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# When the Future Decides

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## Uncertainty and Intentional Action in Contemporary Cameroon

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by Jennifer Johnson-Hanks

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Young Beti women in Cameroon regularly assert that because they are uncertain about what the future will bring, they cannot make any plans. But they do plan, strategize, and indeed act quite effectively. The purpose of this paper is to explain how they do so, specifically in reference to marriage and reproduction, and thereby to contribute to a general understanding of intentionality, uncertainty, and social action. Action has been commonly theorized as the fulfillment of a prior intention. But uncertainties, both the probabilistic uncertainty of events and the subject's experience of uncertainty, threaten to dissolve the link between intention and its fulfillment. This paper argues that, at least under the conditions of uncertainty applicable in contemporary Africa, effective social action is based not on the fulfillment of prior intentions but on a judicious opportunism: the actor seizes promising chances. In other words, women's negation of Weberian rational action is not a lack; by engaging in heterogeneous activities without a clear trajectory in mind, they are able to get by. The paper makes this argument on the basis of ethnographic and demographic data from Cameroon and theoretical analyses of the work of Searle, Schutz, and Hume.

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*Worshipping a dictator is such a pain in the ass. It wouldn't be so bad if it was merely a matter of dancing upside down on your head. With practice anyone could learn to do that. The real problem is having no way of knowing from one day to another, from one minute to the next, just what is up and what is down.*

— CHINUA ACHEBE

Half an hour into our second interview, I asked Martine how many children she planned to have. "Not right away," she responded. "I have to work before having children. . . . I need even a house. I need to have perhaps saved a certain sum." This answer, apparently so disconnected from my question about child numbers, would have surprised me a few months earlier, but I had grown accustomed to it. In both interviews and informal conversations, young, educated Cameroonian women routinely responded "Not yet" to my question "How many children do you plan to have?" My thinking about the topics of uncertainty and intentional action began with this mismatch between question and answer, which offers a portal into the analysis of the vital conjunctions of reproductive action and intention in the uncertain world of Cameroon at the end of the 1990s.

Reproduction offers a particularly appropriate locus for the study of intentionality and its limits; "planning," "intending," and "trying" are at once indispensable and insufficient modes of understanding social action around childbearing. In quantitative social science as in policy, reproduction and especially child numbers are treated as objects of rational, strategic action, building as much on Weberian *Zweckrationalität* as on Bentham's Utility. Since the late 1960s, international family-planning policy has relied on the theory that poor countries have a substantial "unmet need" for family planning, identified when women respond in surveys that they want no more children and that they are not using any means of contraception (e.g., Bongaarts 1991, Bongaarts and Bruce 1995, Casterline and Sinding 2000, Jain 1999, Westoff 1988). The theory of unmet need and related concepts such as "desired fertility" assume that reproductive intentions are relatively coherent, stable, and articulable and that they are oriented primarily toward numbers of children.<sup>1</sup> Given the centrality of these theories to entire academic disciplines and to the multibillion-dollar family-planning industry in poor countries, I went to conduct my research in Cameroon thinking that questions like "How many children do you plan to have?" and "Do you want a(nother) child soon, later, or not at all?" would produce relatively transparent responses, offering a yardstick with which to calibrate my ethnographic results

1. The theory of unmet need is based on many of the same assumptions as expected-utility theory in economics; however, it violates basic economic assumptions and is generally rejected by economists because the intertemporal discounting necessary to observe such off-optimum behavior is implausible (see Pritchett 1994).

against those of 40 years of demographic surveys.<sup>2</sup> The reality was very different indeed.

What kinds of reproductive futures do young, educated Cameroonian women hope for? How do they try to bring about those potential futures? How are these intentions and actions inflected by the uncertainty of everyday life in contemporary Cameroon? By addressing these empirical questions, I hope to contribute to a general understanding of uncertainty and the relationship between intention, action, and outcome as ethnographic objects. At least since Brentano, action has been commonly theorized as the fulfillment of a prior intention; the assumptions of the family-planning community are thus well grounded in Western philosophy and social thought. But uncertainties—both the probabilistic uncertainty of events in the world and the subject's experience or posture of uncertainty—threaten to dissolve the link between intention and its fulfillment. My interlocutors' experiences of uncertainty and intentional action in their reproductive lives contrast starkly with the approaches to these topics from early probability theory, phenomenology, and the philosophy of mind. Through the juxtaposition of ethnographic and statistical evidence with social theory and philosophy, I seek to view them "in the pale light that each upon the other throws" (Stevens 1990:54).

Life in contemporary Cameroon is extremely uncertain, both in the specific sense that death often comes early and unexpectedly and also more generally: few events in everyday experience are predictable or consistent. From buses to paychecks to roadblocks to prices, common things elude standardization. Life was almost assuredly also very uncertain before the two-decades-old economic crisis, but today people invoke *la crise* as an explanation and excuse for the ambiguity and insecurity that they experience. While the intensity of daily uncertainty in contemporary Cameroon draws the limits of a classic intentional model of action into sharp relief, the model is also insufficient to account for social action in the relatively certain, affluent West, if in more nuanced and concealed ways. Social action everywhere combines intentional strategy and judicious opportunism; only the relative proportions change with time and context. This is not, therefore, a story of difference, contrasting the forms of social action that emerge under uncertainty *there* with rational, strategic action *here*. Nor is it an explicit discussion of gendered action or the relationship between gender and certainty, although my examples all concern women. Rather, it is a theoretical analysis of uncertainty and intentional action, using an

2. Although the assumption that demographic action is intentional within the frame of post-Weberian theories remains strong, a growing corpus of work both within and beyond demography has significantly refined understandings of the sources and modalities of those intentions. Perhaps most influential has been the work of Susan Watkins and her collaborators, who have argued that social networks play a key role in shaping women's hopes, goals, and practices regarding childbearing (Kohler, Behrman, et al. 2001, Rutenberg and Watkins 1997, Valente, Watkins, et al. 1997, Watkins 2000).

ethnographic case and associated demographic data as foils.

## Intentional Action from Phenomenology to the Philosophy of Mind

If the family-planning literature generally assumes that women engage in reproductive action (e.g., using contraception) in order to fulfill their prior reproductive intentions (e.g., limiting family size), it is not an assumption cut from whole cloth. To the contrary, a substantial Western intellectual tradition—spanning economics, political theory, phenomenology, and philosophy of mind—has analyzed action as behavior that fulfills a prior intention.<sup>3</sup> Defining "action," in contrast to mere behavior, as oriented toward the fulfillment of intention makes action both cognitive and reflexive and thus necessarily the activity of particular kinds of subjects and amenable to particular modes of analysis. These modes of analysis prove inadequate for the analysis of Cameroonian women's reproductive practices; to understand how and why, it is necessary to address the theories of intentional action in some detail. I will here focus on the phenomenology of Schutz and the philosophy of mind of Searle, arguing that their theories of the relationship between intention and action are largely consonant. Other scholars have also treated action as the fulfillment of intention, Weber being only the most obvious,<sup>4</sup> and much of microeconomics, statistical demography, and quantitative sociology relies on the assumptions of rational-choice theory, a specific and highly formalized version of the theories of intentional action. I focus on Searle and Schutz because they offer rich and nuanced examples of the category fertile enough that even their limitations are analytically useful.

For Searle, intending to do something is a special case of intentionality, the general class of cognitive states that are *about* something, such as wishing, believing, and detesting. Among these, "intending to" has two special properties: first, the conditions of satisfaction of intentions—actions—are uniquely tied to the intentions themselves. Thus, the state of affairs that I hope for may exist independent of my hopes, but "there are no actions without corresponding intentions" (1983:82). Second,

3. In addition to the citations below, see Baldwin and Baird (2000), Dennett (1998), McKaughan (2003), Montefiore and Noble (1989), Smith (1992).

4. Weber's concept of the *Sinnzusammenhang* (complex of meaning) and *gemeinter Sinn* (subjective meaning) were central to Schutz's formulation of intentional action, and the two writers appear to concur on the key points for my purposes here. In defining action, Weber writes: "Explanation requires a grasp of the complex of meanings in which an actual course of understandable action thus interpreted belongs. . . . The subjective meaning of the action, including that also of the relevant meaning complexes, will be called the intended meaning" (1978:9). The fact that Weber includes situations in which the actor is not consciously aware of his intended meaning does not seem to me to pose a problem; although consciousness and intentionality overlap, neither is a prerequisite for the other.

the fulfillment of intention rests both on the outcome and on the process through which it is achieved: my intention to visit my ailing aunt is not achieved if my car happens to stall outside her house and I go inside to wait for the tow truck. By contrast, my belief that she will be home can be fulfilled regardless of how she came to be there (pp. 84–91). Actions are therefore not merely the fulfillment of intentions but also entail them; without some intention there can be no action.<sup>5</sup>

Responding to the potential criticism that some behaviors that intuitively seem to be action—such as running sobbing from the room—are performed suddenly and without forethought, Searle distinguishes between prior intentions and intentions in action. Intentions in action are part of the action, inseparable from it, and thus necessarily present even if the actor is unaware of them. Searle (1983:107) writes:

The action of my raising my arm consists of two components, the intentions in action and the movement of my arm. Take away the first and you don't have action but only a movement, take away the second and you don't have success, but only a failed effort. There are no actions, not even unintentional actions, without intentions, because every action has an intention in action as one of its components.

In other words, any behavior that is associated with some kind of “trying to do something,” no matter how banal, is “action,” because the thing tried for constitutes an intention in action. The relevant distinction is not between intentional and unintentional action but between prior intentions and intentions in action. This move recuperates my running sobbing from the room, killing my rosebush by pruning it too vigorously, and shifting gears as I move onto the freeway as definitionally intentional actions—even if not done “on purpose”—because each is invested with intentions in action (“that my feet move,” “that I cut this branch,” etc.). While philosophically consistent, it has inconvenient consequences for the social scientist. The generality, narrowness, and lack of structure of intentions in action seems to preclude their social analysis. Intentions in action, as explained by Searle, are little more than the cognitive representation of the physical action itself: the intention in action associated with arm-raising is “that my arm go up.” As such, they seem to have little relevance to a social account of voting, volunteering, waving, or any other activity in which arms might be raised. These broader, social aims inhere, rather, in what Searle calls “prior intentions,” intentions that come before the action both in time and in causal sequence. The prior intention is the motivation of the action, the aim in view, the in-order-to motive. Searle’s prior intentions correspond closely to the idea of intention embedded in demographic

5. Searle’s position on intentionality has been amply debated in reference to causal theories of action, as well as in the philosophy of mind (see, for example, Costa 1987, Jacqueline 1989, McCulloch 1984, Mele 1999, Vermazen 1998, Walker 2003).

surveys and in theories of rational choice and also in the phenomenology of Schutz.

In his integration of Weber’s theory of social action with Husserl’s phenomenology, Schutz argues that the goal—and therefore the meaning—of an action is its projected act. This model of the projected act resembles Searle’s notion of the prior intention in at least two ways: the action fulfills the intention or projected act, and the fulfillment is fundamentally concerned not only with outcome but with process. For Schutz, action may be meaningful because the actor removes himself from the flow of duration to reflect upon it, prototypically in memory but also in projecting the future. He argues that action is the fulfillment of a prior intention in the specific sense that intended acts are envisioned as completed, such that their completion in the world brings about an alignment between the mental representation and the external state of affairs (1967:61):

The actor projects his action as if it were already over and done with and lying in the past. It is a full-blown, actualized event, which the actor pictures and assigns to its place in the order of experiences given to him at the moment of projection. Strangely enough, therefore, because it is pictured as completed, the planned act bears the temporal character of pastness. Of course, once the action begins, the goal is wished for and protended. . . . It is thought of in the future perfect tense.

Schutz explicitly argues here that the formulation of a “future perfect act,” an explicit, cognitive representation of an intended outcome, is a precondition for action. At the same time, he makes present meaning dependent on the future’s resemblance to the past, if not on the future’s potential pastness itself. I will argue later that experiential uncertainty differs from statistical uncertainty particularly in its relation to time and to the relationship between different temporal forms and that Schutz’s terms here help to formulate this basic difference. For now I want only to emphasize the necessarily temporal character of intention, which runs through both Schutz’s and Searle’s interpretations. Intention precedes action as memory follows experience (Searle 1983:96):

The prior intention to raise my arm is to the action of raising my arm as the memory of seeing a flower is to seeing a flower; or rather, the formal relations between the memory, the visual experience of the flower, and the flower are the mirror image of the formal relations between the prior intention, the intention in action and the bodily movement.

Thus, intention and memory are both intentional states that are about the conjunction of a physical phenomenon (a thing, a physical movement) and a cognitive one (the visual experience, the intention in action), but the temporal sequence and the mode of fulfillment are inverse.<sup>6</sup>

6. Searle discusses this in terms of the “direction of fit.” The direction of fit is mind-to-world in the cases of belief and perception, where a breakdown would be described as an error on the part of

Whereas for Searle the prior intention is to the action as the memory is to the perception, for Schutz the intention entails an experience that resembles memory directly: the act is seen in the mind's eye as a future memory. This interpretation is echoed in Miyazaki's (2000) analysis of hope in Fiji. Hope is the holding out of a promise for a future closure, what Schutz would call a "protended" state of affairs that, when actualized, will initiate a new round of future perfects, a new round of hopes.

Analyses that treat action as the fulfillment of a specific intention establish a systematic relationship between intentional projects and behaviors and thereby facilitate the meaningful interpretation of those behaviors. Like any model, however, this theory of intentional action must foreclose the analysis of some situations the better to address others. Viewing action as the fulfillment of a prior intention commits us either to excluding behavior that is not oriented to a clear intentional manifold from the category "action" or, following Searle, to positing that every action has an "intention in action" that comes into existence at the same moment as the behavior, whether or not it can be articulated at any point. The first move offers a technical definition of "action"; the second offers a technical definition of "intention." Both, it seems to me, beg the essential ethnographic question of how to think about behavior that is clearly meaningful but is not strategically selected in advance or behavior that emerges through the course of engagement and moves the engagement forward but without the choreography of a specific imagined future. How can we analyze conscious, social, and meaningful behavior that is oriented neither to the fulfillment of a prior intention nor to the actualization of an act projected in the future perfect tense?

For such a question, the ethnography of contemporary southern Cameroon is instructive for two reasons. First, the conditions of life—economic, political, and social—are highly uncertain, making the projection of future perfects particularly tenuous. While lived uncertainties exist everywhere, in contemporary Cameroon they are more visible, more ethnographically inevitable than in the United States or Europe. Second, there is substantial local ambivalence about the legitimacy, viability, and even morality of intentional action in the forms that seem so intuitive and self-evident to many scholars in the affluent West. In their descriptions of their own action—past, present, and future—southern Cameroonians generally reject a model of prior intentions or protended future perfects, instead describing their action as grasping at whatever is available in the present.

### Uncertainty in the Time of Crisis

According to many southern Cameroonians, the possibility of envisioning and seeking to attain specific fu-

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the subject. In the case of intention, the direction of fit is world-to-mind, where breakdowns are described as failures to fulfill a mental representation (1983:88 and *passim*).

tures is a thing of the past, an opportunity that was taken from them by the economic crisis of the past two decades. As Ferguson argues for the case of Zambian mine workers, many of my interlocutors have experienced *la crise* "not simply as a lack but as a loss" (1999:238). In 1987 the value of Cameroonian exports on the world market fell by nearly half, setting in motion *la crise*: a period of economic hardship, increased interethnic conflict, and a generalized state of distrust, a "routinized state of crisis" (Mbembe and Roitman 1997). The volatility in economic and social life brought about by *la crise* extends almost everywhere, from the most mundane to the most intimate domain: transport is unreliable and petty credit impossible to obtain, and even lovers are distrustful of one another's motives.

Two related factors are at work here. First, life in contemporary Cameroon is objectively unpredictable. Second, "crisis" has become available as a trope that serves to legitimate and reinforce both the interpretation of the world as uncertain and behavior that contributes to that uncertainty. Although most Cameroonians perceive their present uncertainty as resulting from the economic and social crisis, there is no evidence that life prior to *la crise* was objectively more certain. Many scholars have demonstrated the fluidity and complexity of African social life in the past (e.g., Berry 1993:18), and Cameroon is no exception (see Laburthe-Tolra 1981:51). Yet, by ascribing contemporary uncertainty to the crisis, Cameroonians have elevated the crisis to an inevitable force that accounts for incompetence, graft, sexual infidelity, school failure, and even witchcraft. The widespread sense that disadvantage and unpredictability permeate not only the economy but also social and personal relationships—what my informants call *la crise morale*—reduces the social pressure in favor of transparent and predictable action. After all, if corruption and witchcraft are inevitable and "everyone" engages in them, why resist? As a result of the common view that Cameroon is in crisis, the values assigned to specific social actions are remarkably fluid, with sometimes devastating consequences.

One example is the case of Madame Essele, a woman in her mid-50s living in a small town about an hour from the capital city. In early 1998 Madame Essele's marriage had become difficult, as her husband had taken a much younger second wife, and there was constant conflict in the compound over money. Her daughter, by contrast, was doing well: working as a schoolteacher in Yaoundé and living with her promising and handsome boyfriend there. Madame Essele went to visit them, and to celebrate her coming the daughter and her boyfriend slaughtered a goat. Back in the town, tales of the goat circulated and escalated. The goat became two goats, then a banquet, and then a feast. Madame Essele's co-wife claimed that the goat was a bridewealth payment for the daughter and that it should therefore have been given to their husband. Madame Essele, she asserted, had eaten (*adi*) the wealth that was by right due to her husband. Eating out of place immediately invokes witchcraft in southern Cameroon. An *evu*, a certain kind of dangerous spirit that resides in the bellies of some people, induces its

host to eat (*adi*) the wealth of his neighbors, the health of their children, or even his own relatives. Immoderate eating is akin to witchcraft and a woman disrespectful of her husband a likely witch. Thus, by claiming that Madame Essele had consumed a bridewealth goat, the co-wife was accusing her of witchcraft.

Those familiar with this case disagree about what happened next. Some people say that Madame Essele's husband paid to have her witched for disrespecting him. Others claim that it was the co-wife herself whose *evu* was to blame. Still others assert that it was Madame Essele's own guilty conscience that brought about her demise. All of my informants agreed, however, that Madame Essele fell ill on her way home from Yaoundé and died of supernaturally induced fever a few days later. Her daughter remained in the city, afraid to return to the village even for the funeral.

This case, in which a goat becomes a plausible basis for a witchcraft murder, points to the dramatic instability of life in contemporary Africa and serves as a good metaphor for the phenomenological experience of *la crise*.<sup>7</sup> Apparently small actions may have monumental consequences; neither the scale nor the direction of their outcomes can be predicted in advance. Bernstein (1994) warns against historical analyses that treat contingent outcomes as if they had been inevitable or obvious from the beginning. So, too, in ethnography: although I can explain the witchcraft accusations in reference to a set of local logics, I could not have predicted the outcome before it occurred. Nor could any of my Cameroonian interlocutors, despite the fact that they all considered the story plausible after the fact. Most Cameroonians share an acute awareness of the unpredictable: uncertainty permeates every plan, and action is rarely formulated as the fulfillment of a prior intention. What is common is a posture of openness to possibility, evocative of the "subjunctive mood" described by Wagner-Pacifici (2000).

In contrast to the armed standoffs that constitute Wagner-Pacifici's object, life in a routinized state of crisis demands not a subjunctive *mood* (temporary, set apart from normal life, partially volitional) but something closer to a subjunctive *habitus*, a system of "durable, transposable dispositions, structured structures predisposed to function as structuring structures . . . as principles which generate and organize practices and representations" (Bourdieu 1990:53). The extreme uncertainty of everyday life does not make people act recklessly or without structure but prestructures their expectations and reactions in a particular way. A *habitus* born of repeated experience of uncertainty and sudden change predisposes the actor to discount choice and refrain from committing himself to specific imagined futures, futures that are—in any case—unlikely to be attained.

The hesitation to commit to specific futures that char-

acterizes the subjective mood should not be confused with concern about the evil eye or even simple modesty, both of which are also at play in southern Cameroon but in different spheres. The narratives that follow may appear to indicate an avoidance of firm claims about the future for fear of bad luck or even witchcraft (cf. Castle 2001). I assumed as much at the beginning of my fieldwork. However, nearly the opposite applies in a variety of circumstances in southern Cameroon. People sometimes refer to, address, and even treat others as if whatever they are preparing for had already been actualized. Engaged women are called by their future married names, schoolchildren by their future titles. As an unmarried graduate student I was regularly called "Madame le docteur," and even the junior seminarians were called "the parish priests" (*les Abbés*). This is perhaps the most extreme example of Schutz's future perfect; not only are goals wished for and protended but they are socially taken as already in play: *Tous ce qui doit finir est déjà finit*. The difference between the seminarians and me, on the one hand, and the young women whose stories I recount below, on the other, was whether the trajectory had been begun. I was engaged to be married and working on my degree, and the seminarians had been accepted and were doing their studies: we were on a discernible path toward something. But before the trajectory is known, the situation is quite different. When my interlocutors claim that they cannot know the future and therefore make no plans regarding it, we cannot disregard their refusal as false modesty or superstition. We must rather take seriously the challenge that they are posing to intentional action as it is commonly understood. That said, their refusal of rational choice does not necessarily mean that they fail to act with intention of any kind. We must take their words seriously but not literally.

In the following quotes, high-school-educated women talk about their plans for the future. These women represent a local elite: while nearly half the women in recent cohorts in southern Cameroon have started high school, fewer than one in six have completed it. Completing high school requires the ability both to mobilize financial resources from kin and to learn under challenging circumstances, such as without textbooks. The first of these appears to be much harder for girls than for boys. Thus, women attending the last grade of high school have been unusually successful and their modes of action effective. That these modes appear far from intentional action suggests that models of such action are inadequate. My interlocutors regularly explained that they were not planning to follow any specific path of training or to seek out any specific employment but would instead take what came to them. For example:

*Ghislaine*: Now times have changed. It is no longer like before. One can no longer like something. Now everything that presents itself, you are obliged to attach yourself to it, to make do with [it]. Now you can no longer say, "I want to do this thing, because that other thing does not interest

7. Witchcraft is highly systematic, even the polar opposite of "blind chance"; nonetheless, widespread witchcraft increases uncertainty because it increases the range of possible outcomes of a given action and may—as here—even reverse their valence.

me." No. Everything that presents itself, one makes do.

*Jenna*: That means [you would do] any old job?

*Ghislaine*: Any old job. If you feel that you are capable, you do it. It is no longer like before. You can no longer choose. The essential [thing] is that one can survive. You do whatever comes to keep your life in balance. That's all.

*Jenna*: But before, you could choose?

*Ghislaine*: One chose. It's like with eating. The people did not eat whatever like they eat now. You could not tell me to eat cocoyams when there were ripe plantains, no! Now there is no longer any means to choose. When it's cocoyams, whether you like it or not, you eat cocoyams. Whereas before one could choose, now no one chooses anything.

And similarly:

*Jenna*: What do you want to do after the *bac* [high school diploma]?

*Adele*: We'll see. Perhaps we'll see after the *bac*.

*Jenna*: You don't have some general ideas?

*Adele*: I do not yet have a precise idea, you see. I am waiting. If I succeed, if the exams come out in success, then tomorrow I will tell you what's what.

*Jenna*: But in order to decide tomorrow, don't you have to have some ideas today?

*Adele*: Your vocation is not like that. It comes from the Holy Spirit.

*Jenna*: Yes, yes, I understand that, but don't you like something?

*Adele*: Today, is it necessary to like something? Whatever presents itself in front of you, you do.

In addition to my blind determination to elicit an answer in the form of a Weberian project, resulting in some extremely inelegant interviews, these passages show that my informants describe the future not as a set of choices and intentional actions but as a sequence of assents: whatever comes along, one may choose to assent to it. At least as dramatically, the young women talk about this lack of choice as a characteristic of *la crise*, stating flatly that in the past people could choose. I am less interested in the objective truth of this description of the past (which I would estimate as close to zero) than in what it tells us about how young Cameroonian women think or at least how they elect to present their thoughts in an interview. By focusing on the crisis as the source of uncertainty, my interlocutors do two things. First, they short-circuit any interpretation of "Western rationality" as opposed to "native superstition," placing uncertainty squarely as a product of globalization in the postcolonial period (see also Johnson-Hanks 2004). Second, they make their own *individual* tactics of getting by and making do the inevitable consequences of life in the present. If *la crise* has made any kind of planning impossible, then any individual woman's lack of planning can hardly be held against her.

Many young Cameroonian women would concur with Ghislaine and Adele that careers cannot be planned by first selecting a preferred end and then finding the most efficient means to achieve it. But, contrary to the local theory of history that traces this uncertainty to the current crisis, my analysis suggests that these ways of speaking about professional trajectories—as not chosen, as unknowable in advance, as determined by divine intervention, and as similar to individual food preferences and taboos<sup>8</sup>—entail both change and continuity from depictions of *Beti* concepts of vocation from the classic sources and applicable to both men and women (Guyer 1984, Laburthe-Tolra 1981, Mbala-Owono 1974, Tessman 1913). Thus, the young women explain their action in the crisis as distinctly different from life in the past even when talking about actions and circumstances that are precisely what past ethnographers have described as typical.

Classically, *Beti* personhood was represented as entailing the notion that each individual had a unique character and destiny, the amalgam of various inheritances and disparate sources of inspiration. Child rearing consisted largely of observing to ascertain where each child's future might lead and then encouraging or fostering those individual talents: a sort of divinatory pedagogy. Future paths were seen in part as unfoldings rather than as "choices." The unfoldings could fail, to be sure; a person could fail to develop inborn potential or to follow and foster inherited gifts. However, it was not a matter of choosing a trajectory so much as one of recognizing it and assenting.<sup>9</sup> Thus, possible trajectories were known to God in advance, but whether the individual would achieve them remained contingent. This sense that certain callings are inevitable, even if their fulfillment is not, remains central in these young women's ways of speaking about their futures, at the same time as they focus on the role of *la crise* eliminating the possibility of choice. Before *la crise*, one chose.

Again and again, in interviews, casual conversation, and columns in the newspaper, Cameroonian women emphasized how in their present condition any kind of planning was impossible. No kinds of futures could be

8. At least two things are at play here. First, food preferences are taken very seriously and are accepted as being grounded in character, physiology, or lineage. Some individuals are thought to be physically incompatible with certain foods, either permanently or temporarily. Second, the choice of cocoyams makes the association with sexuality all but explicit. The very common saying "One does not eat cocoyams every day" means that sex with a single partner all the time is boring and to be avoided by any man who possibly can (although not by women, for whom customary sexual practice is more restrictive). To say that now no one has any choice to eat cocoyams also intimates that the system of sexual diversity—which has always rested on men's abilities to offer enticing foods, clothes, and other gifts to their paramours—has also waned as a result of the crisis. My interlocutor was not explicitly making this latter claim, but her choice of words nonetheless invites the interpretation.

9. This exhortation to perceive and accept the will of God is mirrored in Catholicism as practiced in southern Cameroon. In Luke 1:38, Mary receives the message that she will bear Jesus saying, "Be it unto me as is thy word," a passage often explicitly cited by my informants.

envisioned, no plans made, no intentional action undertaken: the future had been retracted. Uncertainty was naturalized to the point that many people found assertions about certain futures laughable, absurd. Knowing that I was interested in young women's marital, fertility, and professional intentions, village residents sometimes asked me these same questions. How many children did I want? What job would I like to do? What would I do if my husband took a second wife? These exchanges usually took on a familiar form. I would say that I wanted two children, and my interlocutor would ask what I would do if I had five instead. I would say that I wouldn't have five; I would stop when I had two. Then my interlocutor and any bystanders would laugh uproariously and tell me that it was God who gave children and one could not refuse them. Similarly, if I said that I wanted to be a professor, I would be asked what I would do if I had to work in the fields instead. When I would assert that it was impossible that I would be forced to work in the fields in the United States, my conversation partner would laugh and remind me that no one could know the future and anything was possible in this world. Cameroonians are habituated into a kind of agnosticism about the future: life is so uncertain that plans are always tenuous, partial, more hope than conviction.

This posture of openness applies as well to plans regarding childbearing. Questions such as "How many children do you plan to have?" and "Do you want a(nother) child soon, later, or not at all?" have been central to demographic analyses of fertility since the initiation of the World Fertility Surveys in the 1960s. The associated and derived measures—average ideal family size, wanted fertility, and the unmet need for contraception—have been the basis of international policy, population projections, and funding for family-planning programs. Assuming a causal link between intention, action, and outcome, international aid agencies have spent hundreds of millions of dollars eliciting the reproductive intentions of women in poor countries. Because my project was to understand the social practices that underlay a specific demographic relationship, I asked women similar questions about their reproductive intentions. The answers were almost uniformly "non-numeric," as the demographic euphemism would have it (van de Walle 1992). For example, Marie-Claire responded to my question about how many children she intended to have by saying:

Those are the things of the future. We cannot know them. Because there are, you know, you can propose to do what you like, but you cannot know if it will happen. . . . There is first a stage when one is ignorant of certain things. But then you become aware, and you say, "But life is not what one believes! It is bizarre. It is ambiguous." Therefore, you must be wise.

Marie-Claire asserts that it is only in the stage of ignorance that one believes in the possibility of achieving what one intends; awareness and full adulthood come

when one understands that life is in fact bizarre and ambiguous. It is by rejecting the naïve belief in the causal efficacy of intentions that one becomes wise (cf. Wegner 2002). Similarly, a student who planned either to become a nun or else to have children explained that her actions would depend in part on whether her parents needed more children: "One never knows what life holds in store. It holds too many surprises. It could happen that one moment [my brother] just leaves, and our family is not large enough. We'll see what the future decides." This last is a common turn of phrase, used interchangeably with "For that, you never know" and applied to topics from the price of mangoes to the outcome of national elections. A third example has, again, the same structure:

*Jenna:* Sometimes people say to themselves, "I would like to have a lot of children" or "I would like to have only a few children." Do you know the number of children you would like to have?

*Annette:* I can't speak [about that] because I am not married. I have never had a child.

*Jenna:* But me neither. I am not married. I do not have children. But I already know that I want maybe two or three children.

*Annette:* You, you can have some ideas about children because you already have a fiancé. Me, I do not have a fiancé or husband or even a boyfriend. I am alone. So, how is it that I can think about children? Does one make a baby alone? When God sends me a husband, then together we will see the number of children we will be able to have. That's how it is.

Whereas the claim that reproductive intentions are grounded in specific marital relationships would be unremarkable, that is not what Annette says here. Rather, she explains that when God sends her a husband they will see together the number they will be *able to have* ("qu'on arrive à faire"). Even models of joint decision making or mutually constructed intentions are insufficient. Annette is not saying that she and her husband will decide how many children they want once she is married but rather that the number of children that the future decides for them will then become clear. Rather than predicting a future time when the prototypic intentional act will be possible, Annette is disavowing the very possibility of reproductive action in an intentional frame.

At one level, the quotes from Annette and the others sound like ordinary acknowledgments of the world of chance. The economic analyst for a venture capital firm, for example, would likely make similarly humble statements about the uncertainties of prediction. However, venture capitalists can manage probabilistic outcomes by diversifying risk, while individual women trying to plan individual lives cannot. Going 60% into childbearing and 40% into education is not a feasible option. Rather than profit maximization in the face of an unruly market, we should think here in terms of "contingency

plans" that can "smooth the roughest edges of risk" (Bledsoe 2002:24) and of action in the subjunctive mood.

Returning to Schutz, we could say that the inability to act with consequence in the context of *la crise* arises from the fact that no "future perfects" can be viably envisioned. In other words, the potential futures entailed in any here-now can never become "full-blown, actualized events" and are therefore not meaningful in the formal sense of motivating action. Schutz argues that action is ultimately possible because future acts are envisioned as "completed and lying in the past," but it is exactly this synoptic illusion of certainty that *la crise* has made impossible. At the limit, because of the crisis people can no longer decide what courses of action to follow, both because the social ends that they might hope to attain are being contested and revised and because they cannot know which means will result in the desired ends. It is here that Searle's notion of the intention in action proves useful, at least as a point of departure.

While my interlocutors are explicit about their withdrawal from prior intentions, from the formulation of Schutzian future perfects, they nonetheless engage in effective action in the moment, recognizing and seizing opportunities as they come. The challenge is not to formulate a plan and implement it regardless of what comes but to adapt to the moment, to be calm and supple, recognizing the difference between a promising and an unpromising offer. I call this alternative to rational choice "judicious opportunism" and suggest that it is widespread in social action, both in sub-Saharan Africa and in the rich West, whenever the social structures that enable and enforce rational choice are absent or weak. Maintaining options is the central aim of action under judicious opportunism, as made explicit by Martine, whose thoughts about child timing opened the paper. Martine explained why she would not use any form of hormonal contraception, although she and her boyfriend did not yet want children. Hormones can foreclose possibilities, she explained, whereas effective action relies on chances' always being kept open: "This is the inconvenience of those pills there. This is the reason that I am against them. Sometimes after using the pill it can make you have a lot of children that you didn't even want. It can also make you not have any children at all. So, I think that you must put that aside and play the odds." This mode of judicious opportunism and stance of openness is unique neither to life in the crisis nor to Cameroonians. Padgett and Ansell (1993) make the case that it was not strategic rational choice but rather this kind of following of promising leads whatever their source that enabled the Medici to dominate fifteenth-century Florence. On a smaller scale, the experiential uncertainty and judicious opportunism that it demands arise as one finishes one's dissertation and tries to imagine life beyond the defense. Will I find a job? Where will I be living? Will my relationship survive the move? Should I do a post-doc? Dissertation finishing is a moment when the potential futures are maximally open and the actor's potential to act intentionally to bring about some specific desired future is particularly limited. *La*

*crise*—as a social expectation as much as a period in economic history—has made such moments the statistical norm.

## Statistics and the Quantification of Uncertainty

Educated Cameroonian women talk about life transitions as largely random events: they are wholly unpredictable and therefore not subject to planning or intentional, effective action. The explanation that my interlocutors give for the impossibility of planning is that events in the world are random—they have no apparent order and cannot be relied upon to remain stable or constant enough to serve as the basis of planning. Social statistics (such as demography, quantitative sociology, and variational sociolinguistics) aims precisely to analyze and formalize such random events, abstracting structure from apparent disorder by examining relatively few attributes of a large number of cases. It quantifies uncertainty, measures it formally, and compares degrees of uncertainty across cases. As Hacking (1990) has argued, social statistics serve to "tame chance," identifying statistical regularities as a new kind of law. I will argue that experiential uncertainty and statistical uncertainty are more different than alike, particularly in their relationships to time and to contingency. For this reason, the inferences about uncertainty and intentionality derived from a close reading of ethnographic context and content cannot be directly integrated with those derived from statistical analysis of quantitative data.

As Bledsoe (2002) and Whyte (1997) show, contingency contributes significantly to the creation of experiential uncertainty. Bledsoe argues that among Gambian women, physical aging is nonlinear and unpredictable in advance precisely because it depends on—that is, is *contingent* on—so many things, particularly including their reproductive histories. From the perspective of the individual planning a life, the more things are contingent on other things, the more unpredictable they are. In demography and quantitative sociology, by contrast, what is contingent is precisely *not* uncertain; contingency is the linchpin of statistical association and regularity.

Three key tools in the quantification of uncertainty are measures of dispersion, the confidence interval, and tests of significance. In order to know the true value of some length, the researcher may measure it ten times and average the results. The results of these measures will vary somewhat, and this variation in values can be formalized with the standard deviation, a measure of the dispersion of values around the mean. In this simplest case, the standard deviation measures the uncertainty due to measurement error. In measures of some characteristic in a population, where each individual contributes one value, the standard deviation indicates the degree to which individuals differ from the average; a population that is very homogeneous in reference to some characteristic will have a low standard deviation



for measures of that characteristic. Uncertainty takes the form of variability; characteristics that show greater dispersion are more uncertain.

Now, I may want to know the range of values within which I can be 95% certain that a true length lies: the confidence interval. The confidence interval depends on the standard deviation and the sample size (number of tries) and assumes that the distribution from which the sample is drawn has a particular shape.<sup>10</sup> This assumption is quite good in the case of measuring length, a case comparable to the one for which the distribution was defined. As numerous demographers and quantitative sociologists have pointed out, however, it is a relatively poor assumption for some population statistics, for which there is no a priori reason to assume one distribution over another one. What confidence intervals return is not results that are 95% right but results that will be right 95% of the time, over the long run, under the stated assumptions about the shape of the distribution. Alternatively, I may want to know how improbable it is that an object's true length is 30 inches. Tests of significance, appropriate here, indicate the probability of obtaining a certain result given that the true value equals some specified quantity, as well as some assumptions. Like confidence intervals, tests of significance quantify the frequency with which some inference would be correct over the long run—that is, they quantify uncertainty in terms of how often we are likely to be wrong in a large number of tries.

Means, standard deviations, and confidence intervals have unambiguous interpretations in reference to measures such as lengths of objects, where variation is due only to error. But population averages—such as the average age at marriage or the average number of sexual partners before age 25—have an interesting ambiguity, made explicit in the first half of the nineteenth century in the work of Quetelet and his interlocutors (see Desrosieres 1998:73; Porter 1986:41–50). Quetelet argued that this variation, too, is a form of error, because the population average (the famous *l'homme moyen*) is the ideal toward which all strive (1997 [1835]),<sup>11</sup> whereas his critics viewed population means as mere descriptions of their respective populations, with no independent existence or moral force. The latter interpretation is almost universally held today. Nonetheless, Quetelet's general concept that individuals in a population could be thought of as independent "trials" (parallel to tosses of a coin or measures of a distance) and these independent trials used to estimate some parameter of interest plays

a central role in contemporary social statistics, especially in the use of regression analysis (see discussions in Ball 2002, Barnes 1998, Freedman 1999, Le Bras 2000, Poovey 1988).

Regression and correlation both estimate the degree to which variation in one parameter accounts for variation in another or the degree to which two variables are associated. Regression additionally provides an equation describing the shape of the relationship<sup>12</sup> and assesses the certainty with which that equation predicts values of the dependent variable. In both cases the analysis requires a large number of cases, either trials in the classic sense or individuals in a population, each representing one "trial."<sup>13</sup> Such methods can be used to estimate how much of a dog's weight can be predicted by its length, how much of a man's income can be predicted by his education, or how well a student's grade-point average can be predicted by her SAT (Scholastic Aptitude Test) score. The relationships described in these equations are a form of contingency in the most straightforward sense: one value is contingent on another, not determined by but nonetheless dependent on it. Indeed, the aim of regression is to establish such contingent relationships, reading backward from actual outcomes to the latent potentials that apparently existed before anyone knew how to recognize them. To claim that income, for example, is strongly contingent on education means to a social statistician that income is not uncertain: to the contrary, it can be predicted with relatively little error. Contingency thus plays opposite roles in individual experience and statistical analysis.

In regression, the quantification of uncertainty is more complicated than in the simpler case of a single population mean because it has several sources. Not only is each trial measured with some error but the relationship between the two variables may also be more or less strong. For most purposes, the relevant form of uncertainty is measured by the prediction errors (calculated as the standard error of estimate), the degree to which estimates of the dependent variable differ from observed values. Thus, statistical approaches quantify two distinct, although related, kinds of uncertainty: the uncertainty of measures, which arises from error and population variation, and the uncertainty of prediction, iconically represented by the standard error in regression analysis. Both the uncertainty of measures and the uncertainty of prediction result from variability. Indeed, unexplainable, unpredictable variation *is* statistical uncertainty. Given that Cameroonians experience such in-

10. Standard confidence intervals of the mean assume that the sample is drawn from a normal distribution. Historically, the normal and the binomial distributions were thought to be the same, as seen in De Moivre's (1718) Doctrine of Chances. The binomial curve is the limiting distribution of a histogram of outcomes of a fair coin toss or some other random, dichotomous event. The historical process through which the distribution of outcomes of a fair coin toss, the error pattern of measurements, and the distribution of characteristics that have "myriad little causes" came to be viewed as the same is described in Hacking (1990) and Stigler (1986).

11. There is an interesting echo of this position in Durkheim's (1962 [1938]:8) concept of the social fact.

12. This does not mean that regression can "find" a relationship of any form; the most commonly used regression technique, ordinary least squares regression, assumes that the relationship is linear, and the equation describes the intercept and slope.

13. Ordinary least squares regression was developed by La Place in a treatise on the orbits of Jupiter and Saturn (1787). The trials, observations of the planets, included variables such as the longitude of Saturn, its annual motion, and its eccentricity. It is easy to view these observations as a series of measurements comparable to measures of length. The extension of this concept to social statistics did not occur until the nineteenth century.

tense uncertainty, we would expect the demographic rates also to be highly variable, and indeed they are.

In 1998 I conducted a survey of 184 women in southern Cameroon that recorded, among other things, the dates of life events such as bridewealth and church marriages, pregnancies, school transfers, and periods of formal employment.<sup>14</sup> As retrospective reports about events in the past—sometimes far in the past—these data surely contain some measurement error: some women will report that they left school at 15 although in fact they were 16, as the result of a memory lapse or mistake. Measurement errors are random in direction, and because the events are important these errors should be small: few women will mistakenly say that they left school at 15 if they were in fact 20. However, such data may also be subject to systematic bias. As in narrative life histories, people may well “correct” past events to make them appear more nonnative or coherent (Rosenwald and Ochburg 1992:5; Hoerning and Alheit 1995; Ochs and Capps 1996). Post-hoc correction generally results in more customary or normalized accounts of the past, that is, reduces the apparent uncertainty. Yet, despite the retrospective correction that is almost certainly happening, these data show remarkable variability in the timing and sequence of life events.

Figure 1 shows a modified box plot of the ages at which women who were at least 30 years old at the time of interview underwent six life transitions: leaving school, civil marriage, bridewealth marriage, first birth, first formal employment, and first residence apart from consanguine kin.

Two things shown in the plot are of consequence to my analysis. First, the number of women who had made the indicated transitions varies widely, from just about 50% for bridewealth marriage to over 90% for leaving school.<sup>15</sup> Given that these are such socially salient transitions, it is interesting that none of them are universal and some are actually quite rare. Second, even among those women who had experienced the respective events, the transitions occurred at widely varying ages: the interquartile ranges are more than 8 years for all six events, and three are more than 15 years. This wide range of variation according to two measures is—from a statistical perspective—uncertainty.

Despite its usefulness in indicating age and time, figure 1 cannot show the sequence of events in the lives of individual women. Theoretically, the *ages* at which women undergo events and the proportion undergoing them could both be highly uncertain even though the *sequence* of events was clearly fixed. Figure 2 demonstrates that this is not the case. Each of the six events occurred first in the lives of some survey respondents and last in the lives of others. Although the events are not equiprobable in each sequential position, four of the

six have a distribution that is indistinguishable from chance. A more detailed analysis would look at each possible trajectory through the six events; however, there are 720 possible ways of undergoing six ordered events,<sup>16</sup> the analysis would require more than the 184 cases that I have. Nonetheless, even at this simpler level, the amount of variability is already staggering. There is no dominant sequence of transition events, and the range of ages over which the events occur is very broad. The timing of major life events in southern Cameroon is formally uncertain.

This might appear the end of the analysis: Cameroonians experience radical uncertainty in their lives, and—*mirabile dictu*—we find a huge amount of variation in the timing and occurrence of demographic events. This way of combining qualitative and quantitative research so that they both “tell the same story” is widespread. But there is an intellectual danger in agreeing too quickly. Sometimes, ethnographic and statistical analyses use the same terms to analyze quite different things. Uncertainty offers one example. Instead of treating quantitative and qualitative data as complementary, I propose instead to focus on the disjunctures and discontinuities between them, looking for the instances in which confronting ethnographic interpretation with statistical patterns produces a new analysis or at least new questions. In this way, we can throw Stevens’s “pale light” of each on the other. Here, the disjuncture between the phenomenological experience of uncertainty as reported in the narrative self-representations and the statistical measurement of uncertainty rests on the roles of time and contingency.

We can use regression analysis to learn about statistical contingency, that is, to learn what factors are associated—with what degree of certainty—in a retrospective sample with given outcomes, such as the number of children that different women have had. Looking at sequences of events that have already occurred, it is possible to establish patterned relationships between those events, identifying characteristics as indicators of future outcomes. Under one reading, this is a form of the dubious practice of “backshadowing” as critically analyzed by Morson (1994) and Bernstein (1994) in that it aims to find early traces of known later outcomes. But it is also possible to argue that, by using large numbers of cases to identify patterns rather than seeking out premonitions of individual outcomes, regression is doing something quite different. Regression may be more a form of comparative history than of backshadowing.

Because the use of regression to identify patterns generally requires samples larger than mine, I have employed the results of the 1998 Demographic and Health Survey, a nationally representative sample of 5,501 women interviewed about their reproductive histories, their health, and the health of their children by Macro

14. The sampling methods and interview protocol are available on request.

15. In order to be included in the sample, women had to have either permanently left or completed high school. Thus, the women who had not yet left school were attending university or technical training.

16. That is, six possible first events times five possible second events times four possible third events, etc. ( $6 \times 5 \times 4 \times 3 \times 2 = 720$ ). Since women may have completed anywhere from no events to all six, there are 1,997 possible trajectories.

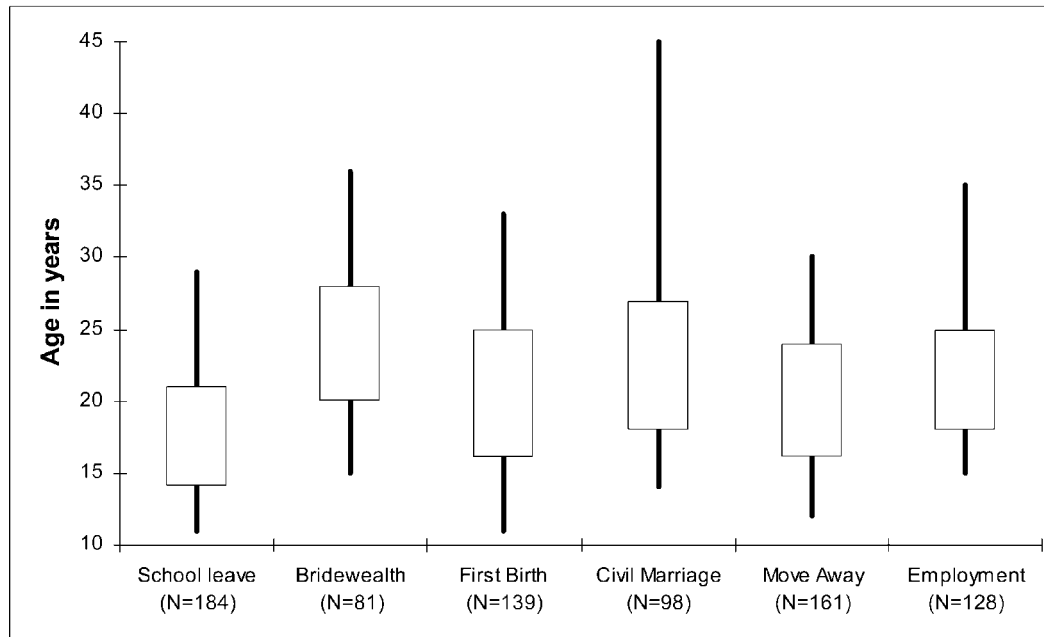


FIG. 1. Observed distribution of ages at specific life events. The boxes represent the interquartile range of ages at transition; the lower edge of the box is the age by which 25% of the women reported having completed the event and the upper edge the age by which 75% reported having done so. The “whiskers” above and below the box indicate the full range of ages within which any observed woman reported making the transition. Many of the women surveyed had completed only some of the transitions prior to the survey; the numbers of those who had completed each transition are indicated at the bottom of the figure.

International in conjunction with the Cameroonian national statistical bureau.<sup>17</sup> Table 1 shows the results of ordinary least squares regression estimating the parameters of an equation for the total number of children ever born as a linear combination of five variables: the mother’s age, whether she attended secondary school (dummy variable,  $\tau = \text{yes}$ ), the number of years since her first marriage, whether she lives in an urban area (dummy,  $\tau = \text{yes}$ ), and whether she has been married more than once (dummy,  $\tau = \text{yes}$ ),  $C = c + \Sigma \alpha_i x_i + \varepsilon$ . Linear equations of this form necessarily assume that every unit of increase in the predictor variable has the same effect on the outcome, and this equation includes no interactions between the variables.<sup>18</sup> Yet, despite these extreme simplifications, this equation is able to account for over half of the variation in numbers of children ever born (adjusted  $R$ -square of 0.60); the number of children that a woman has borne is highly contingent

on these five factors, and by knowing them we can do substantially better than chance in accounting for family size.

All of the variables are highly significant, which means that we can be confident that their effects are non-zero and in the indicated direction. The point of showing these results is not that they are in themselves surprising. The fact that older women have borne more children than younger women is almost definitionally true, and a vast corpus of research has discussed the inverse relation between education and fertility (but for Cameroon specifically see Johnson-Hanks 2003). Rather, what is important here is how easily, in retrospect, the social statistician can account for variation in the number of children that different women bear. Although in prospect women themselves are unable to say what they intend or plan, it is simple to identify which attributes are associated with which outcomes in large data sets after the fact. In a situation of extreme experiential uncertainty and substantial variation in outcomes, those outcomes nonetheless conform to patterns of contingency that are discernible in the aggregate.

This situation inverts formalizations of knowledge, intention, and uncertainty as commonly theorized since Hume. In most such models, the statistician is assumed to be at a disadvantage vis-à-vis the social actor, because

17. The data and sampling methods are available at <http://www.measuredhs.com>.

18. The more numerate reader will argue that this is not an optimal formalization, because ordinary least squares regression treats the dependent variable as if it were continuous whereas in fact the number of children is discrete. This is true: an ordered logit model would be more appropriate. I present the ordinary least squares regression results because they are qualitatively right and more intuitive for the reader unfamiliar with statistics.

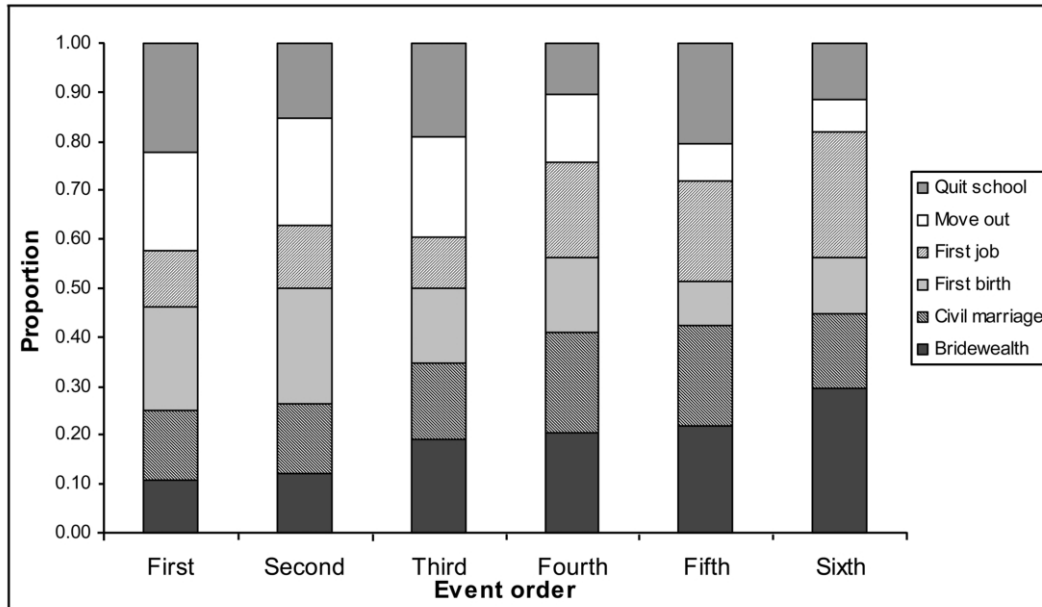


FIG. 2. Sequence of life-history events.

the actor knows his own motives whereas the statistician can only trade in probabilities. For example, imagine a statistician estimating the likelihood that a commuter will select train A over train B, based on long-run probabilities, at perhaps one in three. The estimate is fundamentally uncertain: either A or B could occur in any given case. For the commuter herself, however, no such uncertainty exists: she works in Berkeley rather than San Francisco and will therefore enter train B every time. Because the commuter knows the motivation of her action, which serves as its formal cause for Searle and its meaning for Schutz, her action is not uncertain. In this example, there will always be greater uncertainty in the estimates of the external observer than in the experience of the intentional agent. But in the case of reproductive practice in southern Cameroon we find the opposite: women cannot themselves predict what reproductive outcomes they will have in advance, although in retrospect the statistician can accurately account for the variation. To think through the implications of this inversion, we turn to Hume's discussion of probability and uncertain knowledge.

### The Probability of Cause and the Probability of Chance

Hume's primary work on probability is embedded in a treatise on the sources and forms of human knowledge. The work investigates how we make inferences about the world and when such inferences are valid. Probability and uncertainty are thus treated in conjunction with causation. Hume posits an observer who is invested in the

world, emotionally attached to it. Describing the mental states of the observer of a random die toss attempting to predict which surface will fall uppermost, Hume (2000 [1739]:89) writes:

We run all of them [the possible outcomes] over in our minds: the determination of the thought is common to all; but no more of its force falls to the share of any one than what is suitable in its proportion with the rest. 'Tis after this manner the original impulse, and consequently the vivacity of thought, arising from the causes, is divided and split in pieces by the intermingled chances.

It is easy to see how the social actor whose "vivacity of thought" is "divided and split in pieces by the intermingled chances" would find life a "bizarre and ambiguous" as did Marie-Claire, my interlocutor quoted above. Hume's depiction of the analyst confronted with true randomness corresponds with the descriptions of action given by women confronted by the phenomenal experience of uncertainty. When no outcome is more likely than any other, ambivalence is inevitable. In southern Cameroon, much of experience—from waiting for a bush taxi to waiting for a paycheck, from the bribes demanded by policemen to those expected by schoolmasters, from getting pregnant to getting malaria—appears random. People may maintain a posture of uncertainty because the world that they face is, indeed, one of intermingled chances.

However, according to Hume, not all variation in observable outcomes is evidence of chance. Apparently random outcomes may arise from the working of chance but also, he reasons, from "the secret operation of con-

TABLE 1  
*Results of Ordinary Least Squares Regression Predicting the Number of Children Ever Born*

	Coefficient	Standard Error	<i>t</i>	<i>P</i> > <i>t</i>	95% Confidence Interval	
Age	0.2201	0.0029	76.37	0.0000	0.2145	0.2258
Attended high school	-0.2577	0.0585	-4.40	0.0000	-0.3724	-0.1429
Years since first marriage	-0.01465	0.0062	-23.53	0.0000	-0.1587	-0.1343
Married more than once	-0.6729	0.0526	-12.79	0.0000	-0.7760	-0.5697
Lives in an urban area	-0.2802	0.0532	-5.27	0.0000	-0.3845	-0.1759
Constant	-0.1365	0.1267	-1.08	0.2820	-0.3849	0.1120

SOURCE: Cameroon Demographic and Health Survey, 1998.

NOTE: Number of observations = 5,501; *R*-squared = 0.6029.

trary causes" (2000 [1739]:90). As each commuter enters the train, the diversity of directions appears random until the observer learns of the hidden causes that lead one commuter into the train for Berkeley, another into the one for San Francisco. Similarly, if a leaf on a lake is pushed in one direction by the current and in the opposite direction by the wind, it may skitter back and forth, caught between the contrary causes. The identification of such contrary causes (now usually called partial causes) is a major aim of multiple regression and other classic methods in social statistics, where any possible causes are necessarily incomplete. Analyses of the contrary causes, whether statistical or "experimental" as Hume writes, necessarily look backward, identifying regularities in the past (p. 96):

When the mind forms a reasoning concerning any matter of fact, which is only probable, it casts its eye backward upon past experience, and transferring it to the future, is presented with so many contrary views of its object, of which those that are of the same kind uniting together, and running into one act of the mind, serve to fortify and enliven it.

These "objects" and "facts" are the conjunctions that play so important a role in Hume's theory of causation. This passage develops the idea that whereas absolute regularity of past experience leads the mind to infer a relation of cause and effect, a series of experiences with contrary outcomes leads the mind to be "determined to the superior only with that force, which remains after subtracting the inferior" (p. 95). Both stand in contrast to the vivacity of thought "split in pieces by the intermingled chances" in the case of pure chance, where no experience outweighs any other and the mind cannot settle on any outcome at all. Since Hume argues that causation cannot be directly observed but only inferred from repeated observation of associated events, the analysis of cause and probability is necessarily backward-looking, over a large number of past cases. Regression analysis can thus be thought of as the quantitative formalization of Hume's method of causal inference.

Let us return to consider the statements of my Cameroonian interlocutors—"Those are things of the future, we cannot know them," and "Everything that pres-

ents itself, one makes do"—in light of the formalizations of uncertainty from statistical analysis and Hume. Even if educated Cameroonian women understood perfectly the relative chances, they might still assert that they did not know how many children they would have or when. What, then, does this claim of ignorance mean? One possibility is that they are simply being analytically careful—even after considering the different elements of contingency, a substantial uncertainty remains. Even if a woman finds herself in a situation in which 90% of similar women have borne children, she may still "not know" because the vivacity of her thought is split in pieces by the remaining 10%. This, I think, is the least likely reason that women express uncertainty. A more probable explanation is that they perceive the entire system of social relations—including the relative likelihood of this or that's happening to women of such-and-such characteristics—as subject to sudden and extreme change. Said differently, they are unsure whether past experience offers a good guide for future outcomes because so much about the future appears to be in flux. A still more likely explanation is that women are well aware of the contingency of certain outcomes (like child-bearing) on other events (like marriage), but the fact that marriage is no easier to predict means that this contingency increases uncertainty rather than reducing it. If none of the relevant parameters can be foreseen, then the power of contingency established retrospectively is of no use. Looking prospectively at an individual life course, contingency is uncertainty (Bledsoe 2002).

In the contrast between the die toss and the subway train, the intentional state of the commuter—that of intending to go to work—serves as a hidden cause. Standing on the platform, the commuter envisions the planned act of arriving at work in the future perfect tense. Experientially, there is no uncertainty about the course of action to follow. The train to Berkeley arrives, and she boards it. From the perspective of the analyst, the event of train-entering is either uncertain or not, depending on whether he has identified the relevant relationship of contingency. In this example, intentional action serves as the prototype of Hume's probability of cause: the causes may be hidden to observer or partially contradictory, but they are causes nonetheless, and with sufficient

information their causal force can be identified. But how are we to theorize social action that lacks the explicit prior intention of commuting to work? It is one kind of problem to identify the underlying systematicity in action that is strategically constructed but quite another to explain action that takes place when the actors do not know what the range of possibilities will be or even what, exactly, they will try for. When all that is left is the intention in action, prediction becomes very difficult indeed.

### The Routinized State of Uncertainty

I conclude where I began, with the question of why educated Cameroonian women so often answer questions about desired child numbers with statements about intended child timing. The first answer is simple enough—the final number of children is highly contingent on a large number of factors, outside of their control, whereas the timing of the first child is contingent on fewer things. While statistically and in retrospect relationships of contingency reduce uncertainty, in individual cases and in prospect they increase it. Thus, women answer questions about child numbers with statements about child timing because it is something that they are more likely to be able to know and represents a future that can viably be envisioned. Yet, it is not only because the timing of the first birth is more immediate that women are more willing to predict it. Or, rather, their statements about birth timing are not really predictions of future outcomes as much as assertions about the selves that will inhabit that future. They are signposts toward a very different way of thinking about the objects of intentionality and the relationship between intention and action.

Both answers turn on the problem of uncertainty and the challenge that lived uncertainty poses for classical models of action. In the first case, the intentional model fails because no future perfects can be clearly imagined or because they can only be imagined provisionally, pending whatever dramatic upheaval will inevitably come. Perhaps the clearest example of these upheavals is the story of the woman who wanted to be a nun, recounted to me by one of my research assistants:

From preschool on, she stayed with the nuns. She attended all of primary school there, and middle school. She was a peculiar sort of person. Because at [the school], from the time you enter you are already a nun, because there is the novitiate. When she was in tenth grade, she met a young guy during one of her visits to her parents on the weekend. . . . She says that she doesn't know what seized her. The first time she saw that guy was the first time she had sex. She says that she doesn't know [why] and she regrets it. She slept with the guy and fell pregnant. She left school right around April when she could tell that it was getting serious. She took off her nun's habit and ran away. She nailed the habit on the front gate to the school. She nailed her habit

to the front gate and turned her back. She said, "Me, I wanted to be a nun, but life wanted otherwise."

Aside from the aesthetic appeal of a pregnant woman running off in the night, her habit nailed to the front gate of the novitiate, flapping in the wind, this story emphasizes the radical and unpredictable turns that Cameroonians simply expect life to bring them. Even people with clearly defined aspirations anticipate that—as likely as not—something will happen that throws everything into disarray.

The second reason that educated Cameroonian women usually talk about the social timing of births instead of about their number is that numbers simply do not matter very much. Or, more accurately, in reference to reproduction, numeric goals are extremely vague, whereas the social goal of honorable motherhood—being a woman who bears all her children within monogamous marriage—is less so. This dilemma of vague or underspecified goals poses a critical problem for a theory of action grounded in the fulfillment of prior intentions. When the intentional object of the action is vague or underspecified, it can be fulfilled in a variety of ways. In such cases, what is at stake is not the selection of alternative means to achieve a single, desired end but rather a process of establishing exactly which of a range of viable ends will be actualized on the basis of the means that present themselves. In Searle's terms, there are only intentions in action; what may appear in retrospect as prior, motivating intentions are formulated only through the process of finding out what is possible.

Models of intentional action and particularly rational-choice theory assume that the actor chooses between alternative means to achieve some desired ends. At the limit, these models assume that actors are maximizing something—whether utility or prestige or material gain. But many aspirations, including, I contend, the majority of family-formation goals in southern Cameroon, are conceptually large and multifaceted and can be fulfilled in different ways. At the same time, the possible pathways to achieving any such thing—any part or version of this underspecified aspiration—are few and hard to find. The activity, therefore, is not to develop a good plan and follow it but rather to respond effectively to the contingent, sudden, and surprising offers that life can make. On the basis of these offers, the aspirations, once vague, will be concretized. Instead of rationalizing means to chosen ends, therefore, actors take advantage of whatever means are available and thus settle on a specific end out of the many that would have been acceptable. Social actors engaging in judicious opportunism select the ends to suit the available means rather than the reverse.

In their analysis of the rise of the Medici, Padgett and Ansell have argued for a similar approach to social action, writing that "ambiguity and heterogeneity, not planning and self-interest, are the raw materials of which powerful states and persons are constructed" (1993: 1259). The schoolgirls and young, educated women whose reproductive lives concern me here may be neither as wealthy nor as powerful as the Medici, but their

successes are no less real and their modes of robust action no different. Under extreme uncertainty, when all the rules are changing, what works is not the best strategy but the most flexible one—the one that takes every present in the subjective, that keeps every alternative open as long as possible, and that permits the actor to act rapidly and flexibly to take advantage of whatever opportunities arise.

In previous work, I have analyzed specific conjunctures in the life courses of young women when multiple alternative futures are available or under reconsideration (Johnson-Hanks 2002). These vital conjunctures, like the armed standoffs analyzed by Wagner-Pacifici (2000), are particularly clear examples of action under uncertainty because they are extreme cases, *not* quotidian, habitual practice. In these extreme cases—where multiple potential futures are in play, where the consequences of action are at grave but largely unknowable and unfold in multiple time-frames—the inadequacies of a model of intentional action become especially apparent.<sup>19</sup> But what is striking about *la crise*, and perhaps more generally about African modernity, is the degree to which everyday experience takes on the ambiguity, intensity, and uncertainty of vital conjunctures and standoffs. In the routinized state of crisis of contemporary Cameroon, every action has the potential to explode into a full-blown standoff; even quotidian events hold the possibility of generating vital conjunctures.

I have argued that neither classic models of intentional action nor formal probability can capture the judicious opportunism employed by young Cameroonian women in managing their reproductive—and, more broadly, social—lives. Intentional models fail because they insist on clear goals and ignore uncertainty. Probabilistic models fail because in the management of individual lives the denominator is always one, and the long-run chances matter little. When the future decides which paths will be possible, it is not fatalistic to say that one does not know which path one will follow. Educated Cameroonian women who refrain from saying how many children they hope to have are neither indifferent nor superstitious. Having recognized that life is “bizarre and ambiguous,” they are articulating the rules of a different game, in which the pathways themselves partially determine the goal in view. After Adele passed the baccalaureate exam on which she had previously said so much depended, I asked her again what she planned to do. With characteristic poetry, she responded: “There where the doors will be opened for me, I will set off for that place.”

19. Despite important similarities, vital conjunctures and standoffs also differ in several significant ways. Standoffs are partially defined by their limited set of potential outcomes—deals, surrenders, and violence (Wagner-Pacifici 2000:214 and passim); standoffs necessarily have two adversaries and the action is necessarily dialogic (p. 7); in a standoff, the desired or intended outcomes (at least from the perspective of law enforcement) are relatively specific and short-term.

## Comments

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“When the Future Decides” provides a satisfactory description of the uncertainty of life in sub-Saharan Africa. What is less satisfactory is that it manages to imply that attitudes to the future are different among young Cameroonian women than they would be among young Western women placed in the same situation.

Many aspects of life are very uncertain in sub-Saharan Africa. This uncertainty arises from poverty and the rapid transition from traditional lifestyles as first colonialism and then independence in a globalizing world impinged on Africans. Dictatorships can suddenly cause past legal promises or apparently firmly held jobs to disappear. Inflation can completely destroy savings; some currencies in recent decades have been devalued to less than one-thousandth their previous values. Whole populations have been ordered from their villages by planners or made part of refugee streams by armies. AIDS has come from nowhere to decimate many ethnic groups. This is why, in putting forward wealth-flows theory, I argued that almost the only safe path in planning for the future was to invest in children.

Western populations often engage in short-term planning and seeing what opportunities are open to them, but they necessarily do so in different contexts from those found in Cameroon. Many adopted just such short-term strategies in the early years of the Great Depression of the 1930s and again during World War II. As marriage and fertility rates have plummeted in much of the contemporary West, many young people have decided on cohabitation, formal marriage, or the having or forgoing of having children over relatively short periods and as the occasion arose. Only a minority have, like Johnson-Hanks, been certain of marrying and bearing two children.

Marriage and reproduction have become increasingly unpredictable in much of sub-Saharan Africa. Arranged marriage has largely broken down; bridewealth may be paid fully, in part, late, or not at all; partnerships are increasingly unstable; contraceptives may or may not be available continuously and may be usable only with the partner’s agreement; children coming before or without marriage may well be looked after by the mother or maternal grandmother even in a patrilineal society. Most young women finding themselves in the situation of young Cameroonian women would react as the Cameroonians did—by saying that they could not predict the future and would open doors as they became available. A closer parallel with the Western situation would be asking Western respondents what they would do if they

were diagnosed as having cancer or found themselves without employment.

Certainly, the fertility surveys have adopted artificial devices such as the concepts of "ideal" or "desired" family size. The question is probably no more nonsensical in Cameroon than it would be to ask a Western woman if she planned to marry and if she planned to continue in a married state without divorce. In Cameroon the "up-to-God" responses often mean exactly what they say. In the West such questions conspicuously failed to predict either the recovery of fertility after the economic depression of the 1930s or the "baby bust" after the late 1960s. Neither our sense of probability nor the teachings of David Hume stopped us from changing our minds about family size. The fertility survey questions may not predict the future in either the First or Third Worlds, but in both they are often surprisingly close to actual fertility.

Is marriage less predictable in Cameroon than in the West? Probably not. Is fertility less predictable than in the West? Probably. Do Cameroonian women react sensibly (rationally?) to the reproductive situation in which they find themselves? Almost certainly. Is life less certain than in the West? Usually. Are the different attitudes and responses to reproductive questions in Africa and the West better explained by different cultural heritages or different circumstances? Undoubtedly the latter.

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This article problematizes models of intentional action and probability on the ground that they ignore the possibility or (in this ethnographic case, it seems) the certainty of uncertainty. It devotes theoretical attention to the notion of uncertainty in and through rich and engaging ethnographic material and by drawing attention to the idea that intentionality and "resultant" action are enduring even in postmodernity, in which flux and change abound. In this regard, it achieves a broader and unarticulated aim in that it shows that anthropology must continue to reflect the conditions of the people and circumstances it studies. As the conditions of being human change, so too must anthropology's range of theoretical, methodological, and analytic techniques for exploring those conditions. This article ought to prompt us to continue to examine how our discipline responds to the people and conditions we explore, for it is a fine example of grounded theory, in which important aspects of an ethnographic study emerge to generate the theoretical parameters used to explore social life in a particular context.

The article also contributes to the insights that anthropological and phenomenological frames can lend one another. The shortcomings of intentionality in phenomenology are validly critiqued here, but I wonder if more recent contributions from those who have merged phe-

nomenology with anthropology might be fruitfully drawn upon to explore the lives of these Cameroonian women. I would be interested to see how Michael Jackson's (1998) concept of intersubjective ambiguity, for example, might be used to explore what Johnson-Hanks describes as "unfoldings" and "assents" as opposed to the more certain and intentional "choices" and "directionalities." The notion of intersubjective ambiguity may be useful because it suggests that uncertainty is characteristic of human conception and perception. As Jackson argues in *Minima Ethnographica*, phenomenologists oppose measuring experience itself against a standard (or goal) and insist that what matters, really, is the experience and its social outcomes. It is perhaps here that a balance between being mastered by the world and mastering it is struck—as Jackson insists, action (whether religious, artistic, ritual, or otherwise) and its outcomes are made sense of, in models and language, to subordinate the world to "the hegemony of reason."

This notion of "mastery" is of course drawn from Bruner (1976, 1990), who used it in such a way as to indicate the potential for reauthorship, reconstruction, and reversal in situations in which transformation of entrapped or restricted experience is desirable. I was led to wonder as I read whether the statements of Cameroonian women indicating their awareness of uncertainty and their strategies for dealing with it with "wisdom" and "waiting" were not examples of a variety of mastery. No fools they, to submit to the bizarreness and ambiguity of life by attempting to change these conditions; rather, they will wait until the future reveals itself to embark upon a course of "being able to do" something. It strikes me that this may be a form of submitting the world to reason and reclaiming a mastery of sorts over it, in Bruner's sense. This line of thought seems to retain the author's claim that intentional-action models do not fit the ethnographic circumstances and that intentions and plans may not neatly and elegantly lead to a course of resultant action and goal attainment but still lends a sense of agency and strategy to living over and above the "individual tactics" of making do.

On this note, I would recommend in the strongest of terms that the author draw back from the practice of characterizing phenomenology and intentionality in the terms used by a few phenomenologists. It would be wise to avoid using Schutz to stand metonymically for "the phenomenologists," since he clearly does not. I also think that there is some confusion around "intentionality," since the term as it is used in phenomenology is not reducible to planning, strategizing and acting and is certainly not to be confused with the common use of the word "intention," where this word refers to the purpose one might have in acting. The phenomenological use of the term pertains to theories of knowledge, as opposed to theories of human action (see Sokolowski 2000).

This article reminds us that the world is indeed confusing and less than straightforward, that we are often engaged in attempting to submit it to the strength and solidity of "truth" and "reason" to render it less ambigu-



uous in both theoretical and lived terms, and that we must continue to submit our theoretical propositions, no matter how long-held or comforting they may be, to the most rigorous anthropological critique and inquiry. This is because, as Jackson has reminded us, culture itself is the outcome of the freedom to toy with the possibilities and the limits of being human in any given context.

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Rational-action theory has always been frustratingly limited for anthropologists, and Johnson-Hanks adds a new set of logical and ethnographic reasons. Actors in present-day Cameroon see the world as “highly random,” thus suspending any possible presumption of orderly means-end causal chains. How, then, does one “capture the judicious opportunism” through which people produce the behavior—such as reproductive life—that has otherwise been formally modeled or quantitatively summarized on the assumption of predictability? Identification of patterns, with inferential statements about plausible causation, is—she implies—a weak and even misleading endeavor. Ethnography aims to grasp the experiential level, and if people’s experience convinces them of indeterminacy then social science should not impose orders of its own (Durkheim’s classic study of suicide might need addressing here).

There is a great deal here that is worthy of deeper exploration. I sympathize with the author’s impulse to break down the sequences and the human logics into smaller units and subject each concept, statement, and finding to searching critique. In this spirit I would like to push the argument one small step farther in two ways: first, to abandon the “rational-actor” model altogether and incorporate both tight means-ends thinking and judicious optimistic improvisation into a single category of “reasoning” about complex trajectories over time and, second, to suggest that moving even farther away from conventionalization of the variables at play may bring new aspects of “ordering” out of apparent randomness.

First, for social spaces outside or on the margins of state and Western formal disciplines, we can be ill-served by conflating the ways in which individuals really think under a variety of conditions and the models of that thinking that are developed in order to build the institutions to contain it (in all senses of the word “contain”). Weber himself was clear that instituted rationality could be an iron cage, a construct that sanctioned all other forms of human reasoning as its opposite, “irrationality.” Institutions are aimed at channeling behavior, not reflecting it. Therefore, in trying to “capture” the forms of reasoning in arenas where—for example—singular actions are *not* marked off from trajectories and entailments, calculable sanctions do *not* swing into play automatically to redirect

courses of action, and outcomes are *not* held up authoritatively to the general view, one needs a theory of reasoning that can encompass other and perhaps original forms of those processes. Reclaiming reasoning—with institutionalized rationality as a small component—seems to me a worthy implicit aim of the paper.

If one does that, do new domains for enquiry emerge? One of the baleful effects of rational-choice social science is its conventionalization of concepts and variables. One challenge that emerges from this paper is more rigorous and imaginative attention to pathways. In this regard, the author could go a step farther in an ethnography of judicious opportunism to focus on the recurrent idea, expressed by her Cameroonian subjects, of definitive moments or turnings that initiate a process: the door opening. How are those presented, recognized, and seized under “routinized uncertainty”? The present account gives examples of indeterminate pathways that are primarily retrospective. But is there also a certain preparation for prospect? Are there specific forms of sociality that optimize the occurrence of promising novelties or spiritual or intellectual qualities cultivated to recognize promise and danger? And are there new institutions that rise up to colonize life-segments and even entire sequences? The paper itself opens these doors by cutting through some of the iron cage of thinking about rationality while remaining oriented to people’s capacity for reasoning.

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Johnson-Hanks’s nuanced examination of Cameroonian women’s conceptualization of uncertainty in light of Western philosophy and statistical reasoning is elegant, forceful, and convincing. Her attention to Cameroonian women’s focus on “getting by” enriches the current anthropological debate about actors’ conceptualizations of agency and its limits (see, e.g., Herzfeld 1990; Keane 1997; Mahmood 2001; Miyazaki 2000, 2004). The implications of her argument for the idea of family planning and for population studies more generally are significant. She demonstrates how ethnographers can contribute to policy-relevant technical knowledge.

Johnson-Hanks argues that Cameroonian women explicitly reject planning as a viable method of approaching reproduction and the world more generally because they perceive the world as having become extremely unpredictable. They believe that they “no longer” can make plans and choices for the future. Instead, they try to seize on whatever opportunities become available to them and “get by.” Johnson-Hanks calls this modality of engagement with the world “judicious opportunism” and argues that it challenges some of the most influential theories of action in Western philosophy and social theory. She contrasts these women’s experience of uncertainty with the notion of uncertainty underlying statistical reasoning.

Underlying this observation is Johnson-Hanks’s con-

cern with what I have termed the temporal orientations of different kinds of analysis (see Miyazaki 2003, 2004). To rephrase her observations in my own terms, both Schutz's and Searle's reflections on the temporal sequence of intention and action, on the one hand, and statisticians' retrospectively discovered uncertainty, on the other, fail to recover the real-time immediacy of Cameroonian women's sense of uncertainty. I wonder, however, if Johnson-Hanks has fully explored the implications of this insight for the temporality of her own analysis. Her critique of philosophy and statistics invites further questions about her own discipline and its method. In particular, I wonder if she is willing to consider how one can recapture the immediacy of actors' sense of temporality in an inevitably retrospective ethnographic description. For example, one opportunity that she could exploit more fully concerns Cameroonian women's sense of radical change. According to Johnson-Hanks, these women interpret the current heightened state of uncertainty surrounding their lives as a consequence of Cameroon's political and economic crisis. But what is interesting is that their explicit rejection of planning as a modality of engagement with the world is framed as a response to a new situation. Johnson-Hanks is absolutely right in not taking for granted these women's invocation of newness; she sees in their characterization of the nature of the world both continuity with and discontinuity from the well-documented Beti conception of personhood and time. However, I wonder if there is something more to Cameroonian women's insistence that the world has changed. In emphasizing that they can *no longer* make plans and choices for the future, perhaps these women are drawing attention to the facticity of radical change itself as much as the realness of the uncertainty of the world. From this point of view, by treating the discourse of crisis as a framing device for the subject of uncertainty Johnson-Hanks may inadvertently have erased the reality of these women's apprehension of change and newness. In light of the current pervasive interest in open-ended, provisional, and emergent forms of analysis in anthropology and other social sciences (see, e.g., Ong and Collier 2005), it would be interesting to consider what an analysis would look like if one emulated Cameroonian women's concern with "getting by."

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I greatly welcome Johnson-Hanks's criticism of the usefulness of Western modes of analysis for explaining women's reproductive futures in Cameroon. During several periods of fieldwork in eastern Cameroon I also discussed marriage and motherhood, and I recognize the narrative dimension of women's attitudes towards long-term planning that she mentions. I fully share her concern about the disjunctures and discontinuities between qualitative and quantitative data; statistics often fail to

capture women's opinions and worries about life. Whereas statistics want to talk "numbers," women want to tell "stories" in which numbers are flexible and negotiable. Though the statistical truth may give the impression of "telling the same story," women's life courses are much more dynamic and open to creativity than any statistics may discern. I agree with Johnson-Hanks that women's uncertainty about possible futures does not make them powerless, passive, or incapable of defining their futures. They do have agency, and they constantly make choices in a rational strategic way; it is simply not *our* way.

Johnson-Hanks's objective of explaining women's uncertainty, however, seems to lack a kinship argument that may contribute to an understanding of that uncertainty. Johnson-Hanks generally connects women's unpredictable futures to the uncertain world of Cameroon at the end of the 1990s and argues that people invoke the economic crisis as an explanation and excuse for the ambiguity and insecurity that they experience. As she admits, "there is no evidence that life prior to *la crise* was objectively more certain"; this idiom for describing uncertainty only partially explains the problem she discusses. Supplementary to her analysis of the inadequacies of a model of intentional action, I would like to focus not only on the crisis but also on the importance of kinship in women's lives. Whereas a (Eurocentric) rational-choice model assumes persons to be autonomous individuals who aim at goals defined by self-interest, in Cameroon women's experiences and choices are rooted in a society that is saturated with kin relationships. To understand women's uncertainty we must think of women as "the site of a plurality of relationships" (Piot 1999:7).

Throughout my research women stated again and again that from their first menstruation onwards, relatives never stopped emphasizing that the children they would bear in the future would be not for themselves but for the whole family. Since the number of children women will have depends on the agency and choices of relatives, women hesitate to answer questions such as "How many children do you plan to have?" A woman can hardly be sure about the number of children she will have to care for because relatives may claim her (biological) children as foster children at unpredictable moments throughout her life (Notermans 2004). When children are born in marriage, they may be claimed by their mother's husband and his sisters or brothers; when they are born out of wedlock, they may be claimed by their maternal grandmother or their mother's brothers and sisters "born from the same womb." Though women can counterbalance this loss of biological children by claiming foster children from their brothers or sisters, the outcome cannot be predicted, as life circumstances change over time. A married woman will judge the desired number of children differently from an unmarried one. Moreover, a woman with a good marriage will judge child numbers differently from one facing divorce.

Beyond the interdependent agency of women and their relatives, conjugal flexibility also has to be considered

in explaining women's "failure" to plan their futures. Women's life courses are often characterized by a high frequency of divorce and a sequence of formal and informal marriages. Selecting and entering into different relationships simultaneously and successively in different stages of life, women attempt to pursue their best opportunities. Moving between the households of formal husbands, informal husbands, mothers, and brothers, women live like nomads in a wide network of kin relationships. This posture of openness of possibility engenders different attitudes to child numbers at different moments of life.

Comparing ethnographic studies on women's reproductive lives in Cameroon can help us understand women's lives and interpret their different and often surprising attitudes towards life. I would like to continue the dialogue with Johnson-Hanks, but we'll see "what the future decides."

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Johnson-Hanks is to be congratulated for this elegant combination of ideas emerging from philosophy, ethnography, and statistics to investigate a subject that has been the backbone of much demographic research in recent years and the foundation for much policy and action but has caused unease amongst many demographers, particularly those who combine qualitative with quantitative approaches. For those of us unfamiliar with philosophical thought this paper clarifies where our unease may lie. Although the many demographic surveys on fertility intentions and ideal family size come up with plausible numerical outcomes, such numbers may not adequately reflect the responses obtained with other research methodologies in which uncertainty, non-numerical responses, and evasion are much more frequent. Johnson-Hanks's plausible discussions of the reasons Cameroonian women respond in such ways will ring true to many others who work in this field and should make demographers challenge many international demographic and health survey findings. However, I would have liked to see this aspect taken farther. Her comment that most of her sample (of well-educated Cameroonian women) provided "non-numeric" responses to her questions on reproductive intentions raises the question why most surveys produce so few such responses, especially for such categories of women. How do the enumerators move from the initial non-numerical responses to the recorded numerical ones? Were such movements evident in the interviews with these respondents?

Johnson-Hanks honestly articulates some her own preconceptions before undertaking the research and the consequences of these preconceptions in generating "some extremely inelegant interviews." Her subsequent understanding and reformulation of women's responses is very convincing but still depends substantially on accepting

the articulated responses from such interviews (whether inelegant or elegant) as representing women's experiences and their judicious opportunism. While not denying the plausibility of her interpretation, it would be useful to have more discussion of the forces influencing "how they elect to present their thoughts in an interview" and thus the conclusions that can be drawn. To a degree this is confronted through contrasting the Cameroonian practice of referring to future trajectories using potential titles with Castle's work in Mali, which suggested that invoking future events may incur witchcraft or sorcery penalties. The stakes are very different, however: referring to others' futures through titles poses low risks to the individual respondent compared with those invoked by intimating plans for one's own (and one's children's) future. Difficulties in accepting statements about future reproductive plans at face value are compounded elsewhere in Muslim Africa (Senegal and Mali, for example) by strong social sanctions against challenging divine will with respect to giving children. Fear of crossing such boundaries can inhibit people from expressing any ideas which suggest such forward planning: in interview contexts it can be extremely difficult to interpret silence—to differentiate ideas which have never been thought from those which should not be expressed. There is certainly evidence elsewhere in the paper that similar associations between divine will and childbearing operate in Cameroon, and therefore it is essential to consider the evasive answers to fertility-planning questions not just in terms of uncertainty but also in terms of the respondent-interviewer relationship and the acceptability of publicly stating private intentions.

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This paper advances the notion of "judicious opportunism" to explain social action under conditions of uncertainty in contemporary Africa. It is significant in providing a means of theorizing social action in African settings in ways that avoid what Mudimbe (1988) identifies as the ideological construction of Africa and Africans as prone to decisions based on emotion or reaction rather than on rationality, objectivity, or long-term planning.

Taking the mismatch between a standardized demographic survey question and Cameroonian women's responses as a point of departure, Johnson-Hanks mounts an effective challenge to a dominant model in reproductive-policy circles and exposes the futility of international aid agencies' quest to elicit "the reproductive intentions of women in poor countries." She makes a compelling case that the limited and limiting question of how many children a woman plans to have falls short of apprehending the complex social, political, and economic realities that inform reproductive outcomes.

The paper is ambitious in its attempt to chart questions of aspirations and attitudes as ethnographic terrain. I recall being told in graduate school that “anthropologists don’t do attitudes”—that ethnographers were better positioned to observe what people do than to speculate about their futures. And, indeed, there is truth in this. Yet, in the field, ethnographers encounter the full temporal range of informants’ pasts, presents, and hopes for the future. Particularly for those in applied or policy settings, attention to plans for the future is vital. By coupling ethnographic and demographic data with social theory pertaining to intention, action, and outcome, Johnson-Hanks carves out stimulating analytical space for wide-ranging comparative inquiry that provides a model for understanding present action as it relates to future intentions.

That said, it is worthwhile to question the choice of reproductive action as “a particularly appropriate locus” for the study of intentionality and its limits. When I did a mental survey of how the Western, educated women in their thirties of my own social network who have experienced the gamut of challenges to reproductive aspirations (e.g., miscarriages, stillbirths, lack of a partner and a ticking biological clock) would respond to a question about intended family size, I concluded that Johnson-Hanks’s notion of allowing the future to decide is, perhaps, not unique to the contemporary Cameroon. At least of equal weight, it seems, is what appears in the article as a subsidiary supporting example about similar dynamics of uncertainty regarding post-secondary-school aspirations.

While the author states that gendered action is not an explicit aim of this paper, it seems to be the elephant in the room when she is discussing parallel (but in her cases not intersecting) examples of fertility and education in Africa. This seems particularly important in the case of such a select sample (where one in six persons finishes school). Johnson-Hanks points out that educational achievement is predicated on two variables, mobilizing financial resources and learning under challenging circumstances. She fails to note the importance of managing fertility in the pursuit of educational achievement in African settings. The reader is left to wonder how and when gender becomes explanatory in such an exploration of social action.

Ultimately, the argument seems to hinge on the notion that it is the unpredictability of the structural conditions in which these young women live that informs their response to questions about their futures, including family size. Johnson-Hanks makes an intriguing point about the relative degree of uncertainty in the lives of young Cameroonian women, in which “common things elude standardization.” While she is at pains to avoid a dichotomy between here and there, I pondered what impact interviews with Beti women living in the West would have on the analysis. Would we expect the higher degree of certainty about quotidian life to translate into more decisive plans for the future? Or is there a cultural element to articulating a future trajectory that Johnson-Hanks’s argument does not consider? For instance, at

several points “God” and “the Holy Spirit” emerge as pivotal entities in these women’s views of their unfolding futures. We do not have enough ethnographic contextualization to evaluate the significance of these references, but they do raise questions about the extent to which these women’s perception of the future can be explained strictly in terms of the environment in which they currently live.

This is a very stimulating article that showcases a model for anthropological inquiry to make specific contributions when directed survey questions dead-end. The model for theorizing social action that it advances will prove valuable in myriad settings.

## Reply

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I am grateful to the commentators for their generous and astute responses, criticisms, and suggestions for further work. In particular, I appreciate the proposals—present in nearly all the comments—for specific extensions of my theoretical framework to other cases.

Both Caldwell and Shandy ask whether judicious opportunism does not also describe social action in the rich West, that is, to what degree the analysis here is specific to Cameroon in crisis. The fact that they come to opposite conclusions is evidence that the question is both fundamental and very difficult. My position, argued here and elsewhere (2002, 2004, n.d.), is that action under the principle of judicious opportunism occurs everywhere and among people of all kinds of backgrounds—in other words, that the model of rational, strategic, intentional action is inadequate even for explaining action here. At the same time, judicious opportunism is more common in southern Cameroon than in the West for three related reasons. First, the West has more numerous and more effective institutions that serve to reduce uncertainty: the money supply is stable, public transit mostly works, mortality and morbidity are low and concentrated at the end of life, the courts enforce legal contracts, and so on. Judicious opportunism is thus simply less necessary. Second, people in the West are habituated to this relatively certain state of affairs: through recurrent experience we have been inculcated with the expectation that our actions will be efficacious and with the disposition to act with intention. Although in specific contexts people in the West certainly do engage in judicious opportunism, waiting to see what possibilities will develop and then quickly grasping the ones that seem promising, we have learned to be inclined to act otherwise. Third, explicit intentions and intentional action are represented and culturally elaborated differently in southern Cameroon than in the West. As both Randall and Shandy perceptively suggest, in some contexts Beti would consider firm intentions at least morally ambivalent, if not outright

hubris. Action under the principle of judicious opportunism is therefore neither a universal, rational response to uncertainty nor a cultural peculiarity but a social practice both grounded in material conditions and variably culturally elaborated.

Caldwell points out that survey questions on fertility, bad as they may be, nonetheless tend to predict fertility reasonably well. At the aggregate level, he is correct. Some dozen papers have now assessed the degree to which reproductive intentions predict subsequent behaviors (e.g., Dasilva 1992; Miller and Pasta 1995; Morgan 1982; Nair and Chow 1980; Schoen et al. 1999, 2000; Tan and Tey 1995; Vlassoff 1990; Westoff and Ryder 1977). The results of these studies have been mixed, but the one consistent finding is that the population averages correspond far better than the individual-level data. Dasilva (1992) found that nearly 30% of women in a Sri Lankan survey had outcomes discrepant with their stated intentions just three years later. In Taiwan, Nair and Chow (1980) found that over 30% of the couples wanting no more children did indeed bear a child in the three-year interval between the first and second surveys. Vlassoff (1990) found no relationship between Indian women's reported desired family size and their fertility ten years later. Although the average intention in a population corresponds well to the average reproductive outcome, for ethnography and especially for a social theory of reasoning population averages are inadequate. Individuals matter.

Dennis correctly points out that Schutz does not represent the views of contemporary, more ethnographically inclined phenomenologists any more than Searle represents all philosophers of mind. I use their work nonetheless because it is masterful, compelling, and widely cited. Her references provide thought-provoking alternatives that I welcome.

Guyer and Miyazaki both call for pushing the analysis farther, if in different directions. I am fully in accord with Guyer that the long-run aim must be to break free of rational-choice models altogether and that a rich ethnography of reasoning would be a promising way to do so. If in this paper I am still battling with rational choice, it is because I am convinced that the only way to supplant such powerful analytic paradigms is by showing where they fail. Guyer's second proposal, that we more closely examine the "preparation for prospection" and the "forms of sociality that optimize the occurrence of promising novelties," is even more exciting because more radically new. It also combines productively with Miyazaki's thoughtful critique of the temporality of the analysis and writing itself. Here, both Guyer and Miyazaki ask how we can think of an ethnography that is not always thought backwards, always representing past events, experiences, and organizations. Their concern is particularly relevant for southern Cameroon, where innovation has long been valued (see Guyer 1996, Guyer and Eno Belinga 1995), and the "facticity of radical change" that Miyazaki notes is indeed important. I have thought of vital conjunctures (developed in my forthcoming book) as a partial solution to this problem; how-

ever, even vital conjunctures have to be written and analyzed after the fact, so the temporal problem remains.

Notermans insightfully calls attention to kinship and especially to fosterage and conjugal flexibility as additional important sources of uncertainty for women in Cameroon. She is of course entirely right, and a more exhaustive analysis would have to explore the roles of kinship both in creating uncertainty and as a resource for managing it. One provocative place to explore this insight might be the changing institutional forms of marriage. Some events that in the past were significant, ritualized transitions in the social recognition of a union have all but disappeared, and new ones have developed. How do these emergent social forms relate to the uncertainty of the crisis? It is a question that I look forward to exploring.

Randall draws attention to the methodological problems of interviewing and questions the transparency of interview answers. She perceptively focuses on how interviews unfold as social interactions and on cultural representations about what should and should not be said as sources of bias or error in interviews. And of course she is right that both of these matter very much. When I was working with research assistants, we found that women whom I interviewed were far more likely to report having had an abortion than women interviewed by my Cameroonian assistants. Several times, as I got to know women whom I had interviewed better, I learned of important things that they had neglected to mention in the interview. These are both examples of the situations that Randall, I think, has in mind. The central question, however, is whether the unfixity of intentional projects dissolves once these methodological problems are considered. On the basis of participant observation in a variety of settings, I can say that it does not. Randall and I agree on the need for constant, skeptical evaluation of our sources of evidence; we perhaps disagree on the universality and importance of fixed, private intentions.

Finally, Shandy suggests that reproduction is too easy a mark for a critique of intentional action and its limits and that Western women facing the "gamut of challenges to reproductive aspirations" might well engage in judicious opportunism in just the same way. I agree with her that reproduction tends to produce uncertainty. Reproductive events—from unintended pregnancy to miscarriage to a diagnosis of infertility—open up vital conjunctures, periods in which a wide range of futures is possible and there is no clear path forward. During vital conjunctures, action under the principle of judicious opportunism may be the only alternative. However, reproduction is far from the only domain in which vital conjunctures emerge. Completing school, getting ill, moving across the country—all of these may generate similar kinds of uncertainty and open horizons. Reproductive practice offers a compelling locus for the study of uncertainty and intentions because it is universal, fundamental, and highly variable.

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