

# ARE MEN'S AND WOMEN'S ANSWERS TO BE EQUALLY TRUSTED?

## A dual collection of birth and marriage histories in a population in Mali

*The data used in population studies are in large part based on the answers people give to questions they are asked in censuses or surveys. The reliability of responses is consequently an important issue. Even when there is no deliberate attempt to give wrong information, memory lapses – which may occur in any circumstance – can pose problems (on this, see Nadia AURIAT's Ph.D. thesis published by INED\*). Women are generally considered to be more trustworthy than men for providing data on births and other pregnancies, being more directly involved in these events. Véronique HERTRICH\*\*, studying a population in Mali, shows here that this is not always the case, and that in another field – marriage histories – men's responses may also prove more reliable than those of women.*

In Africa, fertility and nuptiality are almost always approached through women. Male fertility studies are rare<sup>(1)</sup> and are based essentially on small-scale surveys of delimited populations, by means of population observatories (Pison, 1982), multi-round surveys (Guillaume and Vimard, 1994; Adjamagbo *et al.*, 1995) or local or regional retrospective surveys (Donadjè, 1992; Hertrich, 1996). Nuptiality is in general studied as a proximate determinant of fertility and does not receive much more attention. The situation has begun to improve with the increasingly frequent introduction in the Demographic and Health Surveys (DHS) of a questionnaire for men<sup>(2)</sup>. However, it focuses on their opinions and, regrettably, there is little information on their fertility and marital behaviour<sup>(3)</sup>.

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\* N. Auriat, *Les défaillances de la mémoire humaine. Aspects cognitifs des enquêtes rétrospectives*, Travaux et Documents no. 136, INED-PUF, Paris, 1996.

\*\* INED.

<sup>(1)</sup> Of 8,046 titles cross-referenced in *Popline* under the headings 'Africa' and 'fertility', only 24 concern male fertility.

<sup>(2)</sup> This has now become systematic: it concerns all eight of the African surveys in round III, as against seven of the eleven in round II and only four of the twelve in round I. At the same time, the male survey population – at first restricted to husbands of female respondents – has been extended to all males aged 15-59 and the size of the samples has increased (between 1,300 and 3,000 men in round III).

<sup>(3)</sup> The questions on fertility are generally no more than number of children (boys, girls), and on nuptiality, current marital status and age at first marriage.

## I. – The problems posed by surveying men

There are two main reasons why research into male reproductive behaviours has been neglected (Vallin, 1992; Donadjè, 1992; Gendreau, 1993). First, the existence of biological constraints – puberty, menopause, duration of pregnancy – that have a universal and decisive impact on women's reproductive capacity, are a logical reason for choosing to observe female fertility. Second, there are methodological reasons that confirm this choice: maternity is easier to observe and verify than paternity, and a pregnancy might be expected to be reported best by the person who has undergone it and attends to the progeny. The high levels of infant and child mortality in Africa and polygamy are two further factors that may contribute to augmenting reporting errors when the respondents are men. It is known that deaths in infancy are more often omitted by men (Seltzer, 1973; Tabutin, 1984), while polygamy produces complex male reproductive histories that might be more difficult to reconstruct correctly during a retrospective survey. Research in the European context has reinforced the hypothesis that women report family events and moves with greater accuracy than men. In particular, the 3B-B biographical survey conducted by INED and the Catholic University of Louvain on 450 Belgian couples, under excellent conditions for comparing and verifying the responses of husband and wife (each spouse was questioned separately, then they were re-interviewed together and compared responses, and finally their answers were checked against the population register), concluded that women reported births, dates of birth of children and spouse, and dates of marriage and moves, more accurately than men (Auriat, 1991, 1994; Poulain *et al.*, 1992; Courgeau, 1992). However, men were no more likely than women to omit moves.

Does this mean that men's biographies are not worthy of investigation? This would be doing away with a key element for studying populations where – as is often the case in Africa – society is at all levels (filiation, residence, production, property, cult, power) structured around men.

In the framework of a field survey taken among the Bwa population in Mali<sup>(4)</sup>, I recorded men's as well as women's biographies in one of the villages. In a dual data-gathering operation, men and women were interviewed separately, so that responses could be compared in the event of common experiences – unions when both spouses were present, births and deaths of children. The extent and the nature of the discrepancies observed will enable us here to discuss the reliability of information provided by men on their marital and reproductive history.

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<sup>(4)</sup> See the author's Ph.D. thesis (Hertrich, 1994; 1996) for a detailed description of the survey population, methodology and results. A brief presentation of the survey is given in Hertrich (1993), *Population: An English Selection*, 5.

## II. – The data

The field survey was designed to study the changes in reproductive behaviour emerging among the Bwa, a population with rather traditional socio-economic features which is in the early stage of demographic transition. Particular attention was paid to changes in marriage behaviour and family structure.

The data were collected by means of four distinct operations, one of which was a retrospective biographical survey. The dual collection procedure was introduced in the second stage of this biographical survey and concerned essentially one village<sup>(5)</sup>. All ever-married individuals were questioned about their marital, birth, migration and religious history. The interview was conducted in my private hut in the presence of only three people: the respondent, the interpreter and myself. This method was chosen because of the personal, confidential nature of the information collected, the events being described in the light of controls exerted by the family (for marriage, these concern the initiative and the different stages of the procedure; for migration, decision-making and the context of departure, what was gained by the move and where this gain went; provision of child care...) In addition, the fact that respondents participated actively, by giving up some time to come to my hut and be questioned, was a guarantee of quality. We consider here the marriage processes relative to 78 marriages between men and single women and the birth histories of 72 couples (of all marriage orders), the information having been collected separately from each spouse<sup>(6)</sup>.

To evaluate the quality of responses, they should ideally be matched against existing records. But in the study region, vital registration and Christian mission records cover only a small proportion of births<sup>(7)</sup> and cannot be used to evaluate birth histories. We therefore reconstructed the couples' birth histories by matching the husband's and wife's responses<sup>(8)</sup>: births reported by one parent and not the other were added (considered as omissions) and the status of some births was corrected (stillbirth reported as

<sup>(5)</sup> The village of Kwara, located in the heart of the Tominian Circle, with a population of about 600 at time of survey in 1988-9.

<sup>(6)</sup> 70 out of 72 birth histories concern the village of Kwara; they represent two-thirds of all ongoing fecund marriages between two village residents. The marriage procedures concern 77 unions in Kwara, and represent 89% of marriages contracted between a man and a single woman both living in the village. Coverage was incomplete for two main reasons: the dual report operation was added when the biographical survey was already under way, and it was not conducted in the case of some residents who had little free time or a particularly complex history requiring a long interview.

<sup>(7)</sup> 8% of reported births were traced in the birth registers and 13% in the parish registers. Together with other documents (maternity certificate, village register), a total of 25% of reported births could be dated from these written sources (Hertrich, 1993).

<sup>(8)</sup> This was done manually by comparing the different elements of information provided for each birth: first name(s), sex, birth order, place and season of birth, age at and place of death. Preference was given to the more detailed of the two statements when it was necessary to choose whether to reclassify a stillbirth as livebirth or vice versa.

livebirth or vice versa). The reconstruction is flawed insofar as it depends on the above decisions and that births omitted by both parents are missed. *The quality of the birth histories as reported by mothers and by fathers will be judged from these 'corrected' histories.* With regard to the processes leading to marriage, they cannot be compared to any outside source either. Matching the responses of husband and wife is again the only possible course of action. When they do not tally, however, there is no way of knowing whether it is the husband, the wife, or both who are wrong. This will be discussed in the light of the nature of the discrepancies observed (direction, extent) and of the possible interpretations.

### III. – Pregnancy reporting by men and by women

In one-fifth of birth histories, men's and women's answers as to number of pregnancies do not tally (one-sixth if we consider only those resulting in live births) (Table 1). The differences are much more frequent at higher parities: 40% in the case of five pregnancies or more. Order of

TABLE 1. – COMPARISON OF MARITAL BIRTH HISTORIES AS REPORTED BY HUSBANDS AND WIVES.  
PERCENTAGE DISTRIBUTION OF UNIONS BY CONSISTENCY OF RESPONSES

Indicators	Number of pregnancies after comparison of husband's and wife's responses			
	1-4	5-8	9 +	Total
Consistency of responses				
<i>Number of pregnancies</i>				
Identical	94	60	60	78
Higher for:				
– wife	3	15	27	11
– husband	3	25	13	11
<i>Number of foetal deaths (miscarriages and stillbirths)</i>				
Identical	95	65	60	79
Higher for:				
– wife	0	10	27	8
– husband	5	25	13	13
<i>Number of live births</i>				
Identical	95	65	80	83
Higher for:				
– wife	5	20	7	10
– husband	0	15	13	7
Difference in order of pregnancies				
No difference	97	80	60	85
Difference	3	20	40	15
<i>Number of unions</i>	37	20	15	72



pregnancies (without considering omissions) diverges in one out of seven couples, and in four out of ten when nine pregnancies or more are reported.

### ***Omissions and mis-classification***

The differences are not always in the direction one might expect, that is, with pregnancies being omitted by men. The number of miscarriages and stillbirths is, in fact, higher as reported by men than by women, although these are intimate events one might reasonably expect to be less well known, and *a fortiori* less well recollected and reported, by men. There are two explanations for this. First, some of these pregnancies were probably omitted by women, foetal deaths being experienced as failure in terms of childbearing<sup>(9)</sup>, and so to be blotted out of their memory. Second, some men may have reported as 'stillbirths' infants who died shortly after being born. Of the nine cases where a higher number of foetal deaths was reported by the father, we estimated that five were actual omissions by the mother and four were live births wrongly reported as stillbirths (Table 2).

Mis-classification also accounts for some (four out of seven) of the discrepancies observed, in the opposite direction, between the number of live births reported by men and by women. Overall, there are as many cases where husbands reported more pregnancies than wives as the contrary.

Disagreement in the nature of the reported birth (live birth instead of foetal death or *vice versa*) is seen to be just as important as actual omission for explaining the discrepancies between live births as reported by husbands and by wives. Two-thirds of the birth histories that did not tally, and half (9 in 18) of the live births 'omitted' and retrieved after comparison of husband's and wife's responses, are due to this type of error (Table 2).

### ***Fertility and mortality in infancy***

Miscarriages and stillbirths were not recorded for the purpose of specific analysis, but (as in most retrospective surveys) to improve the registration and dating of the live births that form the data base for analysing fertility and mortality in childhood. When the birth histories as reported by husband and by wife did not tally, we corrected them by adding identified omissions and by reclassifying some stillbirths as live births or *vice versa*.

18 live births that had not been reported as such (11 by men, 7 by women) were thus retrieved, while 3 that had been reported as such were excluded<sup>(10)</sup>. Calculated over the total number of live births reported by

<sup>(9)</sup> This is clear from the local term for a pregnancy that does not result in a live birth: *siā yara*, a 'wasted pregnancy'.

<sup>(10)</sup> One live birth reported by a husband was reclassified as a stillbirth after comparison with the birth history given by his wife. Two live births were 'inventions' reported by a woman who had become sterile after her first pregnancy: this was suggested by the inconsistency of her responses and confirmed by her husband and his other wife.

TABLE 2. – ORIGIN OF THE DIVERGENCES: OMISSION OR MIS-CLASSIFICATION

Indicators	Mis-classification (live birth or foetal death)	Omission	Number of observations
<b>Birth histories differing in number of (a):</b>			
– live births H > W	4	4	5
H < W	4	3	7
– foetal deaths H > W	4	5	9
H < W	4	4	6
– pregnancies H > W		8	8
H < W		8	8
<b>Live births not reported as such (b):</b>			
– by husband	4	7	11
– by wife	5	2	7
<b>Foetal deaths not reported as such (b):</b>			
– by husband	3	2	5
– by wife	0	15	15
H: Birth history as reported by husband. W: Birth history as reported by wife. (a) A single recording may contain both types of error, so the sum of cases will be greater than the number of observations. (b) And considered as such after comparison of the birth histories reported by husband and wife.			

TABLE 3. – RATE OF OMISSION OF LIVE BIRTHS, BY CHILD'S PERIOD OF BIRTH AND AGE AT DEATH

Characteristics of live birth	Omission by mother		Omission by father		Number of live births (a)
	Number	Rate (%)	Number	Rate (%)	
<b>Child's year of birth</b>					
Before 1952	0	0	0	0	5
1952-61	0	0	0	0	27
1962-71	1	2	6	10	62
1972-81	3	3	3	3	110
1982-87	3	2	2	2	130
<b>Child's age at death</b>					
Less than 7 days	2	17	8	67	12
1-3 weeks	2	22	1	11	9
1-11 months	1	4	1	4	23
1-4 years	0	0	1	3	34
5 years or more	0	0	0	0	4
Surviving at survey	2	1	0	0	252
Total	7	2.1	11	3.3	334
(a) Total number after comparison of birth histories as reported by husband and wife.					

men and women respectively<sup>(11)</sup>, the rate of omission is 3% for men and 2% for women (Table 3). We had expected it to rise in correlation with time since birth, but this was not the case.

Such rates are low and the sex differential is only slight. *This suggests that male fertility can quite credibly be measured from birth histories reported retrospectively by men.*

The pertinence of basing childhood mortality analysis on birth histories collected from men is another matter. The live births 'omitted' (or mis-reported) by men concern mostly babies who did not survive for long: 10 out of 11 are infant deaths, of which 9 occurring in the first month and 8 in the first week of life. The pattern is similar for women, at a lower level: for men and women respectively, the frequency of omission amounts to 23% and 11% of infant deaths, and 43% and 19% of neonatal deaths (Table 3).

Birth histories reported by men therefore lead to substantial under-estimation of all the probabilities of dying that include deaths occurring in the first month of life (Table 4). The level of under-estimation is 39% for neonatal mortality and 23% for infant mortality. However, with the exception of neonatal mortality, the differences with the corrected probabilities are not statistically significant.

TABLE 4. – UNDER-ESTIMATION OF PROBABILITIES OF DYING IN CHILDHOOD  
DUE TO OMISSIONS

Probability of dying	According to father $q^f$	According to mother $q^m$	Corrected probability $q^c$	$q^f/q^c$	$q^m/q^c$
Infant (0 to 1 year)	0.118 (23/195)	0.140 (28/200)	0.152 (31/204)	0.77	0.92
Neonatal (0 to 1 month)	0.051 (10/195)	0.070 (14/200)	0.083 (17/204)	0.61	0.84
Post-neonatal (1 month to 1 year)	0.070 (13/185)	0.075 (14/186)	0.075 (14/187)	0.93	1.00
Child (1 to 5 years)	0.134 (23/172)	0.140 (24/172)	0.139 (24/173)	0.96	1.01
Infant and child (0 to 5 years)	0.236 (46/195)	0.260 (52/200)	0.270 (55/204)	0.87	0.96

Notes: Based on live births prior to 1982 reported in a dual collection of birth histories from men and women.

With the exception of the neonatal death probability estimated from information reported by father, the differences with the corrected probabilities are not statistically significant at the 5% level.

<sup>(11)</sup> Births omitted by both spouses are not considered. If we apply the Chandrasekar-Deming technique (Chandrasekar and Deming, 1949; Pradel de Lamaze, 1973) to estimate events missed by both sources in the case of dual reports, the number of birth omissions is negligible (0.24). This method is not suitable here, however, because the two sources of information cannot be assumed to be independent.

The information reported by women leads to a much more modest under-enumeration: less than 10%, except for neonatal mortality (16%). The differences with the corrected probabilities are not statistically significant. These results confirm other findings<sup>(12)</sup> on the possibility of collecting satisfactory birth histories from mothers, even in illiterate populations with high levels of fertility and mortality.

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The results therefore follow the expected pattern: the birth histories collected from fathers are less suitable for measuring infant and child mortality than those collected from mothers. But we also learn that omission of babies who died shortly after birth is not the only problem, since these were also sometimes mis-reported by men as 'stillbirths'. In addition, the fact that some foetal deaths were reported by husband and not by wife proves that men pay attention to the birth history of their wife (or wives): fertility is not just a woman's world. Under-reporting by men is slight when measured against all live births, which indicates that the method is satisfactory for estimating male fertility levels.

#### IV. – Marriage procedures reported by men and women

The marriage data used to compare men's and women's responses are of a different nature. Unlike the birth histories, which record events, they describe the components of a procedure leading to marriage between a man and a single woman. We are now not dealing with omissions, but with distortions, i.e. overstatement or understatement of aspects of the procedure. The validity of the statements will be discussed by considering two types of indicator (Table 5, p. 312): indicators of consistency (match or mis-match of spouses' answers) and indicators of measurement (frequency or average among men's and women's responses).

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<sup>(12)</sup> Garenne (1994) found that no more than 3.5% of births and 10% of deaths in childhood had been omitted by the women aged 15-89 interviewed on their birth history in Niakhar (Senegal) in 1968. Even lower omission rates (2% of births, 2.6% of deaths in childhood) were obtained in Matlab (Bangladesh) by matching birth histories reported by women with the births registered by this population laboratory during the 16 years before the survey (Becker and Mahmud, 1984). In fact, the omission rates are not necessarily any lower in industrialized countries: in the 3B-B biographical survey mentioned earlier, of 14 child deaths reported by the couples, one was omitted by the mother and two by the father (Poulain *et al.*, 1991), while Tabutin (1984) noted that 20% of the children who had not survived to the first birthday were not reported in the Family Survey accompanying the 1954 census in France.

***A more traditional male version*** The questions concerned the different stages of the process preceding the actual union<sup>(13)</sup>:

— the event that marks the beginning of the procedure: the granting of consent by the future bride's family, transmitted by a mediator chosen by the groom's family; or the 'abduction' of the girl by the young man (or his friends) without her family's prior consent;

— bridewealth, both traditional (working the fields of the girl's family, presents of grain) and modern (cash presents or indirect money presents through the purchase of millet beer from the girl's parents at a high price);

— the pre-marital transition period – known as the 'entrustment' period – in which the girl is placed in the care of a family designated by the family of her future husband;

— the duration of the procedure;

— the wedding celebration in the village.

All but one of the marriages studied are ongoing marriages. Indeed, since taking the wife of a fellow village-man is reproved, a divorce generally means the woman leaves the village.

Overall, the spouses' answers tally in more than 8 (and often 9) cases out of 10 for all the qualitative variables where there are two possible answers. They tally less often, naturally, for the quantitative variables where there are several possibilities. There is disagreement in one case out of four for the number of years of farm labour (7 possibilities), in one case out of two for duration of procedure (8 possibilities), but only in one case out of six for amount of cash given (4 possibilities). Although the divergences are rather frequent for some variables, they are not really surprising given the difficulty of specifying durations and quantities in illiterate populations.

It is more revealing to study the *direction* of the discrepancies, since they always point in the same direction for men compared to women. Men describe a more 'traditional' procedure that lasts longer and they cite more bridewealth, in cash or kind. Women describe a shorter procedure marked less by consent of the family and less gratifying in terms of bridewealth.

The discrepancies that fall into this pattern account for three out of four, and often nine out of ten, of the mis-matches. The indicators based on husbands' and wives' responses may therefore differ substantially: for instance, there are 32% of marriage procedures lasting three years or more according to men, and 21% according to women, a 50% difference. Despite the low numbers, such differences are statistically significant for some variables: event marking beginning of procedure, years of farm labour, duration of procedure.

<sup>(13)</sup> For further information on marriage behaviour in this population, see V. Hertrich (1997), and also the paper presented by the author at the XXIIIrd General Population Conference in Beijing, China (October 1997). The full set of papers presented at this Conference by INED researchers is available free of charge in an all-English volume (or the corresponding all-French volume), from T. Bouchet or D. Paris at INED.

TABLE 5. – COMPARISON OF MEN'S AND WOMEN'S STATEMENTS REGARDING THEIR MARRIAGE PROCEDURE (WOMEN'S FIRST MARRIAGES)

Variables and indicators	Marriage period		
	Before 1970	Since 1970	Total
Event marking beginning of procedure:			
<i>Consent of girl's family or abduction</i>			
H = W	73 %	90 %	84 %
H = consent, W = abduction	27 %	8 %	15 %
H = abduction, W = consent		2 %	1 %
Percentage of procedures begun by abduction	*	ns	**
according to husbands	12 %	22 %	19 %
according to wives	38 %	29 %	32 %
(N)	(26)	(49)	(75)
Farm labour performed			
H = W	89 %	94 %	92 %
H = yes, W = no	11 %	4 %	6 %
H = no, W = yes		2 %	1 %
Percentage of procedures without farm labour	ns	ns	ns
according to husbands	50 %	37 %	42 %
according to wives	61 %	39 %	47 %
(N)	(26)	(49)	(75)
Number of years of farm labour			
0, 1, 2, 3, 4, 5 or 6			
H = W	61 %	80 %	73 %
H > W	36 %	8 %	18 %
H < W	3 %	12 %	9 %
0, 1-2, 3+: H = W	75 %	92 %	86 %
Average number of years of farm labour	**	ns	*
according to husbands	1.5	0.9	1.1
according to wives	0.8	0.8	0.8
(N)	(25)	(47)	(72)
Grain present			
H = W	86 %	94 %	91 %
H = yes, W = no	14 %	4 %	8 %
H = no, W = yes		2 %	1 %
Percentage of procedures without grain present	ns	ns	ns
according to husbands	46 %	43 %	44 %
according to wives	61 %	45 %	51 %
(N)	(28)	(49)	(77)
Cash present			
H = W	75 %	92 %	86 %
H = yes, W = no	18 %	8 %	12 %
H = no, W = yes	7 %		3 %
Percentage of procedures without cash present	ns	ns	ns
according to husbands	79 %	41 %	55 %
according to wives	89 %	49 %	64 %
(N)	(28)	(49)	(77)
Amount of cash given			
0, ]0,5000[, [5000,10000[ or 10000+			
H = W	84 %	82 %	83 %
H > W	8 %	9 %	9 %
H < W	8 %	9 %	9 %
(N)	(25)	(45)	(70)

Variables and indicators	Marriage period		
	Before 1970	Since 1970	Total
Purchase of millet beer			
H = W	92 %	84 %	87 %
H = yes, W = no	4 %	14 %	10 %
H = no, W = yes	4 %	2 %	3 %
Percentage of procedures without beer purchase	<i>ns</i>	<i>ns</i>	<i>ns</i>
according to husbands	92 %	75 %	81 %
according to wives	92 %	86 %	89 %
(N)	(26)	(44)	(70)
Entrustment			
H = W	93 %	96 %	95 %
H = yes, W = no	7 %	4 %	5 %
Percentage of procedures without entrustment	<i>ns</i>	<i>ns</i>	<i>ns</i>
according to husbands	4 %	10 %	8 %
according to wives	14 %	14 %	14 %
(N)	(27)	(49)	(76)
Place of entrustment			
(among procedures where both state entrustment)			
Man's patrilineage, blacksmith, mission or other			
H = W	96 %	95 %	95 %
(N)	(23)	(41)	(64)
Wedding celebration			
H = W	100 %	94 %	96 %
H = yes, W = no		4 %	3 %
H = no, W = yes		2 %	1 %
Percentage of procedures without celebration	<i>ns</i>	<i>ns</i>	<i>ns</i>
according to husbands	0	6 %	4 %
according to wives	0	9 %	5 %
(N)	(26)	(47)	(73)
Duration of procedure			
No procedure or just entrustment, < 1 year,			
1, 2, 3, 4, 5 or 6 years			
H = W	40 %	55 %	50 %
H > W	52 %	41 %	44 %
H < W	8 %	4 %	6 %
Percentage of procedures lasting 3+ years	<i>ns</i>	<i>ns</i>	*
according to husbands	52 %	21 %	32 %
according to wives	36 %	13 %	21 %
Average duration of procedure (in years)	**	**	**
according to husbands	2.4	1.6	1.9
according to wives	1.7	1.1	1.3
(N)	(25)	(47)	(72)
Number of marriages	29	49	78
<p>H = Marriage procedure as reported by husband.  W = Marriage procedure as reported by wife.  * The difference between the indicators calculated from men's and women's responses is statistically significant at the 5% level.  ** The difference between the indicators calculated from men's and women's responses is statistically significant at the 1% level.  <i>ns</i>: The difference between the indicators calculated from men's and women's responses is not statistically significant at the 5% level.  The calculations are based on the number of procedures (N) in which information was provided by both spouses with the required degree of accuracy.</p>			



These results could be the outcome of two mechanisms: on the one hand, a tendency among men to legitimize their union by setting it firmly in the conventional and valued pattern of a long betrothal well garnished with bridewealth (in the form of payments and services); on the other, a tendency among women to underplay the social and bridewealth efforts their future husband made to gain their hand.

When we consider the marriage period, however, some reserves as to this hypothesis become necessary. The older the marriage, the more likely the husband and wife are to diverge in their account of the procedure. Most of the discrepancies observed relate to the pre-1970 period, and the resulting indicators are often very different for men and women: for instance, the proportion of marriages begun by an abduction is three times as high according to women (38% as against 12%), and the average number of years of farm labour is twice as high according to men (1.5 as against 0.8). For the post-1970 period, there are fewer discrepancies and the indicators are not much different for women and men (respectively, 29% vs 22% and 0.8 vs 0.9 years for these two indicators). If the suggested mechanisms of 'inflation' by men and/or 'deflation' by women were at work, this would mean they augmented with time since marriage. In fact, the hypothesis of a dual mechanism does not stand up to scrutiny: a tendency to over-legitimize the marriage procedure might just as well concern women as men, particularly when the union has lasted (which is the case, as we have said, of virtually all those studied); also, a male 'inflation' of the marriage procedure does not correspond with the high, albeit decreasing, proportion of cases where no farm labour is reported by the husband (50% before and 37% since 1970). Bridewealth in this form is traditional and if there were systematic overstatement by men, the proportion would be lower.

***A lesser participation of women  
in the marriage procedure***

Another hypothesis may be more plausible: that women are traditionally less involved in the early stages of the marriage procedure, but this involvement has increased in more recent unions, making women's knowledge of the procedure more complete and more in line with that of men. Women's lesser – or later – participation in the process accounts for their 'truncated' perception of it and explains why they describe it as being shorter and less dense, in terms of payments and services, than their husband does. The information provided by women relates more often the final or later stage of the procedure and not the whole history.

Several elements suggest that the discrepancies observed are indeed linked to knowledge of the procedure rather than to any voluntary or involuntary manipulation of information.

The accounts of events actually experienced by the woman (entrustment period, wedding celebration) tally in most cases with men's statements, whatever the marriage period. The discrepancies mostly concern

the events which punctuate the process and in which the future bride is not sure to participate. The questions on payments and services which either take place in the final stage of the procedure or are repeated at intervals throughout, and are thus likely to be observed by the woman (at least in part), show a correct match, including for the earlier marriages: men's and women's responses tally in about 90% of cases for performance of farm labour, grain presents, purchase of millet beer. In contrast, they diverge on years of farm labour – fewer, according to women, in nine divergences out of ten – for the earlier unions, whereas this divergence does not exist for the more recent period. Thus, it is well and truly the events marking the beginning of the procedure, its duration and 'density' (in payments and services), that differentiate men's and women's responses relative to the earlier marriages, while the information tends to tally for the final stages of the procedure: the closer the marriage, the better the consistency, since the woman's involvement in, and therefore knowledge of, the procedure increases. The convergence of men's and women's responses for the more recent period suggests a growing participation of the future brides in their marriage procedure.

### Conclusion

For information to be reported correctly by respondents, three conditions must be fulfilled: they must have had knowledge of that information, stored it in their memory and conveyed it accurately to the interviewer. In the Mali population studied here, all three factors contribute to explaining the discrepancies observed between husbands' and wives' responses on their couple's birth history and marriage procedure. But the discrepancies are not univocal and suggest that certain principles of data collection, in particular the possibility of recording family histories from men, could usefully be reconsidered.

Women do not emerge as being automatically the best source of information on pregnancies. Probably because they tend to mask, or neglect to report, pregnancies that did not produce a liveborn child – assimilated to failure in terms of childbearing –, women omit them more than their husbands do. Deaths during infancy are, on the other hand, more frequently omitted by men, leading to an underestimation of mortality compared to data gathered from women. However, relative to live births, male under-reporting is very slight and does not preclude satisfactory measurement of male fertility.

As regards marriage procedures, men seem to provide more reliable information than women. They describe more fully the different stages of the procedure leading up to marriage, especially for periods in the past: participating more in this procedure, they are more liable to describe it correctly. Women's knowledge is more fragmentary but grows cohortwise

as future brides become increasingly involved in the marriage process. The information collected from women is consequently less satisfactory for studying trends in marriage procedures.

Bwa society, like most African societies, is male-oriented: filiation is patrilineal, residence is virilocal and patrilocal, power is patriarchal. That leads us to suppose that men's knowledge may be every bit as good as women's for certain events, and even better than women's for those, like marriage, which are in the family's hands. The findings presented above suggest that it would be rewarding to pay more attention to male biographies.

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**HERTRICH (Véronique). – Are men's and women's answers to be equally trusted? A dual data collection on maternity and fertility issues in a population in Mali**

In this paper the author compares statements made by men and women respectively in replying to a dual survey about aspects of their married lives and children born in their marriages. Contrary to expectations, men's reports on pregnancies which did not result in a live birth were more accurate than those of women, perhaps because women tend not to remember or fail to report events which they regard as failures to conceive. Failure to report the deaths of young children is, on the other hand, more common among men and estimates of mortality derived from their reproductive histories are thus lower than those obtained from an analysis of data reported by women. The trend of men's under-reporting is not, however, significant relative to the total number of live births, and does not prevent the construction of a fairly accurate measure of men's fertility. As regards marriage, information obtained from men tends to be more reliable than that obtained from women: men describe the components of the processes preceding marriage more thoroughly, especially as regards more remote periods. This is probably a reflection of their greater involvement in the marriage process. Women do not get involved in the process until later, and have only a limited knowledge of its implications, so their statements on marriage procedures and their evolution are less satisfactory. The results suggest that family biographies supplied by men are more useful.

**HERTRICH (Véronique). – Les réponses des hommes valent-elles celles des femmes ? Une double collecte sur les questions génésiques et matrimoniales dans une population du Mali**

S'appuyant sur une double collecte biographique dans un village du Mali, cet article compare les déclarations des hommes et des femmes sur les mariages qui leur sont communs et les naissances qui en sont issues. Contrairement au schéma attendu, les hommes déclarent mieux les grossesses n'ayant pas abouti à une naissance vivante que leurs épouses, probablement en raison d'une occultation ou négligence des femmes à déclarer des événements qui s'affirment comme des échecs de fécondité. L'omission des enfants décédés en bas âge est, en revanche, plus forte de la part des hommes et les estimations de mortalité établies à partir de leurs histoires génésiques sous-estiment ainsi celles que permettent les données féminines. Par rapport à l'ensemble des naissances vivantes, la sous-déclaration des hommes est cependant très modeste et n'entrave pas l'obtention d'une mesure satisfaisante de la fécondité masculine. Du point de vue matrimonial, les déclarations masculines paraissent de meilleure qualité ; elles décrivent plus complètement les composantes du processus préalable à l'union, surtout sur la période ancienne, ce qui tient probablement à leur implication plus importante dans la pratique matrimoniale. Les femmes, associées plus tardivement dans les procédures matrimoniales, en ont une connaissance plus partielle qui rend leurs déclarations moins satisfaisantes pour décrire les procédures matrimoniales et leur évolution. Ces résultats invitent à s'intéresser davantage aux biographies familiales des hommes.

**HERTRICH (Véronique). – ¿ Las respuestas de los hombres valen lo mismo que las de las mujeres ? Una doble encuesta sobre cuestiones genésicas y matrimoniales en una población de Mali**

Basándose en una doble encuesta biográfica realizada en un pueblo de Mali, el presente artículo compara las declaraciones de hombres y de mujeres sobre sus matrimonios y sobre los nacimientos resultantes. Contrariamente a lo esperado, los hombres declaran con mayor precisión los embarazos que no dieron lugar a un nacimiento vivo. Esto se debe probablemente a la ocultación o negligencia de las mujeres a declarar acontecimientos que suponen fracasos de la fecundidad. En el caso de defunciones de hijos en edades muy tempranas, en contraste, las omisiones son más frecuentes en las declaraciones masculinas ; por consiguiente, las estimaciones de mortalidad derivadas de sus historias genésicas subestiman las derivadas de declaraciones femeninas. La subdeclaración por parte de los hombres sobre el total de nacimientos vivos es, no obstante, muy modesta, y no obstaculiza la obtención de una medida satisfactoria de fecundidad masculina. En cuanto a la historia matrimonial, las declaraciones masculinas parecen de mejor calidad ya que describen de forma más completa el proceso que antecede a la unión, especialmente en la etapas iniciales. Este hecho se explica probablemente por la mayor implicación de los hombres en la práctica matrimonial. Las mujeres se implican más tardíamente en las prácticas matrimoniales y tienen de ellas y de su evolución un conocimiento más parcial, que convierte sus declaraciones en menos satisfactorias. Estos resultados invitan a interesarse en mayor grado por las biografías familiares masculinas.