Sociology of Translation, Development Anthropology and Ghanaian Waterworks. In support of Richard Rottenburg's Far-Fetched Facts (2009).

Abstract: This article proposes an analysis of international support to waterworks in two African countries. It starts with a presentation of R. Rottenburg' Far-Fetched Facts (2009), a book that analyzes such support in an East African country while producing a much more ambitious line of reasoning. For the author, development aid is not really independent from a more global modern philosophy based on egalitarism (compelling actors to work constantly against and for maintaining this ideological stance). In the second part, the article presents a case study of pipe scheme implementation in Ghana, using one of the important propositions drawn from the sociology of translation —the agency of things— to look into the utility as a means to bring about both the community interests and its overtaking.

Key words: sociology of translation, waterworks, Afrique, development anthropology, agency of things

Résumé : Cet article est consacré à une analyse des appuis à des organisations de desserte en eau potable dans deux pays africains. Il présente dans un premier temps le livre de R.Rottenburg (Far-Fetched Facts, 2009). Cet ouvrage important, qui propose une étude de cas pour un pays de l'Afrique urbaine de l'Est présente également des avancées originales qui renouvelle en grande partie les analyses en anthropologie du développement. Pour l'auteur, l'aide au développement n'est pas vraiment indépendante de la philosophie du monde moderne d'où elle est originaire et de l'accent que cette philosophie met sur l'égalitarisme. Ce qui oblige les acteurs concernés à travailler pour maintenir cette idéologie malgré des pratiques qui s'en éloignent constamment. Dans un deuxième temps, l'analyse revient sur un des principes les mieux stabilisés de la sociologie de la traduction rappelé par Rottenburg —l'admission qu'il existe une agentivité ou un pouvoir allocatif des choses— et montre comment, au Ghana, un dispositif socio-technique de type mini-adduction d'eau potable peut à la fois être utilisé pour susciter l'intérêt des communautés rurales et organiser leur dépassement.

Mots-clés : sociologie de la traduction, systèmes de desserte en eau potable, anthropologie du développement, Afrique, agentivité des choses

Introduction

Richard Rottenburg's 2009 *Far Fetched Facts. A Parable in Development Aid* is, along with D. Mosse' *Cultivating Development* (2005) one of the few recent books that propose a renewal of the reflection in development anthropology. Drawing cleverly on the sociology of translation approach[1], it focuses on a theme often avoided in classical anthropological studies of this sort: the analysis of the relationships between donors and beneficiary institutions. The book provides a thorough examination of the support to waterworks provided by an imaginary European country ("Normland") to another imaginary one in Africa ("Ruritania") for R. Rottenburg.

In the first part, this article presents R. Rottenburg's main arguments and stress two of the points he is making: 1) why the new *agenda* based on similarity and the admission of equality of sovereignty between Northern helping nations and Southern helped ones —under the "partnership" heading— is required and how cooperation organizations try to cope with the problems that this *agenda* generates in practice; 2) how anthropologists' knowledge about globalization and its exclusion effects have played a strong role in shaping their approach to development and detach them from doing what they were supposed to do: give cultural explanations for projects' difficulties or failure.

---

[1] Also called actor-network theory.

In the second part, this article will examine the process through which rural communities secure decisions and implement waterworks, on the basis of some examples taken from the experience of the French Development Agency (FDA) support to Ghana in the Brong Ahafo Region between 2009 and 2015[2]. The Brong Ahafo project was a 18.5 million euro operation aimed at improving water access and delivery in rural areas. It subsidized the installation of 15 pipe schemes, 470 drilled and 20 hand dug wells (fitted with manual pumps) in the west-center of Ghana. The analysis will concentrate on of the highest type of utility proposed by the project (pipe scheme[3]) and show that its acquisition and management by communities are governed by different rules, with no apparent continuity between the socio-political context that would push a community to acquire a pipe scheme and the economical and technical conditions necessary to maintain and manage it. The management of a pipe scheme is supposed to follow rules defined by the international water policies (the 1992 Dublin Statement on Water and Sustainable Development and the 1996 Global Water Partnership —through the Integrated Water Resources Management recommendations). These policies state that it is through a well organized system of a constantly expanding number of paying customers and a constant increase of water consumption that waterworks should balance their budget, face their costs of production and investment and fulfill their objective: an all-embracing service, progressively giving reality to potable water conceived as a pure public good, defined by non rivalry and non exclusion. A conclusion will reflect further on the kind of situation imposed by development projects that cannot start without raising the curiosity and interests of the beneficiaries (hence answering to needs that are deeply contextual) and end up embarking them into a long journey in scalable exigencies.

Difference vs similarity in Rottenburg's book

R. Rottenburg's book is a choral essay and a parable as its subtitle suggests. The author creates multiple subjects of enunciation and gives voices to five development experts gathered around the same puzzle: Normland aid aimed at restructuring public water companies in 3 Ruritanian cities according to the international water policies — see above—. On should note that this model is implemented in a former socialist country where the tradition was free access to public services although there was not always much garantee of the continuity of the services provided.

The book gives the floor successively to a financier (Johannes Von Moltke, director of the Sub-Saharan division of the Normesian Development Bank), a technical consultant (Julius Shilling) and three development anthropologists. The first one is Samuel Martonosi — also a consultant—, engaged in action but a fierce critic of development processes on the (private) side. The second one is Edward Drotlevski, involved in a research project, doing participant observation and following as a consequence the consultants in their travels from Normland to Ruritania and back. He is acting as a partial replacement for the author himself, who writes under his name the fourth part of the book ("Trying again") and also the very fascinating "Prologue" (XI-XXXVII).

With the choral form, Rottenburg sets himself within the "battefields of knowledge" (N. and A. Long, 1992), showing how he slowly builds up his own views and emancipates himself from his protagonists' perspectives: the realism of Julius Schilling, the constructivism of Edward Drotlevski, the relativism of Samuel Martonosi. He also takes the precaution of fictionalizing his account, a process that, he argues, has the advantage of taking the reader away from the question of individual responsibility, directing his attention to "*the significance of general principles and*

---

[2] On the Brong Ahafo project, see M. Tschibambe (2015), N. Vieux (2015), J-P Jacob and P. Lavigne Delville (2019).

[3] A pipe scheme consists of a high-yielding borehole with an electric pump to transport water to a large tank. From the tank, the stored water is distributed to community standpipes. It could be managed through a community association (CWSMT, Community Water and Sanitation Management Team) or a private operator. Most of the beneficiaries in this case choose the first solution.

contingencies of mundane practices of the development word" (XVIII). Among development specialists, where one supposes that the readership for this book is mainly located, "*objectivity might* [also!] *be the fidelity to the individual case*" (p.141, see below), unless some formal device (like erasing the countries'names for instance) is used to guide the reader's interpretation elsewhere. As K. Donovan puts it, the sociology of translation allows anthropologists to extend to development organizations the constructivism and aptitudes to build support and networks that were once reserved for the analysis of beneficiaries[4] (2014: 874-875). The contribution of Richard Rottenburg to this thesis takes five different paths, each of them organized around a specific definition of the principle of difference and the way it is dealt with by actors.

-Difference vs similarity. Filling up the gap n°1

First, the reader is reminded that difference is at the root of all justifications of international aid and its "*will to improve*" (T. M. Li, 2007). It is because people, institutions, states, governance, economics in Southern countries are "different" —i.e less advanced— that they need to be helped by more affluent ones in the North (see on this topic, Corbridge, 2007, Mosse, 2013). Funds are raised to help erase these differences. But in the last decades, there has been a second principle, totally unavoidable and forming a loose couple (see below) with the first one, that has emerged. It insists on equality or similarity ("partnership"). Southern countries should also be recognized as sovereign nations, equals to others, that have a right to self-determination and ownership.

The reasons why this new ideology has been adopted has be explored. As N. Lühmann (1997) explains, the totalitarian semantics of our time is a semantics of all-inclusion that stems directly from human rights and values such as equality and freedom. While in earlier times, it was assumed that some (most!) societies —and most groups within societies— could not be included, nowadays it is expected that every society (and every group within each society) must be. The intense activities which make the world more global everyday requires equality, i.e the image of sovereign nations agreeing to do business together on an equal footing.

Within the development field itself, there might be very diverse motivations for the egalitarian *agenda* beside the general considerations layed out above. It might be put forward because it is thought to be in the best interest of the beneficiaries themselves (see below). For development professionals who have made carriers out of helping others, differences cannot be essentialized because it will act as a damper on their activities. Financiers need equality to reassure themselves about the fact that national project beneficiaries assume liabilities as borrowers. The new emancipatory *agenda* might also function to instill a "*new cycle of optimism*" (Quarles van Ufford and Roth, 2003), as a remedy to aid fatigue, boosting and refreshing the spirits under which development is undertaken.

According to Richard Rottenburg, in this dominance of the similarity paradigm, the difference narrative tends to be underplayed, being deliberately suppressed or living a life confined to rhetorical matters or specific practical grounds. This idea is illustrated first by the author showing, as a direct substantiation of Donovan's proposition (above), that the donor, the Normesian Development Bank, acts as a center of calculation. As development operations gather heterogeneous actors (donors, consultants, operators, beneficiaries, national institutions…) separated from each other geographically as well as politically, culturally and cognitively, it is very important to be sure that these distances —and the differences that they imply— are never construed as definitive obstacles. The notion of a center of calculation drawn from B. Latour (1987, see also Callon and Muniesa, 2003[5]) gives a name to these registering processes which act at continuously bridging worlds, collecting "*far-fetched facts*", putting them in a common context by the imposition of a metacode, i.e a standardized way to report reality from one end of the chain

---

[4] See for instance J-P Olivier de Sardan (2005).
[5] For a presentation in French, see Jacob (2015).

of actors and institutions to the other, using the same taxonomies, criteria for selection and ordering, procedures for measuring and aggregating data and lines of reporting. When these operations have been successfully carried out, data can be easily mobilized to answer calls for accountability. They become "*immutable mobiles*", objects which can be transported over long distance without deformation (Latour, 1987).

-Difference vs similarity. Identifying the gap

The second line of analysis in Rottenburg's book, stresses the changes that the dominance of the similarity framework has provoked in the division of labour between actors within the development field. Difference continues, obviously, to be the main justification of international aid at its inception—it is still very much necessary to secure funding! — but the reality that it involves is quickly forgotten in the concrete processes of development interventions. The new *agenda* offers to each operating agency the opportunity to reinvent itself as a coordinating or facilitating entity, leaving the beneficiary countries, under the guise of partnership or ownership, the task of setting their priorities, designing programs, implementing them and being accountable for what is achieved[6]. Except that difference —i.e underdevelopment— is still very much at work in many beneficiary countries and to pretend otherwise is to credit them with a capacity to direct and implement projects that they do not possess. Donors, who are aware of this problem without being allowed to recognize it officially, have to invent unofficial and not entirely satisfying ways to get around this constraint (see third section). It cannot work otherwise and it is easy to understand why, applying some simple logical reasoning: if the difference narrative is to be taken seriously, we have to admit that it is systemic, it concerns all sectors in the beneficiary country, all demanding fixing and support. As a consequence, there is no internally developed domain that can be used to gain traction and lift another one out of its misery. As Rottenburg remarks, developers are facing a typical "Catch-22" situation, where they need (but cannot find!) an infrastructure in order to be able to establish an infrastructure (2009: XXI-XXII)[7].

-Difference. Filling up the gap n° 2

The third line of analysis, which takes up a great deal of room in the book, entails an exploration of the relationships of the main actors involved in the implementation of a project (the financier, the beneficiary — the national organization, also the borrower and theoretical "project owner"— and the consultants) to resolve the difficulties alluded to before:getting something accomplished at any rate despite the similarity *agenda*. To analyze these relationships, Rottenburg uses the agency theory and its stress on asymetrical information (principal-agent relationships)[8]. Within this theoretical framework, we can characterize the financier as having several problems, specifically in relation to the beneficiary: he wants to be represented as respecting the emancipatory paradigm that puts the national entity in the principal position ("*in the driver's seat*") (problem 1) but he also wants to retain this position because he wants to be sure that his money is used wisely and efficiently by the borrower in a context where there are no immediate mechanisms —in the form of the amortization of the loan for instance— to prove that (problem 2). He also wants the possibility of escaping responsibility for any possible project's failure and to extend the same immunity (mainly for diplomatic reasons) to the national organization (problem 3). For Rottenburg, to achieve these different goals, the actors resort to two different scripts, an official one (O script) that is put forward and paid homage to in all public circumstances and an

---

[6] For an explanation of the slowness of the World Health Organization to respond to the 2013-2014 Ebola crisis in West Africa linked to this question, see N. Chorev (2015).

[7] The Brong Ahafo project shows an example of this kind of Catch-22 situation with the difficulties of delivering the project through a local administration (districts) that was largely unable to deal with the new public procurement rules (tender of bids) and didn't have the skills or competencies to monitor the infrastructures being constructed and the consultancy provided. The solution was to recentralize these tasks and entrust them to the head office of CWSA in Accra.

[8] See M. Jensens, W. Meckling (1976).

unofficial one (U script), that is mobilized sometimes as a substitute, sometimes as a complement to the first one, within a principle of loose coupling[9].

—O script. Within the O script, the national organization/borrower is the **principal** and the consultant is the **agent** (the financier is out of the loop). The O script is good for answering problems 1 and 3;
—U script: within the U script, the financier is the **principal** et the consultant is the **agent** (the borrower/national organization is out of the loop). The U script is good for answering problems 2 and 3 (note that in both scripts, the consultants can be transformed into scapegoats in case of difficulties).

The alternate uses of these scripts allow actors to answer objections or escape practical difficulties coming either from the emancipatory or from the difference (and efficiency) frameworks, depending of the context.

-Difference. The anthropologists' reason for not acknowledging the gap

The fourth line of analysis is an inquiry into the prohibition of difference, here in the sense of cultural differences, in explanations for a project's difficulties or failure. Rottenburg introduces this question by identifying the arguments raised by two his anthropologist avatars, S. Martonosi on one hand and E. Drotlevski on the other, around the puzzle that constitutes the official objectivist presentation of the project as a technical game, an old theme in development anthropology since the publication of James Ferguson's book (*The anti-politics machine*, 1990), given a new life by T.M Li (2007). For Samuel Martonosi, following Ferguson and A. Escobar (1995), the technical game is the disguise under which a highly political game is being introduced. It functions like a Trojan horse and smuggles in a new social order and a new web of belief. Edward Drotlesvski would have none of it. For him, if the project is presented as a technical game, it is because it is the only code available for carrying out transcultural negotiations, in a context where everyone —especially the national staff in charge of the waterworks and the concerned ministries— is eager to transact.

Drotlevski also stresses the shortcomings in Martonosi's positioning. He notes that his anti-politics stance is not relayed by any will to identify the local cultural aspects that would be rendered invisible by the new hegemony blanket and could possibly explain the project's difficulties. "*In doing so*, Drotlevski comments, *he is observing one of the strictest taboos of contemporary anthropology, which absolutely prohibits using people's cultural patterns to interpret their actions*" (136-137). Drotlevski is raising here an important issue that seems structurally linked to development anthropology since its beginning. The « first » (pre-translation!) researchers' attempts, mainly focused on beneficiaries' constructivism —see for instance J-P Olivier de Sardan, 2005— were already marked by a strong insistence on the local actors' strategic skills (their agency!) and a constant avoidance of cultural themes. Rottenburg links this implicit self-censorship to anthropologists' extreme awareness of the rules of exclusionary inclusion characteristic of modern life. As N. Lühmann states it (1997), modern society (by opposition to traditional ones) is made of function systems (law, science, economy, politics, religion..) which all claim to be open to everyone, except that any actor trying to enter one system would realize quickly that his inclusion is conditioned by the possession of the *media* necessary to act profitably within the system (money in economy, money and networks in politics…). Development resources

---

[9] They sometimes show up simultaneously in the same sentence! See for instance the first principle of the Paris Declaration (2005): "*Ownership* "**Ownership**: *Developing countries* **set their own strategies** *for poverty reduction,* **improve** *their institutions and* **tackle** *corruption.*" http://www.oecd.org/dac. As S. Bellina and *al.* put it: « *The national governments appear both as objects to be fashioned and as subjects with whom agreements are to be concluded* » (2010: 84).

may be delivered to Southern countries provided the stress is put on the fact that the beneficiaries possess the *media* necessary to make good use of them: hence the emphasis on the skills of their institutions and agency of their citizens, not on their differences and difficulties to adapt. As Rottenburg explains in another article: " (For anthropologists) *it has become more difficult to speak about difference, because the central topos of the present is exclusion and because the establishment of differences can contribute to mechanisms of exclusion in globalization*" (2006: 32). Our own experience tends to make us think that anthropologists took anti-culturalist stances because a lot of development professionals were culturalist, or were, on the basis of their own experiences, trying to link the difficulties encountered in their work with local culture characteristics. In taking this counter position, anthropologists showed that they had an acute perception of the possible trap they might fall into if they accepted the developers' *agenda*: given their understanding of euro-american societies' functioning, they refused to raise issues (like cultural values and differences) that could lead to a denial of poor people aspirations for « *full membership rights in a world society* » as J. Ferguson, (2006: 166) puts it.

Within this context of self censorship, the difficulties of the projects were and continue to be attributed to a train of always changing but equally neutral causations (lack of funding, of technical means —computers, cars…—, of training, participation or communication…).

-Difference. Exploring the gap

Among the infrastructures which are missing and prevent the waterworks he is studying to make progress, Rottenburg explores specifically the absence of what he calls *procedural objectivity*[10] (see Eisner, 2017) that hampers common understanding among all the parties involved in the water management system, and especially at the lowest level (meter readers and maintenance teams), about what data are relevant, how they are to be formatted in order to be recognized as data, and how they are to be linked together to be considered as information: hence, the carelessness with which customers forms are filled up by the agents (see below). In reality, something called *list autophagy* by S. Martonosi is plaguing the whole system: the accuracy and the quality of the existing lists of facts and figures that are used as basic references for planification and management decisions is altering quickly, everyone knows it but no one seems to be able to do anything about it. *List autophagy* has important negative effects as it prevents the development experts to transform the different waterworks into centers of calculation —and to introduce for that purpose, the "mother of all calculations", i.e an accurate computerized database of water customers—, locating users and listing them, being able to figure out how much they consume and as a consequence, how much they should pay for their consumption, making sure that their bills reach them and can be paid, what is the *ratio* between the water produced and billed and how close we are from a balanced budget…Going into the systemic problem of the documentation of customers that prevents computerization from being implemented to the general satisfaction of the parties involved, Drotlevski (see Rottenburg's book, chapter 5) shows the consultants examining the completed customer forms accumulated at the waterworks headquarters archives and working themselves into a state of progressive perplexity as they uncover the huge gap between what the meter readers are asked to achieve and their actual performances, identifying various levels of misunderstanding of the recording procedures that make it impossible —to select only a few problems mentioned in the book—: 1) to proceed from a list of water meters to the actual site where a water meter with a particular number is located; 2) to make links between the maps that represent the individual taps within the different technical zones that divide up the city; 3) to have a house number that would be consensual enough to allow managers to be able address a bill for water consumption to a mailing address without risking confusion and protest.

---

[10] Procedural objectivity might be defined as the "*elimination of personal interferences in the description and appraisal of a state of affairs*" (E.W Eisner, 2017: 44).

For Drotlevski, it is these expressions of uneasiness with written procedures and the kind of underlined dispositions that they ask from the meter readers which require explanation and give us incentives to look at cultural differences. These dispositions are so obvious to us that it is only after this exotic detour that they appear for what they are: exercices in decentration, demanding, from the person who fills out the form, an understanding of the goal that is sought after by the organization which produced the document and to care about this goal. In Ruritania, procedural objectivity obviously makes unreasonable demands on Ruritanian common sense, probably because in this country, there is no great need or opportunity to give priority to written documents over narrative knowledge (the superiority of written procedures has not been demonstrated!). Objectivity in this context is, above all, the "*fidelity to the individual case*".

Ghanaian small town pipe schemes

-A statist framing of local culture

The attachment to particularism which Drotlevski is stressing is not always an immediate hindrance to development processes, although they might find their limitations further on in their advancement, because of it (see below). As Rottenburg says, a large share of financial assistance flows into the public infrastructure of developing countries (education, potable water, health, communications, transportation, administration…) but this infrastructure is implemented and takes reality through bilateral arrangements between donors and local groups, one change in a community life at a time, that is one constructed dispensary, social service, school, manual pump or pipe scheme after the other. This disaggregation process is what makes interventions so hugely popular, as particular resources aimed at specific communities are reinterpreted as inputs that could help them keep their development trajectories or extend their sense of worth. This sense of worth has a long history in West Africa and some longitudinal studies (see J-P Jacob, 2007, P-Y Le Meur, 2012, J-P Jacob, P. Lavigne Delville, 2019) show a constant search by community members to maintain its reputation and expand its influence and prestige through changes that constantly modify the norms under which a residential unit can be judged worthy.

Briefly sketched and for a West African community that would have passed all the stages successfully, the search for *community worth* was linked in the XIXth century-beginning of the XXth century to strong demographics and attempts to attract migrants, in a context where there were plenty of natural resources, not enough people and human establishments were constantly under the threat of disappearing (see J-P Jacob, 2007). In the second half of the XXth century, when demographics were no longer a problem, this search was linked to its capacity to secure development funding for projects and public infrastructures. Nowadays, it is more and more associated with the community ability to launch into a local government' career (becoming a district head for instance), within a context of decentralization policies that have multiplied opportunities of this sort. As D. Graeber puts it (2001: 46), solitary pleasures being mostly unsatisfactory, these ends are realized in front of a collective audience, the group of villages belonging to the same area and forming a competitive acquaintanceship.

Now, if we look at the communities synchronically, comparing different regional states of development, we can see very well that 1) not all communities have had the resources to pass through all stages identified above successfully; 2) as a consequence, the sociological problem that their members have to solve if they want to maintain their sense of worth can vary greatly; 3) the acquisition of waterworks can play an important role in solving it, at least for a time, but the dimensioning of the utility to access water should fit the specific problem the community encounters. Easy access to potable water constitutes a formidable tool of "interessement" (or capacity to attach others to one's fate) as M. Akrich (1992) says, but the attachments sought can differ greatly in nature. When people act to acquire water utilities they do it because they want easily accessible and potable water but also because they are moved by people or interests which don't belong to the immediate development arena and are hardly observable directly. In

development matters as in science, "*we are not the number we believe we are*" as Latour (1988: 62) puts it.

In some areas, access to potable water is so difficult and the drudgery linked to its provision so huge that the men of the community cannot find spouses. Women are not willing to marry into a residential group that provides such harsh conditions of life. In other areas, much more advanced, where these kinds of marital problems disappeared long ago or never existed, water needs might be linked with the community capacity to provide other public services like schools and electricity and considered together in their ability to attract important economic and political actors and help the polity to pursue a career in local government (on this aspect, see also Akrich, 1992). In these contexts, the acquisition of a pipe scheme might be considered as a must and it is very likely that simpler devices that would not secure the desired goal would be rejected[11] . It is useless to propose a given technology in a context where the interessement this technology can bring on is not yet or no longer considered as a serious sociological issue.

Now, we still have to explain how this segment of local history informed by the search for attachments and community worth could encounter a segment of public policy dedicated to developing the country's water access and lead to some positive results (waterworks being implemented), instead of coming into conflict with it. We will do it in digging a little deeper into the institutional position and legislative production of the Ghanaian state. In matters of water supply and waterworks, it is facing new and old constraints:

—on one hand, decisions concerning the allocation of resources in water equipment escape it more and more. Under donors pressure, it is the decentralized levels —implemented since 1988/89 in Ghana—, notably the district assemblies (DA) and the district chief executives (DCE) who are given the authority resources to allocate waterworks to communities, a situation which opened the door in Brong Ahafo to lobbying and pressure by villages competing with each other for the utilities of the highest prestige (pipe schemes)[12];

—on the other hand, the state continues to have an obligation to show good indicators of development performance. The country has a reputation to maintain in these matters since structural adjustment times (see C. Ake, 2001). No longer mastering the equipment decisions, the state has to accompany the local dynamics and try to adjust its development indicators on the ones fixed empirically by the communities themselves if it wants to pursue this strategic line. And as we have seen before, communities have a very pragmatic perception of what development means for them. Based on the search to maintain the community worth, they see it as an exit from rural village status (perceived as the lowest economic and political state) to reach the level of a small urban center and (possibly) administrative head of a cluster of villages (considered as a higher state of development). But to be able to make this *scenario* real, the central state has to clear the organizational obstacles that would prevent this kind of dynamic from unfolding freely. In Ghana, this has led to a lift of the geographical and institutional division between urban and rural settings for water equipments, a "classic" of past development strategies, inherited from the colonial times. Until a few years ago, Ghana had two national institutions that took care of water access and delivery respectively in urban settings (the Ghana Water Company Limited, GWCL) and rural ones (the Community Water and Sanitation Agency, CWSA). This division was functional when the central state had a monopoly on the territorial development and was the point of entry of all foreign funding, making all decisions concerning water equipment. But this turned quickly

---

[11] The FDA planned to install 112 hand dug wells (the lowest technology in its range of offer, below drilled wells and pipe schemes) but only 20 were actually implemented (see M. Tschibambe, 2015: 73).

[12] N. Vieux (2015: 60-61) reports the vigorous protests of the Districts Assemblies (DA) and the District Chief Executives (DCE) to the FDA proposal to regroup the tender of bids of several districts under the heading of one lead district instead of leaving each concerned administrative entity to manage its own procurement system.

into a hindrance when local governments gained full legitimacy and controlled most of the decision making in matters of utility equipments. In a first move to undo these barriers, the central state had authorized GWCL, an institution that has many financial problems, to extend its service supply to rural areas everywhere it could reach customers without excessively increasing its connection costs. In a second move, it imagined a clever institutional and legislative path to accompany the changes in communities' status and help their transformation from rural to urban.

It is the concept of *small town* which allowed it to do so (see on this topic, G. Owusu, 2004, 2005 a and b). In Ghana, the concept doesn't have any clear demographic definition (all communities having between 5000 and 50 000 inhabitants can get this label) but it is recognized in different and connected institutional settings, a situation which makes it possible for community members to transit nicely from rural to urban, to go to bed villagers one night and wake up the next morning city inhabitants. First, the *small town* is the third level of urban planning (after large and medium-sized towns). Second, it is considered as the privileged level for the installation of district headquarters (the district is the lowest level of decentralization, the highest one being the region). Third, the laws on water, especially the 1998 Community Water and Sanitation Agency Act, state clearly that each rural community which succeeded in acquiring a pipe scheme must be considered as a *small town*: « *"small town" means a community that is not rural but is a small urban community that has decided to manage its own water and sanitation systems* » (Act 564, section 22). This label doesn't automatically ensure it the status of district headquarters but rather the possibility to compete with other *small towns* to get it. Chances of competition are numerous as the different Ghanaian governments launch into regular reforms aimed at creating new districts, justified by the idea of tightening the links between citizens and the local administration.

-Particularism vs universalism

As we alluded in our introduction, the acquisition and maintenance of a pipe scheme are governed by two different types of rules. Its acquisition is determined by a development administrative policy which privileges since some decades now, decentralized decisions. In fact, the localization of a pipe scheme's implantation is vigorously negotiated between donors and local representatives and it fits a very particularistic *agenda*. At the end of the day, the utility goes to this community and not to this other one, giving the beneficiary group an opportunity to extend its sense of worth. The management of a pipe scheme, on the other hand, is supposed to follow rules defined international water policies (see introduction). There are rules from above (and from outside) and because of the strong dependency between the different flows (money, customers and water) that condition pipe scheme functioning and the importance of the investments granted to construct one, it is also one of the first times that donors and national agencies are really serious about the fact that these rules need to be made community rules. The equipment in manual pumps is also conditioned to the respect of management rules (a water committee needs to be put in place, money collected at the pump, accounts should be held) but there is no clear link between the availability of water and the respect of these rules at least as long as the pump is not broken[13]. As a consequence, rules remain the concern of outsiders (civil servants, NGO, for examples in Niger, see J-P Olivier de Sardan and El Hadj Dagobi, 2000). This is not the case here as the availability of water and its delivery to an increasing number of customers are linked to stable financial flows, hence to accounting processes, strict monitoring and a mandatory shift in individual attitudes that would contribute and not be obstacles to the smooth integration of these variables within the system. Rules from outside and from above needing to become community rules means that the society and the water associations ought to undergo the ordeal of *normative self positionning* (V. Descombes, 2013 : 244) with its inherent aporias. As V. Descombes, following C. Castoriadis (1990) remarks, in any society, social life is not the result of rules being applied from above, it is about the possible support that rules coming from above

---

[13] And when it is broken, it can be fixed through a punctual raising of funds or a sponsor donation.

encounter in the rules coming from below, i.e the aptitudes, the dispositions, the habits, the knowledge, that people have already acquired and which can (or cannot!) make sense and room for new top-down proposals. There are at least three domains where we are unsure that the proper background can be provided for pipe scheme management norms to become effective.

First, the customers need to depart from the usual panafrican representations of water as a good that should not be denied to anyone (like land or air). At the standpipes, the money collectors (they are always women!) are compelled to make the consumer pay for the amount delivered, because if they don't do it —ceding to compassion or the desire to please someone— they put into danger their own revenue and position. With the new model, water must be paid for by everyone and it should cost an amount that matches its costs of production, distribution and investment. The application of the model might be enforced by the technical design of the pipe scheme itself which involves meters at the network head and on each standpipe and makes easy the comparison between the volumes of water produced and paid for. Account balances can be more easily reached when human interactions are disembedded from the logic of sociability and solidarity which usually frame them, with the advantage that this decision of disembeddness appears as the decision of no one but rather as the result of the technical design of the water conveyance system itself[14]! Thanks to water meters, operators are delivered from the warm embrace of social relationships and moral issues' messy compromises and justifications.

Second, the customers have to accept the supply monopoly of the pipe scheme. This monopoly and a prevision of an ever-increasing water consumption are necessary if the system is to be sustainable. In the communities we visited, this has led to the closing of the pre-existing manual pumps that were perceived as economic dumping (since it was accessed free of charge, see picture 1). However, the CWSMT has to deal with some problems in the assertion of this monopoly. Unlike the new customers of big national water companies that serve cities (like the Office National de l'eau et de l'assainissement —Onea— in Ouagadougou, cf Jacob, Lavigne Delville, 2019) who can benefit from the economies of scale of a well established monopoly (with an objective of universal service and differential prices), here the clients are obliged to consider the pipe scheme standpipes as obligatory passage points for their water consumption even though this obligation brings no immediate benefits for them or the poorest members of the community, but an increase in price for all. The operators might be helped in the general acceptance of such an unfavorable situation by the reference to the sociological virtue of the pipe scheme (it enhances the village worth!), the pressures of the customary chiefs (CWSMT have traditional chiefs on their board) and the promises of a better future but at the end it will all depends on the solidity of the international model and the fact that is possible to reconciliate efficiency with equity through public service payments.

---

[14] As A, Amiraly and P. Prabhakar (2016) put it, water meters with volumetric charges holds out the promise of a "virtuous cycle" that can cut the Gordian knot of unsustainable pricing practices, poor supply management and resource depletion.

Picture 1: Locked hand pump (village of Fenteta, Brong Ahafo, April 2015, source: author)

Third, the operators (community members —mostly farmers— with no particular skills regrouped into CWSMT) need to extend their technical and accounting knowledge. They have to operate the pipe scheme under the required conditions, making sure that they have at any given point in time an accurate perception of the different flows (water, money, consumers) which constitute the system and able, as a consequence, to planify its expansion. Beginning with a particularistic *agenda*, how can we be sure that, in the end, the actors have departed from it enough to be acting as professional water managers? How can we be sure for instance that the CWSMT members have received enough training not to be victim of *list autophagy*?[15].

Conclusion

Difference appears several times in the course of this article, but we will concentrate here on three aspects. It arises first as the justification for aid. Southern countries are considered as less advanced in a series of domains and it is why money and resources destined to help them catch up are raised by Northern countries. Difference appears also as a gap between norms and facts, as a phenomenon that manifest itself when development operators are too seriously trying to apply the similarity ideology and want to use a part of the beneficiary society to improve the situation in another part, as if the first part could be used as a simple means, "*an infrastructure that can be used to establish an infrastructure*", to take Rottenburg's words. Difference appears a third time in our paper, as a contrast between the particularistic framework that shapes the conditions of acquisition of a pipe scheme and the universalistic one that defines the conditions for it to remain the business of the community. This difference might hide some similarities in the actors' positioning. Following their encounter, the developers and the beneficiaries make the

---

[15] Lately, some official voices in Ghana suggest that the community management model is not at the level of the challenges raised. See chief executive officer of the Community Water and Sanitation Agency (CWSA) https: /www.ghanaweb.com/GhanaHomePage/regional/CWSA-to-engage-private-operators-for-sustainability-Community-Water-Systems-458536. Accessed 27/12/2017.

same discovery about each other: each party brings to this meeting an array of relations, characters and categories that are mostly invisible to the other one at first. Community members have women to marry or elites to attract in mind when they move into action and try to secure water utilities. The same community members also realize that in accepting pipe schemes they have to accommodate new material and immaterial beings that are somewhat hidden within the structure of the utility itself and need to be incorporated at any rate: disembedding of water access from social relationships, imposing a supply monopoly, farmers having to become professional water managers, customers strongly advised to pay for their consumption, accounting books and customers'forms to be produced and kept…However, asymetries remain in the sense that developers discover hidden worlds that are mostly not scalable (the motivations of the beneficiaries are deeply contextual) while the pipe scheme' beneficiaries find out that the duties of maintenance push them into a stronger entanglement with state frameworks and global norms (see on this topic, M. Akrich, 1992, A. Lowenhaupt Tsing, 2015). As Drotlevski in Rottenburg's book, puts it: "*whoever wants to operate a waterworks has to do the same things no matter where, or by whom it is done*" (2009: 142).

Bibliography

Ake, Claude, 2001, *Democracy and Development in Africa*, Washington, The Brookings Institution.
Akrich, Madeleine, 1992, The De-scription of technical objects, in W.E Bijker & J. Law (eds), *Shaping Technology/Building Society. Studies in Sociotechnical Change*, Cambridge, The MIT Press: 205-224
Amiraly, Akil, Prarthana Prabhakar, 2016, *The water meter, a management tool reconfiguring the sociotechnical context of water consumption practices in an Indian city: the case of Belgaum (Karnataka)*, unpublished paper, 12 p.
Bellina Séverine, Dominique Darbon, Stein Sundstol Eriksen, Ole Jacob Sending, 2010, *L'Etat en quête de légitimité. Sortir collectivement des situations de fragilité,* Paris, Editions Charles Léopold Meyer
Callon, Michel, Fabian Muniesa, 2003, Les marchés économiques comme dispositifs collectifs de calcul, *Réseaux*, 6, n° 122: 189-233
Castoriadis, Cornelius, 1990, *Le monde morcelé*, Paris, Le Seuil
Corbridge, Stephen, 2007, The (im)possibility of development studies, *Economy and Society*, 36:2: 179-211
Chorev, Nitsan, 2015, *We have never been global: the Who's response to Ebola in Historical Perspective*, Conference to Anso department, Graduate Institute for International and Development Studies, Geneva, march 11, 15 p.
Descombes, Vincent, 2013, *Les embarras de l'identité*, Paris, Gallimard
Donovan, Kevin, 2014, Development as if *We Have Never Been Modern*: Fragments of a Latourian Development Studies, *Development and Change*, 45 (5): 869-894
Escobar, Arturo, 1995, *Encountering Development. The Making and Unmaking of the Third World*, Princeton, Princeton University Press
Eisner, Elliot, W., 2017, *The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice*, New York, Teachers College Press
Ferguson, James, 1990, *The Anti-Politics Machine: "Development", Depoliticization, and Bureaucratic Power in Lesotho*, Cambridge, Cambridge University Press
—2006, *Global Shadows: Africa in the Neoliberal World Order*, Durham, Duke University Press
Graeber, David, 2001, *Toward an anthropological theory of value. The false coin of our dreams*, New York, Palgrave
Jacob, Jean-Pierre, 2007, *Terres privées, terres communes. Gouvernement des hommes et de la nature en pays winye (Burkina Faso),* Paris, IRD Éditions.
—2015, La sociologie de la traduction, l'anthropologie du développement et l'Apad. Commentaires sur les textes de P. Lavigne Delville (Un projet de développement qui n'aurait

jamais dû réussir ?) et de Pierre-Yves Le Meur (Un barrage contre le Pacifique), *Anthropologie & développement. Revue de l'Apad*, n° 42 : 85-98

Jacob, Jean-Pierre, Philippe Lavigne Delville, 2019, *Comprendre la trajectoire des interventions de développement. Processus et réseaux d'acteurs dans trois projets d'eau potable (Burkina Faso, Haïti, Ghana).* Hors Série, Paris, Agence Française pour le Développement, 135 p.

Jensen Michael C. & William H. Meckling, 1976, Theory of the Firm: managerial behavior, agency cost, and ownership structure, *Journal of Financial Economics*, vol. 3, n° 4 : 305-360

Latour, Bruno, 1987, *Science in Action: How to Follow Scientists and Engineers through Society*, Cambridge MA, Harvard University Press

—1988, *The Pasteurization of France*, Cambridge, Harvard University Press

Le Meur, Pierre-Yves, 2012, Grandeurs villageoises. La politique des ressources et des appartenances au centre du Bénin, *Cahiers d'Etudes Africaines*, 208 : 877-903

Li, Tania Murray, 2007, *The Will to Improve. Governmentality, Development, and the Practice of Politics*, Durham, Duke University Press

Long, Norman, Ann Long, 1992, *Battlefields of Knowledge. The Interlocking of Theory and Practice in Social Research and Development*, London, Routledge

Lowenhaupt Tsing, Anna, 2015, *The Mushroom at the End of the World. On the Possibility of Life in Capitalist Ruins*, Princeton, Princeton University Press

Lühmann, Niklas, 1997, Globalization or World Society: How to Conceive of Modern Society, *International Review of Sociology*, 7, n°1: 67-79

Mosse, David, 2005, *Cultivating Development. An Ethnography of Aid Policy and Practice*, London, Pluto Press

—2013, The Anthropology of International Development, *The Annual Review of Anthropology*, 42: 227-246

Olivier de Sardan, Jean-Pierre, 2005, *Anthropology and development: understanding contemporary social change*, London, Zed Books

Olivier de Sardan, J-P, El Hadj Dagobi, A., 2000, La gestion communautaire sert-elle l'intérêt public ? Le cas de l'hydraulique villageoise au Niger, *Politique Africaine*, 80 : 153-168

Owusu, George, 2004, Small towns and decentralised development in Ghana: Theory and practice. *Afrika Spectrum*, 39(2), 165-195

—2005a, Small Towns in Ghana: Justifications for their promotion under Ghana's decentralisation Programme, *African Studies Quartely*, vol. 8, Issue 2: 48-69

—2005b, The role of district capitals in regional development: Linking small towns, rural-urban linkages and decentralisation in Ghana, *International Development Planning Review*, 27(1), 59-89

Quarles van Ufford, Philip, Dik Roth, 2003, The Icarus Effect: The rise and fall of development optimisms in a regional development project in Luwu District, South Sulawesi, Indonesia, in P. Quarles van Ufford & A. Kunar Giri (eds), *A Moral Critique of Development. In search of global responsabilities*, London, Routledge: 76-100

Rottenburg, Richard, 2006, Social Constructivism and the Enigma of Strangeness, in R. Rottenburg, B. Schnepel, S. Shimada (eds), *The Making and Unmaking of Differences: Anthropological, Sociological, and Philosophical Perspectives*, Bielefeld, Transcript: 27-41

—2009, *Far-Fetched Facts. A Parable of Development Aid, Cambridge*, The MIT Press.

Tschibambe, Maurane, 2015, *Processus projet, réseau d'acteurs et durabilité des interventions de développement. Le projet d'approvisionnement en eau et assainissement en région Brong Ahafo, Ghana*, Mémoire pour le master en études du développement, IHEID, Genève, 194 p.

Vieux, Nicolas, 2015, *Processus projet, réseau d'acteurs et durabilité des interventions de développement. Analyse socio-anthropologique du projet d'hydraulique mixte en région Brong Ahafo (Ghana) financé par l'AFD*, Mémoire pour le master en études du développement, IHEID, Genève, 103 p.