11 When subjective quality shapes the whole economy of pharmaceutical distribution and production

Carine Baxerres, Adolphe Codjo Kpatchavi, Daniel Kojo Arhinful

Since its emergence in the 1980s, the anthropology of pharmaceuticals has focused both on how products are used and the ways they are distributed (Van der Geest & Whyte, 1988), yet these two questions are not always explored simultaneously. How pharmaceutical companies influence prescriptions and consumption has been highlighted, especially in the context of rich countries (Collin & Otero, 2015; Dumit, 2012; Greffion & Breda, 2015; Moynihan, Heath, & Henry, 2002; Vega, 2011). Speculation logics of the multinational pharmaceutical industry as well as legislation on intellectual property and their impact on the economy of "emerging" countries, such as India, Nigeria, and Mexico, have also been described (Hayden, 2003; Peterson, 2014; Sunder Rajan, 2017). Through this chapter, we aim to analyze the relationships between pharmaceutical supply with a strong focus on distribution—and consumers' use of medicines in Benin, Ghana, and Cambodia. We will thus extend recent works carried out in the Global South by pharmaceutical anthropologists on specific health issues, such as mental health in India; sex hormones and menstruation in Brazil, Cambodia, the Philippines, and South or West Africa; as well as AIDS in West Africa (Desclaux & Egrot, 2015; Ecks, 2014; Sanabria, 2016). Our work is centered on the everyday pharmaceuticals used to treat symptoms and acute illnesses.¹ We turned to the pioneering work of Arjun Appadurai and his colleagues (Appadurai, 1986), which focused on material objects and their consumption to highlight the interest in studying the relationships between culture and economics, and conducted an empirical and theoretical investigation on pharmaceuticals pinpointing the intersection between medical anthropology and the social sciences applied to economics (anthropology, sociology, and history).² As we will see, the concept of quality appears to be central in our investigation. Economic sociologists, who have increasingly studied this idea since the late 1980s, have shown that this structures the broader market, and ultimately, all types of markets (Steiner, 2005), regardless of what commodities are being considered. However, in these studies, the concept of quality often seems to assume a single tangible meaning, even though it is associated with the complex issue of trust (Karpik, 1989) that we explore later. And yet, we felt it necessary and important to distinguish the objective reality of product quality from its subjective dimensions.

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A product's objective quality is measured using technical criteria, which in the case of medicines includes the quantity of active ingredient, the dosage of different compounds, and the degree of impurity established in the product specifications in accordance with its marketing authorization (MA) and one of the internationally recognized pharmacopoeias (Vickers et al. 2018; WHO, 2014). A product's objective quality is defined through certification standards established by organizations, such as the World Health Organization (WHO) or the International Conference on Harmonisation of Technical Requirements for the Registration of Pharmaceuticals for Human Use (ICH),³ and applied on an international scale for drugs.

Subjective dimensions of product quality—the topic of this chapter—draw on individuals' perceptions of these products, relative to the product's and the manufacturer's reputation. In sociology and anthropology, the concept of perceptions refers to a set of ideas and values that are widely shared by different groups or categories of people. It has become separated from the more ideal concept of "collective representations" (Durkheim, 2007/1895) through the introduction of practices, thus linking the psychological with the somatic (Gélard, 2016). Because perceptions are shared, they reflect back on the subject at hand. The concept of subjectivities, one that extends beyond the methodological register (the researcher's reflexivity in their study site), is relatively recent but increasingly advanced in anthropology, especially when related to health and biomedicine (Derbez, Hamarat, & Marche, 2016; Fainzang & Ouvrier, 2019). For Joao Biehl, Byron Good, and Arthur Kleinman, "subjectivity constitutes the material and the means of contemporary value systems" (2007, p. 5). Regarding issues of social suffering related to health that the authors are exploring in the wake of economic globalization, they highlight that the power issues that come into play at the societal level are largely linked to the subjects' daily experiences and to the significations that they give them. "Capital accumulation and governance occur through the remaking of culture as well as the inner transformations of the human subject" (Biehl, Good, & Kleinman, 2007, p. 5).

Thus, the subjective dimensions of product quality are both specific to the individual and widely shared, as will be shown later. They are also an expression of the temporal evolution of economic powers and trends within countries and, more broadly, global regions. These macrosocial changes and the economic and political actors who try to influence them strongly permeate consumers' subjectivities, as this chapter will illustrate using the example of pharmaceuticals. Hence, we will deconstruct the "imaginaries of consumption" that surround drugs, as with all types of standardized products (the washing machine, wristwatch, car, clothing, food, etc.), in the postcolonial contexts of the three countries where we investigated. How are positive or negative images of the various types of available drugs constructed? What criteria does the purchaser apply to the various products before selecting one? Lastly, what implications might these choices have when dealing with pharmaceuticals—products that beyond being marketed and subjective, are also therapeutic?

Establishing a typology of pharmaceutical supply and subjective value scales

Our studies led us to conceptualize pharmaceutical supply in the three countries through a typology of available medicines that broadly works for both consumers and distributors. This subjective typology is built on three criteria: the products' supposed geographic origin, their presentation (packaging—individual box, hospital packaging, illustrations, colors, etc.—and dosage form), and their price. This allows us to classify the various available products in the countries using a subjective value scale, ranging from the most to the least valued. By describing the various categories of products, we shall see that this typology is influenced by colonial and more recent history in Benin, Ghana, and Cambodia as well as by the characteristics of local and regional pharmaceutical production in these countries.

"French products" and "UK products"

The first category of medicines illustrates the symbolic weight that the countries' colonial history imposes on individuals' perceptions about medicines. It is the most valued category in terms of drug quality and, in each of the three countries, is described in reference to the former colonial power: France for Benin and Cambodia, the United Kingdom for Ghana. An observation in a pharmacy in Accra illustrates this: "A woman came and asked for 'diclo suppository' and Mark⁸ told her he had lofnac [made by an Indian company]. The woman asked 'Don't you have UK?' Mark told her no, and she left without accepting the lofnac. I asked Mark what he thinks about what the woman said. He told me that some people have this perception that low-priced medicines are not efficacious, but it is not always the same" (field diary, October 26, 2016). Observations in places where pharmaceuticals are sold in Ghana revealed that requests such as "a woman just asked for 'Omeprazol UK'" (field diary, May 20, 2015) are not uncommon. As previously described in Benin (Baxerres, 2013), informal sellers refer to them as "French medicines." In Cambodia, they are "thnam barang" (thnam: medicine, barang: French). A woman selling in a pharmaceutical warehouse in Phnom Penh explains that she likes the thnam barang. "They have the effect. They're effective. They can cure faster. And it's a little more expensive" (interview on May 5, 2015).

It was revealing to note during our field studies in each of the three countries that the highest quality for medicines was associated with the former colonial power. This is understood as a symbolic register; the coercive power of the former colonial empire is transmitted to products that supposedly originate there. In Ghana, people sometimes mentioned another category, ranked just behind "UK products," of "German products," since Germany was the country's secondary colonial power. From a more pragmatic perspective, it should be recalled that pharmaceutical specialties were introduced in all three countries by the former colonizer, which served as the main supply source for a long time (Monnais & Tousignant, 2006; Pourraz, 2019). This is still the case in Benin (Baxerres, 2013).

This is a subjective category because only some of the products in question actually come from France or the United Kingdom. For example, "French products" are never requested in Ghana, even though from an objective standpoint, French pharmaceutical companies do exist in local markets. More generally, these are drugs manufactured by European and North American multinational pharmaceutical companies, and sometimes by major Indian companies, marketed under a brand name, whether they are innovative, originator products, or generics, and packaged individually for the private sector. In Cambodia, these medicines are recognizable by labeling written in French or more widely in the Roman alphabet. In that country, drugs from South Korea may also be included in the "French products" category. In its role as an Asian economic power, South Korea is universally valued in Cambodia. The two countries maintain university and economic exchanges that help drive this positive image.

As underscored in the previous field excerpts, product price helps establish this highly valued category of medicines. These products are expensive! The relationships between a product's price and its perceived quality, known as the "Veblen effect," named for the economist and sociologist who uncovered this mechanism (Veblen, 2014/1899), are quite evident. Other economists have highlighted that the high price is considered a necessary condition for quality (Wolinsky, 1983). A father of a "middle-class" family in a Beninese semirural area offers this opinion: "The way I see it, the one that is excessively expensive will be effective" (interview on December 8, 2015). Another father of a "poor" family living in Phnom Penh explains: "We really want the *thnam barang*. It is effective and also expensive" (bimonthly monitoring conducted on March 17, 2015).

"Local products"

A second category of products comprises drugs manufactured in the country or possibly in the bordering countries, but with the same type of packaging. In the eyes of consumers and distributors, products in this category are valued significantly less than those in the previous category. Overall, it is common in the three study countries for imports from abroad, especially from Western companies, to be valued more highly than what is produced locally.

In Benin, they are called "pharmaquick drugs," named for the country's only pharmaceutical company—Pharmaquick—that produces generics marketed under an International Nonproprietary Name (INN), usually in hospital packaging (large quantities of loose tablets or most often blister packs in large containers). This subjective category in Benin includes other generics marketed and packaged using the same procedures but manufactured in Togo, Ghana, Nigeria, and China (see figure 11.1 below).

In Ghana and Cambodia, both of which have a relatively developed pharmaceutical industry (36 and 14 companies, respectively), this category primarily includes products actually manufactured in the respective countries. As in Benin, they are either made up of generics marketed under an INN and presented in hospital packaging, or manufactured specifically for the private market and,



Figure 11.1 A box of "pharmaquick drugs."

Source: © IRD/Stéphanie Mahamé, Cotonou, March 2019

therefore, marketed under the brand name and packaged in individual boxes. However, other products may also be included within this subjective category. In Cambodia, for example, one of the visible elements of this category is the package insert written in the Khmer language. Thus, even when manufactured in a Western company, a drug that has one of these package inserts can be perceived as "local," which depreciates its potential quality in the eyes of individuals.¹¹

As mentioned previously, the price of these "local products" contributes to their lower value when compared with "French" or "UK products." The fact that they are a bargain insinuates poorer quality. A seller in a pharmaceutical warehouse in Phnom Penh points out: "Cambodians don't like to take Cambodian medicines because they believe the quality isn't very good. They prefer French medicines" (interview on March 10, 2015). Another female vendor in a pharmacy explains: "It's true that the cheaper drugs have lower quality" (interview on February 24, 2015). In Ghana, this mother of a "wealthy" family explains: "When I use the foreign paracetamol, its effect, I see... I don't know how to even explain myself. When you use it, from a personal experience, I think that one works much better than the local one" (interview on October 10, 2015). However, these products are not considered to be bad medicines, as this observation conducted in a pharmacy in Accra illustrates: "Another man also came and asked for rubbing alcohol, and Vida told him there was a 'foreign' and 'local' one, and then asked him which one he wanted and the man asked the prices of each and she told him 8 cedis and 10 cedis respectively. The man said he wanted the 8-cedis one"12 (field diary, March 4, 2017). On the other hand, some people in Ghana and Cambodia also value local manufacturing of pharmaceuticals.¹³

Some companies within the Ghanaian and Cambodian pharmaceutical industry try to elevate their products' image in comparison to other "local products"

by emphasizing their connections to the former colonial power or, more broadly, with the West. Their products are sold at a slightly higher price than other "local products." This was the case for one producer in Ghana that was just launching its wholesale activities and primarily imported drugs produced by Western multinationals. This was also the case at a company based in Cambodia, which is said to sell "French products" that it packages in Cambodia.

Drugs from neighboring countries14

The category of drugs, perceived as coming from nearby countries, whether from a geographic or historical perspective, is more ambivalent than the two other categories in how it is valued.

In Benin, "drugs from Nigeria and Ghana"—generics marketed under a brand name, imported from Nigeria and/or Ghana and manufactured either there or in Asian countries—are easily recognizable by their colorful packaging with photos or illustrations of the illness that the product is meant to treat (see Figure 11.2). They are inexpensive and, therefore, are perceived as having lower quality than the "French products." But at the same time, some people perceive them as "strong" and effective; we will return to this aspect later.¹⁵



Figure 11.2 Ronmax Extra® produced in India by Ronak Exim; this pharmaceutical has been renamed "8 illnesses" (in reference to the 8 photos on the box) in Benin and is perceived as a "drug from Nigeria and Ghana" in Benin and as an "Indian product" in Ghana.

Source: © IRD / Aubierge Kpatinvoh, December 2020

In Ghana, "Indian products," also generics marketed under a brand name, are less expensive and thus less valued than "UK products." At the same time, people believe they are effective, hence their popularity, which is further enhanced because they are inexpensive. When talking about the owner of a clinic where she used to work, this mother of a "wealthy family" in Accra said: "Her drugs are not bad but most of the time, these antimalarials that she buys are from India, the majority of them (...). Me, I didn't use to like their medications, but they are not bad (...) so far the ones I have tried, have worked" (interview on March 25, 2015). India is actually a major source of drug supply in Ghana (30% according to Chaudhuri (2016) and the business relations between Ghanaian and Indian pharmaceuticals, particularly within the Commonwealth, are strong. Drugs produced in other Asian countries (such as Indonesia, Pakistan, and China) are incorporated into this subjective category of "Indian products." 16

In Cambodia, "Vietnamese drugs," which may be generics marketed under either an INN or a brand name, also fall under ambiguous perceptions. They are poorly perceived, as reflected in the Khmer expression "thnam yuon." "Youn" derives from Sanskrit "yavana," meaning "barbaric." It is a nickname that Cambodians often give to Vietnamese that reflects the political tensions between the two countries. An example of these tensions is a rumor that circulated at the time of our study in Battambang province, claiming that the Vietnamese had sold ampicillin capsules containing hooks to Cambodia to kill Cambodians. This pharmacy vendor explains: "Most people when they see a medicine is from Vietnam, they don't want it. (...). Because they think that is not good, it is not good medicine" (interview in Phnom Penh, April 24, 2015). However, for serious health issues, people in Cambodia who can afford it go to Vietnam for care, where the health system and, by extension, the drugs have a better reputation than in Cambodia.

When applying this value scale to the pharmaceutical supply in these three countries, "drugs from neighboring countries"—despite being especially vulnerable to resentments sometimes between people living in nearby countries due to situations of economic or political domination—fall between the "French" or "UK products" and the "local products." The colorful, eye-catching packaging used for most of these branded generics, unlike INN generic drugs, is clearly a factor in the relatively good value associated with these products.

"ACTs"

A fourth category of products needs to be introduced: drugs issued from public health programs. We call these "ACTs" in reference to the national malaria programs in the three countries that recommend using artemisinin-based combination therapies (ACTs) to treat uncomplicated malaria. These drugs opened the door to our research on understanding global and local pharmaceutical markets in the context of the Globalmed program. Given the high prevalence of malaria in Benin and Ghana, antimalarial drugs evoke multiple, rich perceptions. By contrast, in Cambodia, malaria is confined to specific geographic areas (mainly in

and around forests), and antimalarials, which are not used on a daily basis, are not really an object of popular perceptions. ¹⁹ Although we focus on ACTs here, we want to use this category more broadly to discuss the popular perceptions of subsidized drugs introduced into the countries through public health programs with the involvement of so-called transnational actors. ²⁰ These pharmaceuticals have an objective quality, which is certified by the WHO Prequalification of Medicines Programme presented in the introduction of the chapter.

In Benin and Ghana, subsidized ACTs are generics marketed under an INN and sometimes a brand name, usually in specific packaging for public health use and sometimes also in individual boxes (see Figure 11.3 below). These medicines are inexpensive (up to seven times less expensive than unsubsidized ACT; see Chapter 7) and, once again, are valued less than "French drugs" or "UK products." As one assistant in a public health center pharmacy in Cotonou points out: "When you prescribe ACTs²¹ for someone here and they take it, 10 days later they come back and say it's not working. You tell them ok, go to the pharmacy and tell them that you have a problem. When they sell them the drugs that they have there, then they're really satisfied" (interview on October 26, 2016).

Nevertheless, people's perceptions of the value of "ACTs" can be improved through State-implemented communication campaigns, so they are perceived as having acceptable "quality." This is especially true in Ghana where the National



Figure 11.3 A box of an "ACT," here subsidized Coartem® distributed in Benin. Source: © IRD/Moïse Djralah, Comè, August 2015

Malaria Control Program developed a very effective communication campaign addressing ACTs, using a green leaf logo representing an artemisinin leaf (see Picture 7.1 in Chapter 7).²² A mother of a "poor" Ghanaian family, living in a semirural area said: "ACT, isn't it these ones, the yellow tabs? (...). It really helps us in this village. (...). It's very fine. In fact, it's good. (...). That is the best so far...." (interview on February 21, 2015). Despite having acceptable "quality," green leaf "ACTs" in Ghana could still be commonly valued less than "UK products."

Therefore, the countries' available pharmaceutical supply is categorized by consumers and distributors and ranked on a value scale that plays an extremely significant role and is widely shared by individuals. We will now look at the factors that guide consumers when choosing one or another of these categories.

Subjective quality and the functioning of pharmaceutical markets²³

What is the impact of these subjective perceptions of pharmaceutical supply and of the quality of locally available drugs on how individuals purchase and use drugs? What do we also learn about how pharmaceutical markets currently function in these countries?

Deciding between the subjective quality and objective price of medicines

Given the subjective typology of medicines presented previously, it is clear that, first and foremost, consumers tend to choose based on the product's price. Thus, people's socioeconomic status guides them toward one drug category or another. Generally speaking, poor people are much more likely to use "local products," "drugs from Nigeria and Ghana," "Indian products," and "ACTs." The most affluent primarily use "French drugs" or "UK products." Also, both in Ghana and Benin, vendors in pharmaceutical distribution locations themselves actually steer people toward one drug category or another, based on their physical appearance, clothing, and how they speak, as explained by this mother of a "poor" family in Accra: "It's the same thing. There is no difference [between the products]. Hmm hmmm but sometimes if you go, they [the sellers] will tell you that this one is from UK. Hmmm hmm and this one too is from Ghana, but it is good" (interview on March 11, 2015). In most cases, poor people have to settle for the lower valued categories, which they justify as best they can. In Benin, for example, people might say that "drugs from Nigeria and Ghana" are very good, that they are effective, but if they could afford it, they would rather go to the pharmacy and purchase "French drugs"; we will discuss the link between the drug category and types of distribution sites in the next section. "What can you do if you can't afford the pharmacy? You have to buy the one that is cheaper than the other one and take care of yourself" (interview with a mother of a "poor" family in Cotonou on December 18, 2014).

However, for a more nuanced investigation, two other factors need to be considered alongside price. First, the specific health goals that the product targets also influence which drug category is selected for purchase. For medicines consumed on a daily basis, for common symptoms such as headache or "fatigue" or even to take care of one's body (vitamins, blood tonics, etc.), "simple" drugs, which people use all the time—"para and such," as one hears in Benin—it is not necessarily worth it to find the highest quality product. "Local products," "pharmaquick drugs," and "Indian products" are often sufficient, regardless of the person's socioeconomic status. One customer said, "folic acid will always be folic acid no matter where it is produced" (observation in a pharmacy in Accra on January 11, 2017). A mother of a "wealthy" family living in Cotonou also notes: "I don't usually buy medicines in the market stalls... [...] just 'para', paracetamol, like when I have a headache and I take para right away... for para, we know that para is just para" (interview on December 11, 2014). On the other hand, when a "real" health problem arises and people are concerned enough to consult a health professional, they will try much harder to obtain the prescribed medicines in the highest valued category, depending, of course, on the individual's financial means. The health problem that someone wants to treat can also influence the drug category. "I don't buy malaria drugs for my children in those places [in the homes of neighborhood 'aunties']... Even for myself, I don't buy antimalarials very often from the women; I buy [at the pharmacy]" (interview with a mother of a "wealthy" family in Cotonou on December 23, 2014).

A second important factor to consider alongside price is who exactly is supposed to consume the medicine. "Quality"—and thus, the highest valued drug category—will be more aggressively sought after for children, pregnant women, the most vulnerable, or those who are most cherished. For healthy adults, even the least valued medicines suffice. An observation in a pharmacy in Accra highlights this: "Another old woman came and asked for 'para, 1 UK and 3 local ones." The UK brand was for herself, but the local one, according to her, she has visitors and they are many, so it is better to get the local one that is much cheaper to cater to them all. She asked Euget if it works the same as the UK brand and she said yes" (field diary, April 11, 2017). In Benin for example, "drugs from Nigeria and Ghana" are perceived as "strong," very effective drugs, but possibly too strong for "weak" bodies, like children's. Inherent to this second factor is how medicines often become personalized—the fact that a drug may be suitable for one person's body but not another's, even when it is for the same health issue—a situation that must also be considered (Baxerres, 2013; Sarradon-Eck, Blanc, & Faure, 2007; Whyte et al., 2002). Thus, for some people, regardless of their socioeconomic status, an "Indian product," a "drug from Nigeria or Ghana," or a "pharmaquick" will "work" better than a "UK product" or a "French product," for example.

Close relationships between drug categories and types of retail structures

Coupled with product price and the potential customer's socioeconomic status, our study highlights that the different types of pharmaceutical distributors

working in Benin and Ghana do not distribute the various drug categories in the same way. Looking at actual pharmaceutical distribution reveals close relationships between the distribution site and the types of drugs offered.

Although they are also available through various means from other retailers, the predominant distribution site for "French drugs" and "UK products" is the private pharmacy, both in Benin and Ghana. This is even more so in Benin where the pharmacist's monopoly is strong (see Chapter 3). Therefore, the "French drugs" category essentially overlaps the other subjective category of "pharmacy drugs" (Baxerres & Le Hesran, 2011). Compared to other pharmaceutical distribution sites in the two countries, the pharmacy has the greatest institutional legitimacy. It is managed or run by a qualified pharmacist. Pharmacies are not equally distributed throughout the country and are mostly located in urban areas. In Accra, they are mostly found in the city's most upscale neighborhoods. In the Ghanaian semirural area that we investigated, there were no pharmacies.

"Local products" are commonly distributed in health centers in both countries, in pharmaceutical warehouses and by informal vendors in Benin, and by OTC medicine sellers in Ghana.²⁴ Again in Benin, where drug categories and distribution sites are closely linked, "pharmaquick drugs" are also called "hospital drugs," due to their hospital packaging. In Ghana, "local products," marketed in individual packaging for the private sector, are mostly sold by OTC medicine sellers, particularly in rural areas. Commonly using rural outlets for distribution of local drug production in Africa is not a characteristic specific to Ghana. It has also been reported in Tanzania (Chaudhuri, Mackintosh, & Mujinja, 2010).

In Ghana, "Indian products" are also quite commonly sold by OTC medicine sellers. In Benin, "drugs from Nigeria and Ghana" are only available from informal vendors, a category that may include products classified as "local products" or "Indian products" in Ghana. It is interesting to note that products from a specific company located in Ghana are highly valued by informal vendors in the neighboring francophone countries who buy large quantities of them when they go to Ghana for their supply.

"ACTs" are not distributed in the same places in Benin and Ghana, as shown in Chapter 7. In Ghana, they are available from any pharmaceutical distribution actor, both public and private, while in Benin they are only accessible through public health centers and community health workers assigned in rural areas through specific public health programs, such as malaria control.²⁵

Therefore, the subjective categorization of drugs also has to do with where they are distributed in the country. The pharmaceutical products available are not the same for everyone but are instead based on the consumer's socioeconomic status and area of residence.

Economic "niches" for pharmaceutical companies

Upstream of distributors, the pharmaceutical companies, in turn, are seeking their market share. According to economic sociologists, in these types of

wholesale markets where economic actors engage in ongoing business dealings, unlike the brief encounters in a retail market, "these producers watch each other to define how they want to position themselves into 'niches' that they will occupy on the market in terms of product quality and volume" (Steiner, 2005, p. 41). Hence, in drug markets at play in Benin and Ghana, some companies, such as the abovementioned Ghanaian manufacturer, focus more intensively on the lower class. Their products are inexpensive and are distributed more chiefly through OTC medicine shops and in rural areas. They are also very popular in Beninese informal markets.

Other companies, mainly multinationals from the West, produce brands whose product quality is highly valued. Their packaging is highlighted in such a way as to further emphasize this feature. They are perceived as being "original" products, even long after the drug has entered the public domain or when they were not in fact the originator product. They are expensive and their price further reinforces these perceptions. By comparison, companies that produce locally or in Asian countries are perceived as manufacturing "generics," in the negative sense often associated with these drugs in Ghana and especially in Benin that deviates far from the legal definition.²⁶ Their low price further reinforces this perception. Nevertheless, the vast majority of people in these countries have relatively low purchasing power. Thus, the market share, in terms of quantity sold, for "local products," "Indian products," or "drugs from Nigeria and Ghana" is significant.²⁷ These products are widely popular and appreciated by most low-income people. This appreciation increases when the packaging for the private sector is appealing, colorful, and illustrated with photos that show the treatment's expected effects (see Figure 11.2).

Yet, since they also want to be major players in these markets, Western companies develop their generic brands (Chaudhuri, 2016). For example, a new subjective category, playing out among Ghanaian distributors, has emerged in that country: "UK generics." This name designates generic drugs marketed under their INN combined with the name of the company, usually from the West, which cost less than "UK products" but more than "local products" and "Indian products." And these "SuperGenerics" give rise to the paradox articulated by Cori Hayden, namely "the emergence of sameness and similarity as generative forms of distinction and value" (2013, p. 601). However, a middle class is undeniably flourishing in these countries at an annual growth rate greater than in European countries or the United States. As discussed previously, we see that Ghanaian companies position themselves to enter the most highly valued markets.

Drugs for public health programs, the "ACTs," further complicate the hierarchy in these pharmaceutical markets. Although making these products available definitely has public health objectives (in this case to roll back malaria), the producers also manipulate the subjective perceptions of their potential customers. As seen in Chapter 6, they play on both sides of the field, subsidized and unsubsidized markets, using one specific name or using several names for the same molecule, with different packaging and different prices.

Constructing the subjective quality of drugs and imaginaries of consumption

The biomedical professions and public health actors frequently present drugs as "a commodity unlike any other," for which issues of quality are completely different. We will show that while it has specific features, the drug-as-commodity marketing is constructed like that of many other commodities.²⁸

Insinuating doubts and urging trust

As noted previously, the residents of Benin and Ghana who distinguish between the various types of locally available medicines in terms of quality, generally do not perceive the least valued categories ("local products," "Indian products," and "drugs from Nigeria and Ghana") as harmful or toxic. Contrary to what other scholars have pointed out (Hamill et al., 2019; Mackintosh & Mujinja, 2010), in the contexts and on the types of pharmaceuticals that we studied, the medicine's subjective quality does not reflect the issue of drug risks (Fainzang & Ouvrier, 2016; Massé, 2007). Rather, such quality seems to lie much more in a form of "social distinction," in line with Pierre Bourdieu (1984), or even in a "discrimination and prestige mechanism," in line with Jean Baudrillard (1986/1972, p. 9), associated with product consumption. This social distinction enables everyone, regardless of socioeconomic status, to find "their place" in drug market hierarchy: this is rather ironic, since it involves health commodities. This customer, observed in a pharmacy in Accra, rightly points out: "He asked for amlodipine, and Regina brought Wockhardt brand [an Indian company] to him (...). He picked it up, looked at it and said 'What is this you've brought me? I don't want this one.' By then the manager stood by him and told Regina to bring Pfizer's [a US company] brand to him. I asked the guy why he didn't like the Wockhardt brand and (...) he said 'Just like you will not have the money to purchase coca cola and yet go and purchase special cola [a locally produced drink]" (observation on April 3, 2017).

Of course, economic actors adroitly conflate these two aspects (risk-toxicity and prestige-social distinction). For them, it ultimately means maintaining suspicion around certain products and instilling trust around others (Quet, 2018). Therefore, the idea of subjective effectiveness probably most accurately reflects how consumers assess the different categories of medicines presented previously.²⁹ The least valued medicines are often perceived not as toxic or harmful, but as less effective than the higher valued ones. "Sometimes when I have some money, I go straight to the pharmacy since pharmacy drugs are more effective. [...]. If you buy at the pharmacy, that works better than if you buy at a house (referring to informal vendors). It works better and it works faster" (interview with a mother of a "poor" family in Mono department in Benin on December 8, 2014). This perceived effectiveness may sometimes lead individuals to consume either twice or half the quantity of certain products.

In economics, price theory alone has long explained market mechanisms, as if only prices regulate economic activity. However, economic sociologists have since shown that an increasing amount of this activity calls for new analysis tools.³⁰ Based on his research on lawyers in France and highlighting clients' uncertainty when faced with determining the quality of legal services that they are largely unable to assess—as is the case for medicines—Lucien Karpik (1989) emphasizes the ideas of trust and judgment.³¹ According to him, uncertainty about the quality of services or products manifests through a distinct mode of regulation that competes with pricing. He therefore differentiates between the "price-market" and the "judgment-market." In the case of pharmaceutical markets, as we have shown previously, price helps shape judgment. It is one of the criteria for constructing subjective perceptions of the quality of products. But it is not the only one.

Branding and geographic origin: Creating a reputation and singularity

Our studies show that a product's subjective quality is only constructed relative to other products of the same type, within economic hierarchies and through competition. The work of economic historians on this topic sheds light on the drivers associated with product quality since the eighteenth century,³² given the sharp increase in the number of all types of products marketed in the West since that time.

Historians are especially "sensitive to the issue of categorizing [and] have also explored how the various actors' have invested in the agreed-upon forms to produce an order for commodities within which the tension between similarity and singularization is expressed at the foundation of market segmentation and trade dynamics" (Margairaz, 2012, pp. 1–2). These economic historians demonstrate how the concept of product quality, the standards that enable its objectification, and the branding that make it visible have been constructed by the manufacturers themselves in order to ensure their marketing position and to distinguish themselves from their competitors. Philippe Minard proposes an illuminating analysis of the marketing strategies of silversmiths in eighteenth century England, particularly in Birmingham, who wanted to cement their reputation ahead of their competitors in London. They led a "veritable crusade" to create a regulatory assay office in Birmingham, responsible for measuring the quantity of pure silver in a piece and hallmarking it if it met the standard. In this way, the Birmingham manufacturers made "respecting quality standards their warhorse, and ... turned it into a formidable marketing tool," and "their quest to conquer markets led them to advocate for establishing quality controls that they hoped would give them an advantage in terms of reputation and trust" (Minard, 2010, pp. 1136 and 1119). These manufacturers thus began the long process of building a brand image.

Several studies in sociology, economics, and history have investigated labels, certifications, and brands as symbols associated with a product's quality, which strengthen consumer confidence. Whether they view quality based on its objective dimensions (Linnemer & Perrot, 2000), defined in the introduction, or whether they emphasize its subjective dimensions (Boltanski & Esquerre, 2017;

Musselin et al., 2002; Stanziani, 2005), they all show the competitive and commercial aims that, along with strategies, propel these moves to demonstrate quality. According to Luc Boltanski and Arnaud Esquerre, brands began to garner attention at the end of the nineteenth century and then flourished with the rise in marketing (Cochoy, 1999). The authors assert that a dual concern explains the increasing importance placed on brands: "stimulating sales" and "enabling producers to disengage from traders, while ensuring that objects can still be identified in a way that is relatively independent of the identity of the people who sell them." This is about winning customer loyalty, "regardless of where the product is sold" (Boltanski & Esquerre, 2017, pp. 227–228), and building loyalty to a specific product that the customer trusts rather than a single interaction with a vendor. Obviously, advertising accompanies these elements of product singularization, as Sophie Chauveau (2005) has shown with the emergence of pharmaceutical specialties in the eighteenth and nineteenth centuries.

In historical studies, a product's geographic origin appears to play a fundamental role in the singularization and classification of commodities: silver products from Birmingham are distinguishable by the anchor stamped on the pieces, compared to those from London, with its leopard design (Minard, 2010); the white textiles of Holland and those of the East India Company (Margairaz, 2012), and so forth. Therefore, the construction of objective quality often passes through geographic spaces. The protected designation of origin (PDO)—a European legal instrument to create reserved markets (for food products associated with a specific region, or terroir) that is integrated into competition law and economic law and distinct from intellectual property rights because it has no time limit—is proof of this geographic impact. Ultimately, this tool closely resembles trademark law, which "is born with the brand's registration and dies, in theory, with the death of the company that submitted it," but it is more powerful: the PDO "is indissoluble because the land is immortal, immemorial" (Hermitte, 2001, pp. 197-198). Not unlike labels and brands, construction related to geographic spaces also carries undeniable economic advantages. Philippe Minard shows how a geographic space can affect reputation. In the case of silver pieces "made in Birmingham." this involved "building up an attractive reference, a symbol of superior quality" (Minard, 2010, p. 1140). Lynda Dematteo (2016) shows that when confronted with fierce competition from Chinese clothing producers, the Italian textile industry is trying to reposition itself based on high quality and luxury, thus creating a "niche" by emphasizing its "made in Italy" attribute. However, Chinese producers can also play at this game, and Lynda Dematteo notes the case of a Chinese company that uses a brand name that sounds Italian.

We have seen through the example of pharmaceutical supply in Benin, Ghana, and Cambodia that the perceived geographic origin of drugs, linked to national territories (France, United Kingdom, India, Vietnam, Nigeria, and Ghana) is undoubtedly a criterion for "quality" among consumers. This geography of subjective value takes on a specific resonance in the postcolonial contexts of the three study countries. Returning to Mario Biagioli, cited by Cori Hayden (2013, p. 606), it could be said that for Western pharmaceutical companies, the perceptions

associated with drugs from the West, in postcolonial contexts, play the role of "intellectual property without intellectual property."

Encountering subjectivities, creating attachments

Economic actors' marketing strategies past and present, which we have attempted to decipher in the previous pages, shape the products that encounter consumers' subjectivity. Some scholars speak of "desires of consumption" (Boltanski & Esquerre, 2017), but this concept is difficult to apply to medicines—a product, first and foremost, of necessity. And yet some vignettes from our ethnographies seem to reflect this. Liliane, mother of a "poor" family living in a Beninese semirural area, exemplifies this. During the 9 months that we monitored her family's pharmaceuticals consumption, she mainly bought "pharmaquick drugs" or "drugs from Nigeria and Ghana" for herself, her husband, and her children from the informal vendors whom she paid between CFA 250 and 500 (between EUR 0.40 and EUR 0.76). One day she bought a box of Parafizz® at CFA 1540 (EUR 2.30) in a pharmacy to treat a headache.³³ It seemed to us that she wanted to "indulge herself" that day, after unexpectedly receiving some money.

Market research conducted by producers and their marketing teams on the drug as an object, especially its packaging, definitely encountered individuals' "imaginaries of consumption" in Ghana, Benin, and Cambodia. Manufacturers employ a variety of factors to construct a product's "subjective quality": using colorful boxes with illustrations and photos showing the drugs' effects; featuring seemingly white-skinned people in the photos on boxes of "Indian products" and "drugs from Nigeria and Ghana"; or using elaborate packaging, complete with a prestigious brand, in contrast to the INN generics sold in hospital packaging, whether "ACTs" or not. As demonstrated by Emilia Sanabria (2016) on the topic of sex hormones, product packaging has an impact on medicines' materiality and, therefore, on the effects that they actually produce, beyond their solely symbolic efficacy.

Producers generate consumer "attachment" to the product through this work on brands and packaging. This idea has been put forward by Michel Callon, Cécile Méadel, and Vololona Rabeharisoa as a second mechanism structuring markets alongside the "singularization" of products. "The consumer is not alone when faced with a product and having to identify its qualities. He is guided and assisted by tangible devices that serve as benchmarks, guide posts, and 'affordances' (allowing and suggesting a course of action) through which information is distributed" (2000, p. 225). In their view, "attachment" occurs at the juncture where an object's characteristics and the symbolic meet—in other words, subjectivities. Other authors discuss the "seduction" that major brands exert on consumers (Stanziani, 2005).

Thus, the object's image combines with price and assumed geographic origin (which is reinforced by the brand name) to complete construction of the drug's "subjective quality." These three criteria appeared to be inherent factors that play an equal role when assigning a value to medicine-as-commodity in postcolonial

contexts at the time of our studies. Proving that value is relative depending on the context, era, and commodity concerned, the effect of these three criteria may vary and others may be more influential (rarity, soundness, newness, location, etc.).³⁴

This last ethnographic vignette, featuring Indian companies and mass production of low-end products on the one hand, and a former colony and refined, high-quality production inspiring trust on the other, speaks volumes about the "imaginaries of consumption" associated with medicines in the postcolonial contexts that we studied: "Their products are better [referring to products from a European company].... As for Indians, I don't trust them, no, I don't trust them, they are like mass production... like, let me say, emmm, a UK person would do this one, he would take his time, make sure the efficacy, that everything is okay.... But these people they do 'bra, bra, bra' [meaning in a hurry], finish! because they want to produce many, so they wouldn't take their time. When you take a UK product and you take an Indian product, when you look at it closely you would see that there is a difference ... though it's the same active ingredients," (interview with a wholesaler-importer in Accra, August 21, 2014).

Conclusion

In the three countries where we conducted our studies, a subjective hierarchy of locally available drugs is at play that structures the pharmaceutical markets. This hierarchy is influenced by the countries' colonial and more recent history as well as by the characteristics of local and regional pharmaceutical production. Forms of subjective categorization in pharmaceutical supply are certainly at work in other national contexts, including in the West.³⁵ Countries' early and recent history, their political conflicts, and the dynamics of global pharmaceutical production all leave their mark, as demonstrated in the examples we have described. One key factor to consider lies in the systems for covering health costs: in countries where medicines are affected by social distinctions when purchased directly by the consumer, as we have highlighted, the standards and reimbursement mechanisms for drugs (and for which drugs) are undermined and less effective.

Our research shows a different way to understand the concept of quality when applied to medicines than what is normally advanced in the media and public health actors' discourses (Baxerres, 2014; Hodges & Garnett, 2020; Quet, 2018). The "subjective quality" of medicines, far from their objective certified characteristics—clearly demonstrated by the example of "ACTs"—is, nonetheless, incredibly effective and a key factor in structuring pharmaceutical markets. Subjective quality influences what consumers choose as well as how they use products. It steers the commercial strategies of pharmaceutical companies that position themselves toward different types of clientele (more or less solvent, living in urban or rural areas, rich or poor urban neighborhoods) (see Chapter 9 as well). It also guides which products retailers select to distribute in their pharmacies and shops.

Nevertheless, the drug quality standards discussed in the introduction, while objective, are neither neutral nor immutable. Historians have revealed that

how a product's "objective" quality is defined—a transhistorical concept that is assumed to actually exist—evolves and transforms. Their research underscores that "a product's quality is not the same at different times and in different places" (Stanziani, 2005, p. 419). They also demonstrate that "official certification can become a weapon that we must learn how to use and that we can turn against competing manufacturers" (Minard, 2010, p. 1124). Some economists echo this stance when they report "that we sometimes ascribe the goal of supporting producers of good quality to a policy regulating quality" (Linnemer & Perrot, 2000, p. 1399). These historical findings need to be questioned concerning medicines and what might be understood as ever-increasing quality requirements currently incumbent on pharmaceutical production (Pourraz, 2019).

The objective and subjective qualities of drugs ultimately come together in the fact that they both structure economic activity and how markets function, although operating through different processes. It is advisable to be especially vigilant on these issues and to rely on scientific, biomedical, and social science research to inform the "hybrid forums" (Callon, Méadel, & Rabeharisoa, 2000), comprising nongovernmental organizations, transnational actors, economic actors, scientists, and consumers' associations, who never fail to take a stand on the polarizing subject of pharmaceutical drug quality.³⁶

Notes

- 1. The Globalmed program focused on medicines used to treat malaria. With this as a starting point, our research results primarily concerned common, everyday pharmaceuticals used to treat symptoms and acute illnesses—in short, the most frequently used medicines in the study countries. Our results would have been different if we had begun by focusing our investigation on, for example, medicines to treat chronic diseases.
- 2. The work of Arjun Appadurai and his colleagues inspired the founding authors of the anthropology of medicines, who used the "social lives of things" as a springboard to propose the study of the "social lives of medicines" (Whyte, Van der Geest, & Hardon, 2002).
- 3. The WHO certification standard for the quality of medicines is called the WHO Prequalification of Medicines Programme (PQP). It was first applied in 2001 to antiretrovirals for AIDS, then to antimalarials and tuberculosis drugs, and then gradually from 2006 onwards to contraceptives, antivirals for flu, and treatments for acute diarrhea and neglected tropical diseases. The ICH was founded in 1990 and is made up of pharmaceutical regulatory authorities and industry associations from the European Union, the United States, and Japan (Pourraz, 2019).
- 4. We would like to thank Eve Bureau-Point, head of the study in Cambodia. We are as well grateful to Maurice Cassier, for the scientific discussions we shared on these issues that greatly inspired us while writing this chapter. See the Introduction of the book for more information on the data collection methodology.
- 5. This concept is advanced by the Vipomar program research team (funded by French National Research Agency—ANR 2014–2018), which addresses "The Political Life of Commodities" in line with seminal anthropological research in consumption (Douglas & Isherwood, 1996), in addition to that of Baczko Bronislaw (1984) on the topic of social imaginaries connected to various political regimes, and of Maurice Godelier (2015), which is more specifically focused on religious imaginaries, as well as games and art.

- 6. Of course, depending on who is speaking and where they are, some interviewed actors, especially some distributors, might go beyond this categorization and describe more nuanced categories, combining, for example, many more countries where the drugs originate. However, this does not question the operationality of the subjective typology described here.
- 7. Our previous research, conducted in the city of Cotonou in Benin, already enabled us to demonstrate a subjective typology for drug supply sold in informal markets (Baxerres & Le Hesran, 2011). This study, based on a comparative approach between three countries, extends and enhances the previous research.
- 8. All first names used in the chapter are pseudonyms.
- In 1922, part of Togo, colonized by the Germans, was attached to the British "Gold Coast," the former name of present-day Ghana.
- In Cambodia, the various subjective categories of medicines are partially structured on which alphabet is used on the boxes (Roman, Khmer, Thai, or Vietnamese alphabets).
- 11. Legally, any drug requesting a Marketing Authorization in Cambodia must include a package insert inside its packaging in the Khmer language. But sometimes a loose sheet of paper added into the box that provides a translation of the package insert in Khmer will suffice. Thus, imported drugs do not always have this insert, whereas drugs manufactured in Cambodia must include a package insert.
- 12. The Ghanaian currency is the cedi (GHC), and its rate fluctuates regularly. 1 GHC is worth approximately USD 0.20.
- 13. This valuing factor—locality—operates much more strongly for industrialized herbal medicines (Hardon et al., 2008), as we saw in Chapter 8. Nevertheless, it occasionally affects pharmaceutical specialties as well.
- 14. No quotation marks have been added to this category, which is etic, unlike the others described in this chapter that are emic. We constructed it so that we would be able to combine categories operating in the three countries where we worked.
- 15. Some formal drug distributers have a very negative view of drugs that they believe come from Nigeria. People in Benin generally perceive Nigeria as a country that produces low-quality copies of numerous goods (IT equipment, kitchen utensils, automobile parts, etc.). For more information about popular perceptions of "drugs from Nigeria and Ghana," refer to Baxerres (2013).
- 16. It is interesting to note that medicines included in the "Indian products" category in Ghana fall under the "drugs from Nigeria and Ghana" category in Benin. Also, surprisingly in Benin and Cambodia, popular perceptions do not encompass drugs originating in India, even though India is, in fact, a major source of drug supply in these countries.
- 17. It would be interesting to also specifically investigate "Thai drugs," which appear to reveal rich perceptions about the pharmaceutical flows between Thailand and Cambodia, as well as relations between the two countries. However, we did not go in depth on this issue during our study.
- 18. In the 1980s, after bringing an end to the Khmer Rouge regime, the Vietnamese installed the People's Republic of Kampuchea in Cambodia, which was under their control.
- 19. Malaria continues to be a major public health problem due to antimalarial resistance, which remains prevalent in Southeast Asia, and more specifically, at the border between Cambodia and Thailand (Phyo et al., 2012).
- 20. The expression "transnational actors" combines different types of extra-national actors currently involved in a country's public health issues: bilateral institutions (the various international aid services) and multilaterals (World Bank, Global Fund), nongovernmental organizations, foundations, and public-private partnerships that are sometimes aligned with the pharmaceutical industry.

- 21. In Benin, when distribution professionals talk about "ACT," they are referring to subsidized ACT. Sometimes they also use the term "coartem," because the Coartem® brand was overrepresented, if not the only available option, among subsidized ACTs for a long time. Consumers usually say coartem and sometimes ACTs or they describe the medicine. Nonsubsidized ACTs that are sold in pharmacies are known by their trade name, with people using different names depending on their purchasing practices.
- 22. This campaign was implemented during the launch of the AMFm (Affordable Medicine Facility-malaria), supported by the Global Fund. In Ghana, professional distributors use the term "ACTs" for all ACTs that have the green logo on their packaging; and even if they know that there are different manufacturers, they generally believe that these are the same products. However, consumers talk about "the one taken four-four, the yellow ones," and some also know the term "ACT." As in Benin, unsubsidized ACTs that do not carry the "green leaf" are known by their trade name.
- 23. The next two, more analytical, sections are based on our studies conducted in Benin and Ghana. The data collected in Cambodia as part of this more exploratory study did not allow for a detailed analysis of the local realities there.
- 24. For more information on these different actors in pharmaceutical distribution, see Chapter 3. In Ghana, OTC medicine shops are managed by non-pharmacists who are authorized to sell only over-the-counter medicines and some public health program products such as antimalarials or contraceptives. They were numerous in the country (10,424 at the time of our study). Private pharmaceutical warehouses in rural Benin are also held by people who do not have a degree in pharmacy. Owners are authorized to sell essential medicines from a limited list and are under a pharmacist's supervision. Linked to this strict legislation, their number is very few in rural Benin (165 in 2018). Informal vendors in Benin distribute drugs outside of the formal circuits prescribed by the State: in markets, in shops, door to door, at home, on public transport, etc.
- 25. This reality, which greatly limits individuals' use of "ACTs" in Benin, certainly also has an impact on the low value, noted above, attributed to these drugs in this country.
- 26. A generic drug is a copy of a proprietary drug whose patent has expired and entered into the public domain and whose therapeutic equivalence, quality, and safety are guaranteed by the drug regulatory agency in force in a territory. In accordance with national laws, generics may be marketed under a brand name or not; the latter are marketed under their INN, sometimes with the name of the manufacturing company or the company's generic division. Generics may be marketed in hospital or individual packaging. In our study contexts, it appears that "generics" are usually associated with drugs sold under an INN in hospital packaging and perceived as having low quality.
- Medicines manufactured in India account for 30% of the Ghanaian pharmaceutical market. Local production in Ghana covers 30% of the private market in this country (Pourraz, 2019).
- 28. To define commodity, we have adopted the simple definition recently advanced by Luc Boltanski and Arnaud Esquerre: "anything that entails a price when it changes ownership" (2017, p. 12).
- 29. The social and symbolic dimensions of drug efficacy have been widely described in anthropology alongside their pharmacological aspects (Garnier & Lévy, 2007; Whyte et al., 2002). More recently, in a literature review that proposes revisiting the anthropology of medicines in line with scientific and technological studies, Anita Hardon and Emilia Sanabria (2017) fall back mainly on the concept of efficacy and its heuristic value. They highlight that this is conditioned by contexts (of the research, Market-State nexus, or regulatory environments) and influenced by the interests, expectations, and practices of both users and economic actors.

- 30. The neo-classic school of economics has highlighted the subjective theory of value since the so-called marginal revolution (Menger, 1981) (Original work published in 1871). Subsequent economic sociologists further refined an understanding of those realities (Steiner, 2005).
- 31. Some authors also cite the idea of trust, and its opposite, suspicion, when dealing with medicines (Hamill et al., 2019). However, from our point of view, they do not adequately develop a critical analysis of how these ideas actually play out for economic actors. Refer to Brhlikova et al. (2011) for a more critical use of these notions in the pharmaceuticals field.
- 32. Since the 1990s, extensive historical research has examined product quality, particularly for food products (bread, wine, milk, meat, etc.), textiles, silversmithing, and luxury items (Béaur, Bonin, & Lemercier, 2017/2006; Minard, 2010; Stanziani, 2005).
- 33. Parafizz® is manufactured by the Indian company Cipla, but it is a safe bet that since this drug is sold in pharmacies, it passes as a "French drug" in rural Benin.
- 34. Luc Boltanski and Arnaud Esquerre define value as simply "a system to justify or criticize the price of things" (2017, p. 13).
- 35. In France, for example, singularization in terms of the quality of various available drugs works largely through the distinction between "generics" and "originator products," with the words "fake" and "real" often being associated with these categories. For various historical and legal reasons, consumer "attachment" to a product, based on its brand name and packaging, does not occur with generics (Nouguez, 2017).
- 36. On this topic, note the organization of the conference entitled "Medicine Quality and Public Health," the first of its kind held in Oxford in September 2018 and which will be repeated: www.tropicalmedicine.ox.ac.uk/medicinequality2018/, consulted December 16, 2018.

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