
"The Prince and the Magic Magnet": An Ethnographic Tale of Technology, Power and Health in Africa

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Introduction

- 1 Once upon a time, on the southern *limes* of the Western Empire, there was a small kingdom without much wealth but other than the pride of the people living within its boundaries. When our story begins, at the start of the 21st century, this peaceful island amongst restless neighbours was governed by a benevolent Prince who had been democratically elected as was the rule at that time. In order to strengthen his power, he chose to bring his people economic prosperity. In order to tighten the links between the State and the people, he decided to offer them more effective health care services. And, because he believed that technological progress was necessary to attain these praiseworthy goals, he facilitated the introduction of the latest Information and Communication Technologies (ICTs) into the kingdom and decided to purchase a sophisticated "Magnetic Resonance Imaging" (MRI) scanner.
- 2 In the following pages, I shall tell you the ins and outs of this bold enterprise in the form of a story mixing the rigor of science and the attractiveness of a tale¹. To begin with, I shall attempt to understand what this Prince had in mind when he decided to introduce such a machine and what he was expecting to gain from it. Then, I shall try to explain why medical imaging technologies — and especially MRI — were believed to improve health care. Finally, I shall report what resulted from this technological adventure regarding the improvement of health care in terms of both accessibility and financial and medical profitability.

Part one: The Prince as a *"big social actor"*

- 3 Our story begins on a nice day in May 2007 when, in front of TV cameras, newspapermen and members of the government, the Prince inaugurated with pomp and circumstance the new MRI equipment which had been set up in one of the main hospitals in the kingdom's capital. On that occasion, after having thanked and praised the numerous people — physicians, engineers, technicians, bureaucrats, industrials — who had successfully managed such a complicated technology transfer, he disclosed the goals he had in mind by having this technological innovation brought into the kingdom:
 - Improve the people's health care by allowing medical practitioners to get more precise images of the patients' inner body — "as if we were inside it".
 - Save money by taking care of patients at home instead of sending them abroad to get MRI exams.
 - Increase the knowledge and skills of local physicians (radiologists and clinicians alike) thanks to the smooth and quick circulation *via* Internet of the digital data created by this computer-based machine.
- 4 The Prince's belief in the positive role of digital technologies in the knowledge process was a widespread one in those times. It stemmed from the so-called "knowledge economy" or "collective intelligence" notions according to which the new ICTs, thanks to the free movement of knowledge they allowed between people, were going to open an era of individual and collective empowerment. As a matter of fact, the Prince spent much time and energy trying to fill the "digital gap" between Africa and more advanced countries within the framework of an ambitious pan-African project called the "New Partnership for Africa Development" (NEPAD). The aim of this Promethean venture was to acquire (stealing was no longer possible) from the young gods of the Silicon Valley the techniques (computers, mobile phones, up-to-date digital communication networks) which were becoming essential to the daily lives of much of mankind. Let us note that, by acting this way, the Prince was unintentionally helping the "digital colonization" (Beckouche, 2017: 161) of his kingdom by a few North American supranational private corporations which later on managed to gain control over the Net and changed it into a very profitable business by tapping the "Big Data" produced by the users of these new technologies (Sadin, 2015: 49–50).

Some facts about the kingdom

At the time of our story, the population — which was doubling every 25 years — was around 12.5 million inhabitants, about one third of whom were living below the poverty line while the average annual individual GDP was US\$ 1,000. From an epidemiological point of view, like most of its African counterparts, the kingdom was facing a situation characterized by the coexistence of infectious diseases (malaria, tuberculosis, acute respiratory and digestive illnesses) caused by poverty, malnutrition and limited access to health care centers, with chronic non-infectious diseases (diabetes, cardio-vascular illnesses, cancers) in connection with a sedentary lifestyle and a longer life expectancy.

Technology, power and development²

- 5 By opening this MRI unit and saying that technological progress was the key to social development and medical improvement, the Prince was taking for his own the prevailing *doxa* of that time according to which more Technology meant more power over Nature and consequently a better life for human beings. This way of thinking, born in Europe during the Age of Enlightenment (18th century), was spread around the world through the colonization process and adopted by local elites of developing countries which came to believe that Technique was the only way to make oneself a place in a globalized economy and hence get rid of poverty (Ellul, 2012: 177-194).
- 6 Moreover, as a "big social actor" — that is somebody who has succeeded in establishing a balance of power which allowed him to speak and act on behalf of others (Callon and Latour, 2006: 20) — the Prince was not only able to say that appropriating new technologies was necessary to improve health care, but he also had the power to invest public money to purchase expensive medical imaging equipments such as MRI and X-rays scanners, rather than improving the functioning of basic health services³.

Part two: Medical imaging technologies, health care and the myth of corporeal transparency

- 7 While the installation of a MRI equipment in the kingdom in 2007 was quite an event in West Africa (it was the second machine of its type to be introduced in this part of the continent), this technology had already largely spread around the world since the first machine was marketed in the USA in 1982⁴. The invention of the MRI was the result of a historical process that began with the serendipitous discovery of radiography by Roëntgen in 1895 and then developed in such a way that, by the end of the 20th century, medical imaging had become one of the main technological pillars of biomedicine alongside biotechnologies. During the second half of the 20th century, this development was driven by the successive introduction of several technological innovations: first the ultrasound echography, then the Computed Tomography (CT) and the Positron Emission Tomography (PET) and finally the Magnetic Resonance Imaging (MRI)⁵ which, at the turn of the 21st century, was considered to be the gold standard for the exploration of the nervous apparatus as well as the osteoarticular, vascular and digestive systems.

What should be known about MRI

To create images of the inner structure and functioning of the human body, the MRI technique does not use X-rays or ultrasounds but a powerful magnetic field which makes the protons of the hydrogen nucleus atoms contained in the patient's body to be oriented in the same direction. By briefly exciting and releasing them, it is possible to obtain an analogical signal which after a specific treatment can be transformed into images. See Kastler *et al.* (2006) for a comprehensive review of the physical basis of MRI.

- 8 The dissemination of these various medical imaging technologies across the world, the fact that all organs could be visualized, and the higher and higher resolution of the

images produced by these machines resulted in an increase in their use by physicians to solve all types of diagnostic and therapeutic problems. This evolution was supported by a widespread discourse according to which medical imaging, by allowing more precise and early diagnoses to be made, was improving the quality of health care and — the icing on the cake — could save money. These statements, set forth repeatedly by all kinds of people (radiologists, journalists, industrials, lobbyists, politicians, technocrats from the World Bank and WHO, and most researchers), made medical imaging a technique whose efficiency was rarely questioned from a scientific point of view, not only because there was not much money available to study this issue, but also because measuring the cost-effectiveness of medical imaging precisely was a very complicated task⁶.

- 9 In other words, the alleged efficiency of medical imaging to solve health problems stemmed from a collective "techno-imaginary"⁷ which left little room for questions or doubts. Historians of the time explained that this set of representations was the result of a socio-historical process that went back to the end of the 18th century, when *camera obscura* was used to create more accurate drawings of dissected human bodies (Daston and Galison, 1992: 93–94). Further on, when photography was invented in 1830, it immediately appeared to scientists to be the most adequate instrument to represent the natural world accurately and objectively. Not so much because of its truthfulness, but because, as a mechanical method of visual representation, it was considered "to be free of individual judgment" (Daston and Galison, 1992: 114). Later on this quality was transmitted to radiography — perceived to be a photograph of the inner body — and subsequent medical imaging technologies as part of a new scientific paradigm based on the claim that "seeing is knowing" (Pasveer, 1989). It was from this epistemological ground that arose the widespread belief that medical images were like "transparent windows" through which one could see directly inside the human body (Joyce, 2008: 11).
- 10 This belief in a supposed "corporeal transparency" (Dijk, 2005: 3–18) had two major effects: on the one hand, it made the technical, social, political and economic factors that fully contributed to the production of medical images as cultural and social artefacts invisible; on the other hand, it gave medical images an authority which downplayed other methods of medical examination and, in particular, the clinical one. In the case of MRI, this way of thinking was strengthened by the fact that, being the most sophisticated medical imaging technology available at that time, it was endowed by physicians and lay people alike with a kind of magical or miraculous aura (Joyce, 2008: 149–150).
- 11 Though the Prince's decision to purchase this high-tech instrument sprang directly from the global collective techno-imaginary which was then prevailing, its installation in a local hospital was far from obvious. The obstacles to be overcome along the way turned out to be highly complicated. Among the numerous problems at stake, one of the most tricky was the setting up of an appropriate human and technical environment before, during and after the equipment was put into service. Once this technical system was installed, indeed several conditions had to be fulfilled to have the machine safely and usefully operated: a stable and sufficient electric supply⁸; a stable and sufficient cold water supply necessary to cool the whole MRI unit; trained technicians and engineers to look after the machine; trained technologists and radiologists to perform and interpret MRI examinations; and last but not least medical practitioners taught to properly prescribe MRI exams.
- 12 How this technical object was finally put to work successfully — or, to use a Simondonian term, how all necessary conditions for it to reach a state of "*concrétisation*"⁹ were met — is

a fascinating story which provides a glimpse of the ambivalent relationship this society had with technique in those ancient times (Werner *et al.*, 2010: 227–229). Unfortunately, because time is running out, I shall not be able to tell this story for now. Rather, I shall carry on and proceed with the description of what resulted from this endeavour in terms of health service improvement by looking at this issue from different points of view.

Part three: Outcomes

- 13 You remember that the Prince made three statements during his inaugural speech. First, he wanted to offer *all* the people of his kingdom better health care by giving them access to a more efficient means of diagnosis. Second, he was expecting the State to save money by reducing the number of medical evacuations carried out in order to have MRI examinations done abroad. Third, he aimed at improving the flow of information between local practitioners by the use of ICTs. In saying this, the Prince was referring to some critical issues — profitability, accessibility, the circulation of information and medical efficiency — that we are now going to look at closely from various points of view.

Profitability

- 14 Let us begin with the financial *profitability* of the MRI equipment by looking at it from two sides: Did the State save money by cutting down the number of medical evacuations abroad? Was the MRI unit able to make a profit by “selling” MRI examinations?
- 15 Regarding the medical evacuations that the State was taking care of, they numbered around 500 annually and each one cost around € 8,000, which meant the State was spending € 4 million a year altogether. Otherwise, it had been calculated the State would save more than € 3 million by taking care of these 500 patients on the spot. But further examination of this issue did not confirm these estimates as most of the patients evacuated abroad were suffering severe health conditions (head traumas, cardiovascular problems or severe multiple injuries) and did not need only a MRI examination, but also a comprehensive medical care. Under these conditions, it is reasonable to suppose that the presence of this MRI equipment did not significantly reduce the number of medical evacuations and consequently the amount of money spent by the State for that purpose.
- 16 As far as the second question is concerned — was the MRI unit profitable? — the answer is clearly negative. During the MRI unit’s first eight years of operation (2007–2014), the hospital lost money on every MRI examination¹⁰. The main reason for this was that the average unitary profit (in other words, how much money an examination was effectively bringing in) had always been lower than what it cost the hospital to have an MRI exam performed. To understand this state of affairs, it is necessary to take into account the various factors determining the cost of an examination. It depended, on the one hand, on the amount of money spent on purchasing this equipment and making it function properly (in accounting this is called direct and indirect production expenses) and, on the other hand, on the number of examinations done during one year knowing that the smaller this number is, the higher the cost of an examination. With an average unitary cost of approximately € 232, the level of activity of the MRI unit was never high enough to attain profitability even though the average annual occupancy rate of 2,750 examinations was higher than the break-even rate of 2,600 exams per year which had initially been set by the hospital financial department to achieve this goal.

- 17 There are two explanations for this discrepancy. The first one is quite trivial: according to the hospital financial department, the average annual number of examinations *effectively billed* (2,500) was lower than the number of examinations done in the unit (2,750). The second is more difficult to grasp as it is related how the tariff structure had been established and how it ultimately worked out. I urge the reader to pay particular attention to this point because it is of the utmost importance.
- 18 Regarding the tariff structure, one must know that two rates were applied to customers according to their social status: while a "preferential rate" (€ 164) was granted to the civil servants and their dependents, a so-called "general rate" — 50% higher (€ 248) than the preferential one — was applied to all other patients. Moreover, it should also be noted that the members of the hospital financial department who designed this tariff structure expected that 75% of the exams would be charged at the general rate. But, it did not turn out this way and, ultimately, only *one third* of the exams were charged at this rate. Consequently, the number of examinations necessary to break even should have been around 3,500 per year, a figure which was never reached during the period of time the machine was in operation.
- 19 Knowing that the MRI unit operated normally during much of the time and that the above-mentioned average annual number of 2,750 examinations carried out by the MRI unit was far from covering the needs of a population of 12.5 million, this low occupancy rate is rather problematic even when taking into account the other MRI machines in operation at the same time¹¹. Under these circumstances, in order to explain this relatively low occupancy rate, we are now going to look at how people were able to access this equipment and what obstacles could prevent them from doing so.

Accessibility

- 20 As far as medical imaging technologies and especially MRI were concerned, one cannot invoke a cultural obstacle to their use. On the contrary, medical imaging examinations of all types were widely wanted by patients and physicians as the most efficient way to get a reliable diagnosis. Given this context, the data show that the most effective way for a patient to get an MRI examination was to have health insurance. As a matter of fact, during the first seven years of operation, on average 75% of all examinations were covered completely or partially by health insurance (Werner *et al.*, 2010: 24), knowing that, in 2008, only 15% of the population could have the cost of an MRI examination covered by private or public health insurances.
- 21 This minority was composed of two groups of people: first, the civil servants and their dependents plus the students (around 7.5% of the population altogether) whose health care expenses were covered in great part by the State; and second, the employees of the private sector and their dependents (around 7.5% of the population) whose health care expenses were partially covered by their employers through private health insurance plans (Ministère de la Santé et de la Prévention, 2008: 12).
- 22 Furthermore, it should be noted that, over the period of time the machine was in operation, the proportion of customers without health insurance (in average 25% of the MRI unit's customers) who were able to pay for an MRI examination gradually dropped. This decrease was caused by the effects on local economy of the global financial crisis

which started in 2008 in the USA following the subprime mortgage crisis. As a result, the kingdom GNP growth rate slowed down while rising food and energy prices made the daily lives of the people more difficult and left them with less money to spend on health care.

- 23 In short, the main obstacle to have an MRI examination done was financial and the best way to overcome it was to have a health insurance.

The circulation of information

- 24 Now, let us consider what happened to the Prince's objective of improving local health practitioners' work by using the ICTs to facilitate the circulation of information inside and outside the kingdom. Here also, the result was not satisfactory. The first and main reason for this relative failure was that the technical conditions necessary to store, transmit, receive and exploit the digital data produced by the MRI unit were not fully met. I shall give two examples to illustrate this. The first one concerns the computer server which had been put into operation in the hospital in order to store the flow of digital images produced by the MRI unit. It quickly broke down and remained out of order for a long time¹², and so it became a hindrance to the circulation of information rather than a help. The second example has to do with the fact that the results of the MRI exams were not always fully accessible to the clinicians who had prescribed them for lack of appropriate technical means (like a physical connection to Internet, up-to-date computer hardware and/or software or electrical power). In other words, the efficiency of the MRI technique could not be fully achieved because of the gap existing between this high-tech device and the underdevelopment of the local environment in terms of communication network architecture, up-to-date computers, proper maintenance, sustainable funding, and even energy supply.

Medical efficiency

- 25 Finally, if the State did not make profit or save money with this up-to-date medical imaging technology and if only a minority of the population could benefit from it, what happened to the improvement in the quality of health care that the Prince was looking for? In other words, did more accurate and early diagnoses help the local medical community take better care of the handful of patients who were able to access MRI equipments? The answer to this question is not simple and the facts must be scrutinized from different points of view in order to get a thorough understanding.
- 26 From a diagnostic point of view, the MRI proved to be a very efficient technology when put into practice by trained and dedicated technologists and radiologists like the ones working in the hospital. Indeed, about 85% of the examinations resulted in an etiological diagnosis and most of the prescribing clinicians were fully satisfied with the quality of the images and interpretations that were delivered to them by the radiologists: "It is a key method of investigation!"; "With MRI, we have an absolute certainty!"; "MRI provided us with formal proof". One of the consequences of this outstanding diagnostic efficiency was to prompt the physicians to over-prescribe MRI examinations and under-use less expensive methods of investigation like clinical and biological methods, thus making the cost of health care more expensive and consequently less accessible for poorer patients (Werner *et al.*, 2010: 234).

- 27 But, when a diagnosis was made, several other conditions needed to be met in order to implement therapeutic solutions. First, the illness needed to be curable; second, when it was curable, the treatment needed to be available on the spot; and, finally, if available, the treatment needed to be affordable for patients, knowing that health insurance plans (both public and private) did not usually cover the cost of expensive medical treatments such as cancer treatments, for instance.
- 28 The data show that, in a significant number of cases, the illnesses revealed by the MRI exams were not at all curable because they had been diagnosed too late. This was, for instance, the case with prostate cancers which, too often, had already spread to other parts of the body by the time they were diagnosed. Under these conditions, the only option was therapeutic abstention or palliative care, which was poorly developed at the time. Let us stress that, despite the fact that prostate cancers were (and still are) a frequent pathological condition in Africa for genetic reasons, these late diagnoses were due to a lack of screening either by clinical or biological methods¹³ — a state of affairs which had its origins in the underdevelopment of the kingdom's health care services.

A brief overview of the kingdom's health care system

Besides a shortage of skilled personnel, most of the country's available medical resources (40% of general practitioners, 75% of specialists, 70% of pharmacies and almost all technical services) were located in the capital, which housed about one quarter of the population, a situation that caused the needs of people living in rural areas to be poorly served. This weakness in the health care system was to a large extent the result of the harsh financial measures (structural adjustments) that had been imposed for decades by non-democratic institutions such as the IMF or the World Bank in the name of the then-prevailing neoliberal conception of economy — a theory that, as we now know, was wrong as it left the governments of developing countries without enough strength to ensure sustainable and equitable development.

- 29 But when the affliction was curable, it sometimes happened that the adequate treatment was not available in the kingdom (such as, for instance, radiotherapy or highly specialized surgeries). In those cases, the only solution was for the patient to go abroad: a costly measure that only a handful of privileged persons could afford.
- 30 And when the illnesses diagnosed by MRI were curable and the treatments available on the spot, the patients had still to find a way to pay for them, something which was out of reach for most of them when costly treatments — like cancer medications or surgical treatments — were needed. However, when all the abovementioned conditions were fulfilled, the contribution of MRI was essential as it allowed practitioners to implement individually tailored therapeutic solutions¹⁴.
- 31 Now that this story is coming to an end, let me summarize its main results before unveiling its moral.
- 32 Firstly, although the implementation of the MRI unit was a success from a techno-medical point of view, it was not profitable and could not even break even financially. At issue was the low level of activity due to the fact that the cost of an examination was too high in relation to the low purchasing power of the 85% of the population without health insurance.

- 33 Secondly, while the MRI unit did provide precise and accurate diagnoses for the handful of privileged patients who could access it, its therapeutic impact was severely limited by the lack of adequate curative facilities and the expense of medical and surgical treatments.
- 34 In other words, the magical power ascribed to the MRI device was not sufficient to bridge the gap between the islet of high-tech technology that was the MRI unit and its social, economic and technological environment.

Moral

- 35 Two lessons might be learned from this tale: "One should not put the cart before the horse" and "The sleep of reason produces monsters"¹⁵.
- 36 "One should not put the cart before the horse" has two meanings. In the first place, it means that, before bringing in new technologies (like ICTs and MRI), the Prince should have ensured the health of the horse, *id est* a stable and quantitatively sufficient electrical energy supply. As a matter of fact, while he was boasting that he could master a technique as advanced as the MRI, he was unable to provide his people with enough power to meet their basic daily needs — a failure that played a role in his removal from power in 2012. In the second place, it means that the introduction of technological innovations in the field of medical imaging could not on its own solve problems related to a situation of economic and social underdevelopment. Indeed, we have seen that, far from compensating for the shortcomings of the health care system, the introduction of this technical innovation highlighted its weaknesses and aggravated the inequalities in access to health care facilities. Here, the Prince ignored the fact that once the MRI had gained physical existence, there were still other conditions that would need to be met if it were to function in a socially sustainable way, in particular, a strong and just State capable of organizing and monitoring an efficient health care system and providing the people with the means to take care of themselves.
- 37 Now, what are the "monsters produced by the sleep of reason"? They are numerous but the most important one is the huge and very powerful complex arising from the successive industrial revolutions in which science, technology, industry, finance and the military establishment became tightly entangled like a Gordian knot — a complex that, up to the present day, pretends to solve all the numerous critical issues facing mankind despite the fact that it obviously generates as many problems as it solves. In regards to this monster, we have learned two things from our forefathers: it is dangerous to set it loose and there is no way for human beings, whether princes or ordinary citizens, to gain control over it other than the use of reason allied to imagination. A complicated task indeed as the current belief in the power of Technique to improve the lives of human beings, is so deeply rooted in our collective imaginary that it is very difficult to escape its draw. Difficult, but not impossible as its power of attraction does not stem from some irresistible *Gestell*¹⁶ but from a "sacralization" of Technique by the dominant powers "to better enslave the citizens who are free to question it" according to Ellul (1973: 259) and to imagine other ways of life.
- 38 Now, why and how we are still struggling to tame this particular monster is a long story that I might tell you another time if you behave like good little scientists and go to bed early...

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NOTES

1. This story is based on a scientific study carried out at the beginning of the 21st century by a European ethnographer with the help of local health professionals. The data were collected by using a method of investigation combining fieldwork techniques (participant observation, open-ended formal and informal interviews), surveys based on questionnaires, and statistical material. See Werner *et al.* (2010) to access the full account.
2. It is beyond the scope of this story to go into a detailed account of the relationships between science, technology, industry and the State and how they had developed during the two centuries which preceded the events in question. I shall only say that, over time, the State became more and more involved in the development of scientific and technological knowledge and its applications in different fields: industry, army, health, the planning of economic activity, the social control of the population, and so on. See Pestre (2003) for a thorough review of the literature on this subject.
3. Indeed, the Prince spent a lot of money to acquire this machine and other X-rays scanners for public hospitals. To give an order of magnitude, the sum necessary to buy this MRI equipment and have it properly set up (€3 million) was the same as the operating budget of the National Plan Against Tuberculosis over a five-year period.
4. In 2012, according to the European Magnetic Resonance Forum (EMRF), there were 25,000 MRI units in working condition around the world in all, mostly in the USA (46%), Europe (25%) and Japan (15%), and only a handful in Africa.
5. See Holtzmann-Kevles (1998) for a well documented history of medical imaging; Dumit (2004) for an in-depth study of PET in the USA from a cultural anthropology point of view; and Joyce (2008: 24–46) for a detailed account of the MRI invention.
6. See for instance Baker *et al.* (2008) for insight into the situation prevailing in the USA at the beginning of the 21st century.
7. This term was coined by Balandier (1986: 161) to make explicit the twofold nature of a phenomenon in which technology and the imaginary are closely linked together.
8. A condition which not always fulfilled at a time when, like most other sub-Saharan African countries, the kingdom was chronically short of electrical power. In this case, to prevent any power shortage, an emergency generator was installed close to the MRI unit.
9. The "*concrétisation*" (the concrete way of existence) of a technical object is achieved when (my translation from French) "it operates in a somewhat sustainable, stable and non autodestructive way" (Simondon, 2014: 4–6).
10. From a maximum of €77 at the beginning of this period to a minimum of €10 per examination at the end (Werner *et al.*, 2010: 243).
11. In 2010, the six MRI machines (four low field ones in the private sector and two high field ones in public hospitals) operating in the kingdom performed around 6,350 exams. That is to say an average rate of 0.48 examination per 1,000 people per year which was very low in comparison to Organisation for Economic Co-Operation and Development countries where this number amounted to 55.5 (OECD, 2013).
12. The service provider in charge of the maintenance of the server was not paid on time by the hospital, and stopped taking care of it.
13. Screening for prostate diseases relies mainly on rectal examination and biological analysis.
14. For instance, in the case of radiculopathies (one of the most frequently MRI-diagnosed illnesses), surgical treatments were not proposed as frequently as first line treatments, and if so they were better targeted.

15. Translated from the Spanish: "*El sueño de la razon produce monstruos*". This sentence is the title given by Goya to an etching done circa 1797–1798.

16. *Gestell* is a German word used by 20th century German philosopher Martin Heidegger to describe the irresistible force which lies beneath modern technology.

ABSTRACTS

Under the guise of an ethnographic tale, the author tells us a story in which political power, technology and health were closely linked together at the turn of the 21st century in a small poor African country. At the heart of this story is an advanced medical imaging technology called Magnetic Resonance Imaging (MRI), which was introduced into the country by the will of the Prince who was then in power. In so doing, he was taking for granted the collective belief that making patients' bodies more transparent necessarily improves the quality of health care and saves money. But this story proves that it was not the case. From a financial point of view, the State did not save money and, from a medical standpoint, most of the population was unable to benefit from this technological breakthrough because of the excessive cost of MRI examinations. On the contrary, the introduction of this sophisticated technology highlighted the weaknesses of the health care system and further increased inequalities in access to health care facilities. The moral of this story is that the current belief that technology is the key to social and economic development is so deeply rooted in the collective imaginary that it is very difficult to escape its power of attraction.

Sous la forme d'un conte ethnographique, l'auteur décrit dans quelles circonstances, au début du XXI^e siècle, un équipement d'imagerie par résonance magnétique (IRM) fut installé et mis en service dans un petit pays d'Afrique de l'Ouest de par la volonté du Prince qui le gouvernait. Il montre ensuite qu'en agissant ainsi ce dernier reprenait à son compte la croyance selon laquelle l'imagerie médicale, en rendant le corps transparent, améliorerait la qualité des soins et permettait de faire des économies. Deux assertions qui n'ont pas été confirmées, comme le montre la suite de l'histoire. En cause, le coût trop élevé des examens qui limitait l'accès à cette technologie à la minorité de la population (15 %) pourvue d'une assurance maladie. Avec pour conséquence le fait que, au lieu d'améliorer le fonctionnement du système de santé, l'introduction de cette technologie n'a fait que renforcer les inégalités d'accès aux soins et souligner les insuffisances et faiblesses de l'appareil de soins. En conclusion, l'auteur attire l'attention sur la difficulté d'échapper à l'attraction du mythe de la technologie en tant que facteur indispensable au développement social et économique, tant celui-ci est enraciné dans une construction socio-historique établie de longue date et désormais mondialisée.

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