of cultural, social, political and symbolic capital. Too many direct orders can undermine the social capital and symbolic capital that uphold this influence. For all others, connections with those of influence proved useful in navigating and surviving the land consolidation process.

One of the remaining farmers is As7, who manages 202 ha of land in the former Zaribdor kolkhoz in the western part of the WUA. He became a farmer in 1993 and formerly had the position of the kolkhoz chairman (called *rais* in Uzbek). During the land consolidation, in early 2009, approximately 100 ha were added to his farm. He states that he has a free area (i.e. acreage outside the state procurement system for cotton and wheat) of 62 ha, which allows him to grow cash crops like rice or vegetables. For him, the biggest problems concerning water are that drinking water is salty and that there is not enough water to irrigate – both typical problems at the tail end of the irrigation network, where his land is located.

The plots of the chairman of the rural council, the *shura*, (As16, see Figure 6) are located in the centre of the WUA area near the lake, where soil salinity makes the land likely to be frequently exempted from the state plan and, hence, is able to grow rice in years with enough water. He has relatives in government positions in Tashkent and in the seed industry. In 2009, approximately 60 ha were added to his farm through the process of land consolidation. Abdullaev and Mollinga (2010) described him as an influential person with access to state funds and resources, as well as to crucial information and influence regarding land and water distribution.

The fields of the third leading actor, the MTP (Machine Tractor Park) chairman (As1, see Figure 6), are located at the head of the WUA, where the water from the main canal enters the WUA area. He manages approximately 80 ha, 63 ha of which were added to his farm after the 2009 land redistribution. His free area consists of 14 ha where he plants rice.[3] Although his land is close to the canal and at the head end of the WUA (see above), the relatively high elevation requires the use of pumps to lift

water onto his fields. This is less of a problem for him than for other farmers, since, as chair of the MTP, he has access to technology and fuel.

5.3. *Which farmers did not agree with the land consolidation?*

Studying the top-down implemented process of reconsolidating farmland as in 2008/2009, and again in early 2011, in Uzbekistan reveals a range of positive and negative reactions. Loss of lands means economic loss, as well as social and political loss, and loss of the status of a farmer under state plan can also be seen as a symbolic loss, since it confers a higher degree of autonomy in economic decision making and in dealing with government officials. Some of those who lost their land became employees of the remaining farmers, a decidedly lower status in the community and an economically more vulnerable position.

Although for the remaining farmers in Ashirmat, land consolidation meant an increase of their acreage and resources, only 10 in 21 regard the land consolidation as positive. For example, As4 dislikes land consolidation and stated that he could not fulfil the state plan and could not reach his cotton targets due to poor soil quality. His land is located towards the northern edge of the WUA (see Figure 6). His parcels are indeed hard to irrigate – far from the canals – and apparently not very fertile. He was not part of kolkhoz management or district administration during the Soviet era, and does not seem to have powerful patrons. Nevertheless, he stated that his farm was profitable in the water abundant year of 2009. He is one of the few farmers that openly admitted growing rice, pointing at the importance of rice to balance losses in the other crops, but also pointing at the problematic credibility of financial and water accounting in general.

Yet, for those who won land, portraying it as a burden rather than a gain, might also be a strategy of diverting attention: openly admitting to have gained might draw the attention to the capitals at work, and openly admitting successful farming afterwards might draw the attention of rent-seekers and rivals. The same applies to the quality of land obtained: admitting to have obtained good land might increase the pressure of the state procurement system, the system of barely profitable mandatory cotton production. Underestimating the quality of the land (before and after consolidation) might help to reduce the production targets, even to take land out of the state procurement system. Moreover, in the attempt to downgrade the formally recognised soil quality, all forms of capital can be used. Since local officials also feel the pressure to show decent numbers in cotton and wheat production to higher authorities, their favours in this regard have to be carefully balanced.

6. The value and conversion of different forms of capital

The decision to consolidate land was, in essence, a decision to merge small farms into bigger ones – not, as in the European tradition, to re-distribute and merge parcels among a stable number of farmers (Djanibekov *et al*. 2012). So, in the Uzbek situation, the stakes for farmers, as lessees of government-owned lands, were much higher. One could expect the use of every form of capital available. Most farmers saw land as a major asset, a precondition for accumulation of all forms of capital, a possibility to create a relatively safe haven. For them, land consolidation meant a new round of negotiation.

Because money, and economic capital in general, cannot openly buy access to land or irrigation water, and because the tasks and powers of all players in local and

regional games are shifting continuously, it was, and still is, hard for the farmers to decide which capital to apply for and when, and it is hard to find out what the rules for capital conversion are. In that sense, the players' ideas of capitals are derived from their interpretations of the situation (Bevir 2004).

For long-term visions and investments, this climate is not conducive, and the absence of investment could be observed easily in the villages. Money and other economic capital may also be a liability, since using it as investment is hard and showing it is risky. What is left is conspicuous consumption, e.g. at weddings, simultaneously moments to enhance social standing, and investment with short-term benefits, first of all machinery (Oberkircher 2011b).

Since formal entitlements to land and water suffer from insecure use rights, and because of the formally small role of economic capital, the search for conversion rules is intense, and the rate of conversion and recombination of capitals is intense. Everything becomes a favour when the formal rules and obligations do not count much, and when things cannot be bought. Consequently, the rural economy can be described as an economy of favours, where the calculations regarding doing, or not doing, favours, and what to expect in return, can also be described in terms of combinations of forms of capital involved (see Table 1).

6.1. *Uncertainties on value: land*

Thus, we would argue that, as much as the forms of capital themselves, uncertainty regarding their value and conversion, rules the game around access to land and water.

First, it is not clear what the value of land is, whether it would be an asset or a liability. The degrees of freedom, autonomy, in using the land are hard to predict, and the calculations depend on shifts in social, cultural, political and symbolic capital that might amplify each other. Unstable political relations at several levels are at the root of this, but also the unclear succession of the collective farm, the unclear division of labour and responsibility. Another reason for the difficulty in

Table 1. Overview of the main aspects of capital conversions.

	Water	Land	Farm inputs
Characteristics	Often not a scarce resource	Access insecure due to consolidation	Parallel markets
Main capital conversions	*Social capital*: good relations with water distributors, co-operation among farmers	*Social capital*: relations to the *hakimiat*, 'hardness' of formal debts	State market: *Social capital*: political, organisational and family patronage
	Economic capital: conversion in technological capital (pumps)	*Economic capital*: successful farmers get more land (conversion of symbolic capital)	'Free' market: *Economic capital*: expensive but increases autonomy
Simplifying factors of conversions	Horizontal co-operation: patron-client-relations		
Complexity	Capitals often only applicable in combinations		

assessing the value of land is the difficulty in assessing the 'hardness' of formal debts, which can be arrears in payments for water, inputs, taxes, but also the non-compliance of the production target (Shtaltovna *et al.* 2011). However, the formal allocation of debt and the real impact of a formal debt vary considerably, so many farmers prefer to gamble, prefer to keep real income hidden, outside the banking system, and hidden from tax inspectors, local government and input providers; in other words, they prefer official debt over revealing income, since there is little trust in the fate of income once revealed. Once entrusted to banks, part of it can be suddenly claimed for public projects, to name one possibility. Whether a debt would ever be collected depends on the mix of the other capitals, initially the relation with the *hakimiat*.

The same applies to the implications of debt for the outcomes of the land consolidation process. Land consolidation made the gambling on debt implications harder, because it created a new and important potential consequence: loss of land. The question of being officially in debt or not – something known by all to be largely independent from entrepreneurial qualities in the Uzbek context – might be used as an argument to take your land away as well as an argument to give you more land, depending, once more, on the combination of other capitals. The game became even more complicated when it was declared that, formally, the winners in the land consolidation game, the farmers who gained land, became responsible for the debts of the farmers previously working the extra land (interviews). That also meant that the implications of that debt had to be gauged and balanced versus the potential benefits of the extra land, benefits in turn dependent on hard to calculate degrees of autonomy in working it.

6.2. Water

Regarding the value of water, it can be said that it is also hard to predict, but, maybe counter-intuitively, the value does not seem high. Only in years of scarcity (such as 2008), the value of land hinges substantially on the access to water, raising the value of water. As long as the Water User Associations are largely powerless organisations, unable to raise the fees for water, as long as large quantities of water are assigned to each WUA anyway, to ensure the cotton and wheat production, and as long as part of this water can be quite easily diverted to other crops, using other capitals, then the value of water does not play a significant role in the valuation of land. Then, the presence of water is just a condition that can be easily assumed, assuming a minimum of social capital with the farmer; a capital that can be assumed simply by his position as a farmer. In times of scarcity, the game does indeed change, and the intensity of negotiations dramatically increases, with all possible capitals utilised.

6.3. Farming inputs

For farming inputs, the conversion situation is different, since several markets exist in parallel. Farmers can rely on the web of state organisations providing fertilisers, machines, fuel and so forth, but then have to pay their prices, including informal ones. If they enter this pricing system, the formality brings its own informality, i.e. accepting traditions of political, organisational and family patronage. In the case of strong social and political capital, or simply in the case of strong pressure from

higher up on the local organisations to reach the production targets, farmers can afford not to pay, knowing that the debt incurred will be inconsequential. Farmers, if economically successful, can also avoid the risk of being pushed back in line by well-connected colleagues, and can resort to a more free market of more or less private suppliers. There, they will pay higher prices, but can escape from the gambling and the perpetuation of the game of favour and counter-favour. In the case of machinery, the investment might be especially worthwhile, since possessing machines makes it easier to handle extra land, creates autonomy from both machinery and fuel organisations, and the machines can be rented out to others.

6.4. Simplifying factors

We argue that two factors simplify the trial-and-error process of continuous testing of capital values: patron-client-relations and horizontal co-operation.

Patron-client relations persist, and can cross the boundaries of families, clans, ethnic groups, organisations, levels of government, formal roles. In other words, the complexity of a world where formal roles are unclear and can change at any moment, where belonging to this or that organisation, group or family can have different values over time, one-to-one ties, and loose networks of one-to-one ties, patron-client-relations can reduce that complexity (Kaufman 1974, p. 285). People know who they are talking to, who is their patron and who is their client, whatever their current position. Certainly, these relations cannot completely override the other forms of belonging, and cannot completely determine the social, political and symbolic capital of the individual, but they do help in determining the current value of these capitals, and, consequently, what the person can do, or can get away with.

Horizontal co-operation (among more or less equals) is another way to simplify the laborious and risky process of continuous testing: co-operation can aggregate capital and reduce risk (Bourdieu 1983). Farmers co-operate in managing pumps that are assigned to one farmer (Abdullaev and Mollinga 2010), and they will negotiate as groups with politics, either directly or via the *shura* (Oberkircher 2011b). In Ashirmat, the 2009 survey revealed that six farmers were involved in co-operative pump management. None of those six is regarded as very technically skilled or rich in connections with water managers; social capital is formed on the spot, by co-operating, and can substitute for missing political and economic capital. Seven farmers worked together in appealing to officials for water access.

Horizontal co-operation, as well as patron-client relations, often reveals an aspect of mutual dependence. The agricultural system, as a whole, requires the co-operation of a series of actors to maintain productivity. Officials and farmers both know that the state procurement crops (cotton, wheat) will be produced alongside crops more attractive for farmers, in order for farmers and governmental organisations to survive. Thus, whatever threatens the production arrangement involving both types of crops threatens Uzbek society, and this is known, although not officially acknowledged. The mutual dependence of farmers and a host of governmental organisations is thus understood, and many strategies are a priori excluded because of this understanding. Water and land are, predictably, the main assets where this mutual dependence asserts itself: no player can realistically strive for, or deploy his capital towards, a situation where land or water end up in only one

form of production. Looking at the issue from a different angle, it can be said that both governmental actors and farmers know that they need each other, and cannot devise strategies that marginalise the others completely. This does not extend to the whole set of farmers and the whole set of governmental organisations; some organisations (such as MTP's) are likely to disappear, and so are some farmers, but the government cannot do without farmers. Reviving the kolkhoz is not a viable option anymore.

7. Conclusion

Our Khorezmian case showed that Bourdieu's theory of capitals provides a structure that can elucidate economic competition in transitional rural societies.

In Khorezm, a layering of rules, a purposefully ambiguous situation regarding the application of formal or informal rules, does not allow for the easy establishment of values for capitals, of transformation and combination rules. Skills in testing these values, simultaneously skills in interpreting the situation and discerning the most applicable rules, are more valuable there. Capital is never unambiguous. Capital is a risk and an asset.

Land, as a form of economic capital, can also be a liability for farmers. Water thus far has rarely been a substantial risk. The risk of land mainly consists of the aforementioned difficulty in interpreting which rules will be applied when. Land comes with obligations, expectations from many sides, selectively protected rights. Debts can come with new land and with old land. Silent debts can be suddenly re-activated, and un-enforced rules can be enforced. Once profitable, it takes a combination of capitals to keep the existing capital intact. Despite the risk associated with land and economic capital, the general tendency, a double tendency, is one to see land more as an asset than a risk, and, second, to see economic capital as more desirable than others; more capable of withstanding the vagaries of the Uzbek rural economy and politics. In other words, land is seen as an asset that can generate more assets, even if land, what it produces and what its products can buy, are not 'property' in the Western sense, with all its connotations of stability, recognition and protection.

The land consolidation process that took place in late 2008/early 2009 and again in early 2011, proved a valuable field of observations regarding the meaning of land, and the utilisation of all possible forms of capital. It made it possible to study with greater acuity the calculations of farmers in trying to hold onto land, or rather shedding it, in assuming access to water, in dealing with others to get things done. The significant others are a myriad of governmental actors; first the district *hakim* and the other farmers. Even for locals it is near impossible to discern the capitals and capital conversions of their neighbours, as testified by the puzzled reactions of local officials when yet another farmer buys a car, or the amazement of farmers when suddenly a mid-level official moves into a new mansion.

In the game of land consolidation, local power relations can be reinforced or reshaped. In other words, pre-existing capital, of whatever sort, can make a farmer hold onto his land, and get more land, but, because of the instability of politics and the ambiguous meanings of land (and its debt) and of property in general, land and other assets can move to other people, or other people than expected can suddenly make a profit off the land and keep that profit. Despite the planned character and fast execution of the land consolidation, it can be said that negotiations preceded

implementation, and that power relations could be either confirmed or reshuffled in those negotiations. Once the land is re-distributed, its flow of capital will further reshuffle the relations of power. Economic capital, as in money, steadily becomes more important there; a counter-power slowly growing in the shadow.

In terms of Bourdieu, the opacity and tumult of Uzbek transition has had the effect of reducing the fit between habitus and field for many people. They cannot rely on old roles, skills, rules and capitals anymore and it is harder now to identify what is expected and possible in which roles. One can speak, with Pellizzoni (2003), of radical uncertainty, an uncertainty which also pervades the conversion rates and combinatory rules for various capitals. We emphasise that uncertainty here is partly unstructured, a product of instability, and partly structured, i.e. systematically used by groups in power. One can describe the Uzbek transition as a further collapsing of social fields that were already marginally autonomous in the Soviet era (Derluguiuan 2005). While the economic and political fields in those days were clearly lacking the autonomy and self-organisation of capitalist/ democratic systems, the acceptance of a divergence between formal and informal institutions, of a plurality of steering mechanisms, of local markets and kolkhoz autonomy, allowed for a greater differentiation of the economic field from the political one than is currently the case.

In recent years, the continuous attempts of central politics to control the lower levels and to control markets further reduced the autonomy of the economic field, and hence the transparency regarding the role of economic capital. Instability at the political centre, and incomplete control over the regions, in combination with this declining autonomy of the economic field, made politics in the marginal areas (such as Khorezm) at once more important and less stable (cf. Collins 2006). Political capital can thus reconfigure quickly and reshuffle the value of the other capitals concomitantly. Land does not escape these dynamics, but, despite its economic and legal fluctuations in parallel with political shifts, persistently emerges as a desirable economic asset (cf. Trevisani 2008, Van Assche and Djanibekov 2012). The value attributed to it cannot be reduced to its economic value (as in exchange value) at any point in time, because of the opacities, instabilities and restrictions described, and has to link to cultural and symbolic capital (Oberkircher 2011a, Wall and Overton 2006). Land embodies tradition, identity and, despite everything, a belief in future profitability, a hope in a better future.

On a general note, it can be said that these Bourdieu-inspired analyses of a transitional rural economy reveal how unlikely and contingent the Western evolution towards differentiated markets, economies and legal systems was. Indeed, many of the survival strategies observed, from reliance on families, networks and clans to the constant renegotiation of value, could be described, in Weberian (or Luhmannian) fashion, as a relapse in more primitive forms of differentiation, or, in institutional terms, of co-ordination. One can also ask oneself whether Western forms of functional differentiation should not be regarded as an exception that cannot be replicated elsewhere.

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Notes

1. In this paper, the term 'farmer' translates the Uzbek term of 'fermer', which refers to farm labourers that cultivate land under a state contract.
2. Although for the possibility of gravity irrigation the difference between canal water level and field elevation is decisive, due to the lack of continuous canal level measurements absolute elevation values (based on SRTM data) were used as a proxy.
3. Rice can be sold directly on the local market, so that sales revenues stay directly with the seller. In contrast, state crops are sold via bank accounts where revenues cannot be withdrawn for private consumption.

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