



**Affidavit #2 of Joseph Henrich
Sworn November 15, 2010**

**No. S-097767
Vancouver Registry**

IN THE SUPREME COURT OF BRITISH COLUMBIA

IN THE MATTER OF:

THE CONSTITUTIONAL QUESTION ACT, R.S.B.C. 1996, C.68

AND IN THE MATTER OF:

THE CANADIAN CHARTER OF RIGHTS AND FREEDOMS

AND IN THE MATTER OF:

A REFERENCE BY THE LIEUTENANT GOVERNOR IN COUNCIL SET OUT IN
ORDER IN COUNCIL NO. 533 DATED OCTOBER 22, 2009 CONCERNING THE
CONSTITUTIONALITY OF S. 293 OF THE CRIMINAL CODE OF CANADA,
R.S.C. 1985, c. C-46

AFFIDAVIT


I, Joseph Henrich of Vancouver, British Columbia, MAKE OATH AND SAY AS
FOLLOWS:

1. I am co-director of the Centre for Human Evolution, Culture, and Cognition at the University of British Columbia. My professional background is set out in my first affidavit in these proceedings (Affidavit #1).
2. In October 2010 Craig Jones, counsel for the Attorney General of British Columbia, forwarded to me the Affidavit of Todd Shackelford. On November 1st, he forwarded to me the Opening Statement of the Reference Amicus, and a few

days later he also provided me with some demographic figures from the Bountiful FLDS community . I have prepared a Reply Report which is attached as **Exhibit "A"** to this Affidavit. It is in response to Professor Shackelford's Affidavit, and it also has a section at the end in which I summarize and analyze the demographic figures from Bountiful in light of the science I described in my first report. As before, I worked with a research assistant in preparing this report, and I am solely responsible for its content.

- 3. Attached as **Exhibit "B"** to this Affidavit is the email from Robert Wickett to Craig Jones, dated November 5, 2010, providing the demographic figures from the Bountiful FLDS community.

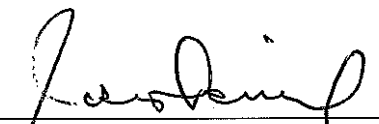
SWORN BEFORE ME at the City of Vancouver, in the Province of British Columbia, this 15th day of November, 2010.


A Commissioner for taking Affidavits for British Columbia

FREYA ZALTZ
Print Commissioner's name

Barrister + Solicitor
Title

(604) 660-0673
Phone Number

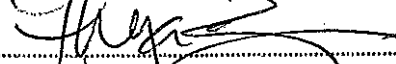

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This is Exhibit "A" referred to in the affidavit of Joseph Henrich

Sworn before me at Vancouver in the Province of British Columbia,

this 15 day of November


A Commissioner for taking Affidavits
within British Columbia

Reply to the Expert Report of Dr. Todd Shackelford

Dr. Joseph Henrich, November 15, 2010

Introduction

I have had the opportunity to review the expert report of Dr. Shackelford, whose work I respect. I have also reviewed the Opening Statement of the Amicus in the Reference, which has given some context to the arguments on which Dr. Shackelford's work bears.

Since Dr. Shackelford's report is presented as a response to my own first report, and might be taken to undermine or call into question my conclusions, I consider here Dr. Shackelford's work and provide my thoughts on its implications.

Overview

Dr. Shackelford's report sets out in some detail the extent to which violence and other negative outcomes (e.g. abuse) are present in monogamous households.

Allow me to begin by highlighting at the outset that Dr. Shackelford supplies no empirical evidence regarding polygynous families, and none of his data permits a statistically controlled comparison of the relative rates of these negative outcomes in monogamous vs. polygynous marriages. If we are interested in considering the consequences to permitting polygyny, then it is comparative rates between monogamous and polygynous households that matter, not merely the presence of some non-zero level of violence, abuse or neglect in monogamous households.

Nevertheless, Dr. Shackelford's efforts provide a useful opportunity. We can take the theory and evidence from his report (and the works upon which it relies) and ask what they predict when applied in polygynous households. Then, we can test our hypotheses against the available data.

Dr. Shackelford's work is underpinned by a number of important observations. The first is evidence showing that monogamous households experience violence within the family (including homicide and child abuse) preferentially among unrelated pairs, including spouses and adult-child pairs (often step relations). This is consistent with the evolutionary prediction that higher degrees of genetic relatedness among pairs within households will act as a kind of prophylactic against negative outcomes, including child abuse, abuse, neglect, conflict, stress and homicide.

Dr. Shackelford's research, and that of others, demonstrates a second point relevant to a comparative analysis of polygyny: much of the violence among spouses is driven by male sexual jealousy, which is another phenomenon rooted in evolved components of our mating psychology. Consistent with this view, Dr. Shackelford provides some of the

most compelling evidence that violence between spouses increases with the age gap between husbands and wives.

To address these issues we can examine how it would apply in polygynous households by asking: are members of polygynous households more or less genetically related? Is sexual jealousy more or less likely in polygynous marriages compared to monogamous marriages? Are substantial age disparities between husbands and wives more or less likely in polygynous marriages?

Once these matters are considered, it becomes clear that the negative outcomes described by Dr. Shackelford for monogamous households will also be present to an equivalent, or probably a greater, degree in polygynous households. In fact, properly applied, Dr. Shackelford's work provides solid support for the idea that polygynous households are *relatively* more dangerous places to grow up vis-à-vis their monogamous counterparts.

Violence Among Unrelated Family Members

Let's begin by applying the evolutionary logic (as deployed in Dr. Shackelford's work) by considering the genetic relatedness between the pairs of adults and children in both monogamous and polygynous households.

Exhibit D accompanying Dr. Shackelford's affidavit, and works cited therein, focus on how genetic relatedness between individuals within households impacts the chances of violence, including homicide and child abuse. Prior to the pioneering work of the Canadian psychologists Martin Daly and Margo Wilson (McMaster University), the empirical evidence indicated that people were most likely to be harmed or killed by members of their own family or household. Daly and Wilson, wielding the theoretical tools then emerging from evolutionary psychology, broke these claims down by examining the effect of genetic relatedness on the likelihood of one person within a family murdering or abusing another. It turned out that—by far—the highest rates of this "intra-family" violence were among genetically *unrelated* family members, including step-relations and spouses. Given this, it's clearly important to examine how polygyny vis-à-vis monogamy impacts the patterns of genetic relatedness within households.

Even before considering "blended families" arising as a consequence of divorce or remarriage, non-sororal polygynous households have—by definition—more unrelated members. Husbands are unrelated to all their wives. The wives are typically unrelated or only distantly related to each other, and thus unrelated or even less related to the children of all the other wives. For comparison, contrast a monogamous nuclear family with two parents and four children. In this household there is one unrelated pairing (assuming no marital infidelity): the spouses. Now consider a polygynous household with two wives, each with two children. This quite small polygynous family has 7

unrelated pairings (3 adult pairs + 4 wives-to-others'-children). That is, for similarly-sized families with four children each, the polygynous household has *seven times* the number of unrelated pairs. The ratio of the number of unrelated pairs for polygynous to monogamous households increases with square of the number of wives in the polygynous household.¹

It's important to underline what Dr. Shackelford's Exhibit D emphasizes: living in the same household with genetically unrelated adults is the *single biggest risk factor* for abuse, neglect and homicide of children. This relationship holds robustly even when socioeconomic variables are considered.

When the implications of divorce and remarriage are considered, the effect is further exacerbated.

Divorce and remarriage under polygyny not only puts children in a household with an unrelated adult male (just as with monogamous re-marriages), but it adds to the mix one or more stepmothers. To see this, suppose an aspiring polygynous man's first wife has two children and he marries a second wife who already also has two children. This places the incoming children in a household with two unrelated adults, and places the husband's genetic children in a household with one unrelated adult (the new wife). Thus, from the point of view of the evolutionary theory underpinning Dr. Shackelford's arguments, polygynous households present a more dangerous situation than do monogamous households.

Of course, it might be argued that this effect would be offset if divorce and remarriage were less common in polygynous households than monogamous ones. It is sometimes argued, for instance, that polygyny might be a preferable alternative to "serial monogamy", in the sense that it is better to keep a man's three families together than to encourage him to leave one to start the next, and so on. However, the available information indicates that divorce in polygynous marriages is at least as prevalent as in monogamous marriages, and likely more so.²

¹ Assume that w = the number of wives, and that k is the number of children each wife has (for simplicity assume each wife has the same number of children). The number of unrelated pairs is $N_p = w(1+(w-1)(0.5+k))$. Assume the number of wives in a monogamous family is always 1, the number of children is irrelevant, and $N_{pm} = 1$. Thus, the ratio of unrelated pair in polygynous vs. monogamous is merely N_p . If $w = 3$, $N_p = 18$.

² Due to the underground nature of polygynous marriages in North America we know little about divorce rates in North American polygynous communities, though Jankowiak (2008) reports that more than 40% of the women in the FLDS polygynous communities of Colorado City and Centennial Park will divorce during their lives. The comparable statistic for the U.S. in general is 34%, and the number for other religious groups who condemn divorce such as Catholics is much lower (it's also much lower for atheists). More systematic and controlled analyses from polygynous societies generally show higher divorce rates for polygynous vs. monogamous marriages in the same society (Gagebrandon 1992; Elbedour et al. 2002). Even these analyses, however, are not entirely persuasive, due to small, localized, samples and sometimes a lack of statistical controls. A more detailed

An important concern with the analysis of genetic relatedness above, which suggests that violence and abuse may be higher polygynous households, is that much of the existing research has focused on men as the perpetrators of the additional abuse and filicide. If stepfathers are the only concern, maybe there will be no difference between the polygamous and monogamous households (since they include no stepfathers). That is to say, if stepfathers are the problem, then the children of three women are no worse off sharing one father than having one husband per mother.

This is why Exhibit D, the paper by Weekes-Shackelford and Shackelford, is so important. In their analysis of an FBI database, which is much larger than previously used by Daly and Wilson, these authors were able to calculate and compare the rates of filicide by stepfathers and stepmothers, as compared to their genetically related counterparts. In this data, while a stepfather is 8.5 times more likely to kill his child (stepchild) compared to genetic fathers, stepmothers are still 2.4 times more likely to commit filicide. Comparing stepfather and stepmothers, stepmothers have a rate that is roughly 1/3 that of stepfathers. That's three unrelated mothers equal one unrelated father, in terms of mortal danger for the child.

Beyond violence per se, the data also demonstrates that a lack of genetic relatedness puts children at higher comparative levels of risk. Studies show, for instance, that investments of money, time and effort by mothers are generally lower for step or adopted children *when* those children compete with the mother's own genetic children (Gibson 2009; Daly and Wilson 1980).³ For example, adopted and stepchildren do not wear seatbelts or go to the dentist as much as genetic children. Data from Australia indicates that children living with genetically unrelated parents are much more likely to be "accidentally" killed, compared to both children living with two genetic parents *and even* children living with a single genetic parent. While children living with a single genetic parent are only 1.29 times more likely to die accidentally, children living with an unrelated parent are between 15 and 77 times more likely to die accidentally (children living with no biological parents are between 37 and 102 times more likely).

investigation from Nigeria, which controlled for differences in religion, education, urban living, childlessness and several other variables, shows that while polygynous marriages with 3 or more wives are highly unstable, polygynous marriages with only two wives were more stable than monogamous marriages. Relative to monogamous families, polygynous families with more than two wives are five times more likely to divorce. Meanwhile, 2-wife polygynous families divorce half as often as monogamous households. This applies to both Christian and Muslim marriages. Using the numbers from this study I calculated that permitting polygyny will increase the divorce rate unless the number of 2-wife marriage is at least triple the number of all other polygynous families combined. Note, however, that this study too has some shortcomings in that it was not able to control directly for income (using education as a proxy), or the ages of the husband and wife at first marriage. Nevertheless, it was the best study I could find given the relatively short period between receiving Dr. Shackelford's affidavit and submitting these notes.

³ Adopted children, however, do just as well as genetic children as long as they are not directly competing with a sibling who is the genetic progeny of the parents.

Now, consider adding a new wife with two children to an existing polygynous family with three wives already. The two new children are now stepchildren to the husband (same as a monogamous family). But, in addition, these children have three stepmothers. And, any children of the other wives now have a new stepmother. This evolutionary logic makes a straightforward prediction here: children will be worse off in polygynous households.

Conflict Among Co-Wives

Unrelated women within a polygynous household compete directly for household resources. The outcome of these conflicts may directly impact the future welfare of their genetic progeny. This is a zero-sum game among non-relatives without common genetic interests (that is, no common offspring). In a typical monogamous nuclear family all pairs of individuals are close genetic relatives, or share a common genetic interest (spouses are unrelated but linked genetically through shared offspring). Under such circumstances, the approach taken by Dr. Shackelford (and I) predicts that serious conflicts will likely arise among the unrelated women in the household.

Of course, we do not know how precisely this logic will play out in polygynous situations in North America—there's no quantitative data, though ethnographic work with Mormon polygynous communities in the U.S. suggests there is substantial conflict among the co-wives (Jankowiak 2008).

Since we lack detailed North American data to directly compare polygynous and monogamous households on this front, we can look elsewhere in world. After a comprehensive review of the literature, Elbedour and colleagues (2002) summarize by writing that children from polygamous families experience higher incidences of marital conflict, family violence, and family disruptions than do children of monogamous families. They also suggest that the creation of stepparents is more common as men often leave their first wives to be with their newer wives, but they keep the children, opening the door for abuse and neglect by unrelated mothers. This converges with an anthropological review of ethnographic data from 69 non-sororal polygynous societies from around the globe that shows the omnipresence of co-wife conflict (Jankowiak, Sudakov, and Wilreker 2005).⁴

Besides conflict among unrelated cowives and between cowives and their unrelated children, there is also potential for conflict among brothers and sisters, since many of these individuals are actually only half-sibs and may be dramatically different in age. Even siblings have conflict, since they compete for the same resources from the parents. This sibling rivalry is mitigated by the altruism that comes with being closely

⁴ Interestingly, many of the places in which conflict was less pronounced occurred where women were permitted to (and regularly do) maintain extramarital romantic relationships.

related. Half-siblings, however, are only half as related as full siblings and face at least as much competition, a Darwinian approach predicts deeper conflicts among the half-sibs in polygynous households. Much work already shows that people finely distinguish close relatives (brothers) from more distant relatives (uncles). Half-sibs are related like uncles, though these are nominally paternal half siblings, which means they are likely treated as if they are somewhat less related than maternal half siblings.⁵

These predictions, which are underpinned by the basic evolutionary logic found in Dr. Shackelford's Exhibits B, C and D, find support both from studies around the world and from work in polygynous Mormon communities. Looking broadly, after examining ethnographic material from 69 polygynous societies, Jankowiak et. al. (2005) found no case where co-wife relations could be described as harmonious, and no hint that women's access to the means of production had any mitigating impact on conflict. Consistent with this, in an in-depth study of a Fundamentalist Mormon community in the U.S., Jankowiak (2008) found substantial conflict among co-wives in patterns consistent with his cross-cultural review. In the same community, Jankowiak and Diderich also compared the solidarity, affect, association and altruism between full and half siblings in polygynous Mormon families. The data reveal much greater association, affect, solidarity, and altruism toward full siblings compared to half-siblings. This finding is interesting since it runs directly contrary to official ideological preaching in this community.

Studies conducted elsewhere by biologists and economists reveal similar patterns. After a long-term quantitative and qualitative study in Mali, Straussman (1997) highlights the conflict among both cowives and half-sibling sons. Mothers both reported and widely feared that their cowives would try to poison their sons—so the poisoner's son could inherit the father's land. Straussman also shows that children of polygynous marriage have a statistically increased chance of dying (relative to monogamous marriages), and she argues that this increases the stress experienced by children. This converges with ethnographic accounts in which completing cowives suspect and accuse each other of engaging in witchcraft. Similarly, on the Ivory Coast, a sophisticated econometric analysis shows that the children of first wives in polygynous marriages receive extra education, probably because of the relative power of the first wife (Mammen 2009).

⁵ It is important to realize just how discriminating people are regarding kin-relatedness. Evolutionary theory predicts that people ought to behave more altruistically—as if they were more closely related—to those who are related through a matriline (e.g., mother's sister's son) than to those related through a patriline (e.g., father's, brother's son). This is because every linkage through a male brings some paternity uncertainty (was he really the genitor?). Amazingly, several empirical studies in different countries now demonstrate that people make this distinction in the predicted manner (Buss 2007). This is important in the case of polygynous families because many of the siblings are actually (or supposed to be) genetic half siblings through the paternal line. Because it is through the paternal line, the theory used by Dr. Shackelford and me predicts more conflict than with equivalent half siblings related through the mother.

Converging with these ideas is long-term research in the Caribbean, which shows how different household compositions impact cortisol levels (a stress hormone) in children. Children in nuclear families with only the genetic parents showed the lowest cortisol levels. Meanwhile, children in households with distant relatives, stepfathers, and half siblings showed the highest cortisol levels of any household composite in the sample (Flinn, Ward, and Noone 2005). This suggests that the children of polygynous households will run higher cortisol levels, due to the presence of unrelated mothers and half-siblings.

Before closing this section, I'd like to emphasize that while there is only limited data from North American polygynous communities, the data we do have suggests that these populations are not unusual when placed in the spectrum of polygyny seen across the globe. Like polygynous communities in other places, such as Africa, North American polygynous families have higher child mortality, substantial co-wife conflict, biased treatment by mothers toward their genetic vs. their non-genetic children, and differential feelings and behavior between siblings and half-siblings in such households (Heath and Hadley 1998; Jankowiak 2008; Jankowiak and Diderich 2000; Jankowiak, Sudakov, and Wilreker 2005). This provides some confidence that non-North American findings have applicability here.

In summary, when the ideas and evidence contained in the materials submitted with Dr. Shackelford's Affidavit are applied to polygynous households, they predict higher rates of neglect, abuse and murder than we'd expect in monogamous households. The available evidence, while not able to directly compare polygynous vs. monogamous households *in North America*, converges well with the expectations developed. These findings also converge well with country level data summarized in my affidavit showing that polygynous countries have higher infant and child mortality rates than comparable monogamous countries (Table 6). This does not contradict any analysis of Dr. Shackelford, but merely extends his ideas by applying them comparatively to monogamy and polygyny.

The Role of Sexual Jealousy and Age Disparity

Dr. Shackelford's affidavit also highlights how sexual jealousy in monogamous marriages leads to domestic violence and intra-couple rape. I find no fault with the work presented, and feel it is important research. However, again, no effort was made by Dr. Shackelford to comparatively examine the *relative rates* of such violence in monogamous and polygynous marriages. No evidence from polygynous marriages or societies is considered at all. The relevant and unaddressed question is whether evolutionary theory predicts any differences in the rates of violence among monogamously and polygynously marrying couples. It would completely miss the point

to note that some level of violence occurs in monogamous marriages, without assessing matters comparatively.

The application of precisely the Darwinian logic that Dr. Shackelford applies to monogamous marriages predicts that rates of violence driven by sexual jealousy will be at least as high, and probably higher, in polygynous societies as compared to monogamous societies. There are three reasons why it should be worse (more violent) in polygynous societies. First, my first report documents both the theory and extensive empirical evidence of how polygyny drives down the age of first marriage for women and expands the age gap between husbands and wives (Section D.2 and D.4 for both macro and micro analyses). This applies to first wives as well as to (in more extreme fashion) subsequent wives. Testing the evolutionary idea that sexual jealousy should increase as the age gap between husband and wives increases, Breitman and Shackelford (2004) show that in Chicago, controlling for a wide range of other factors, the age gap between husbands and wives is strongly related to homicide rates. The larger the age gap, the more likely it is that a husband will kill his wife, and vice-versa (the young wife murders her husband). Notably, however, the effect is highly non-linear: in moving from spouses being the same age to husbands being between 13 and 15 years older, the rate increases from 5 per 100,000 to 8 per 100,000. Then, it spikes to almost five times the same-age rate. This suggests that polygyny is relatively (potentially) much more dangerous than monogamous relations because age gaps of 16 years are not uncommon when accumulating young wives (Jankowiak 2008).

A second application of these ideas to polygynous households involves paternity uncertainty. As Dr. Shackelford points out, sexual jealousy is linked to paternity uncertainty. If a man has multiple wives he may have an increasingly difficult time keeping track of where they all are at any one time ("mate-guarding" is more costly), especially since they often maintain separate residences to manage co-wife conflict. Since polygynous husbands typically circulate among their wives residences or rooms on different nights, there may be many nights in which the husband has little idea about what his other wives were doing. This will lead to greater paternity uncertainty and potentially to more use of violence as a form of coercive control, along the lines sketched by Dr. Shackelford.

Finally, as explained in my first report, polygyny will create greater competition in the mating and marriage markets, since all married men are still "on the market" (to add wives) and must compete with the ever expanding pool of unmarried men created by polygyny. This will elevate competition for women and cause men to shift to more violent and suppressive measures to sustain paternity certainty, and retain their wives. Empirical evidence for this prediction is supplied in my original report. There, I review data showing that greater polygyny is associated with less gender empowerment and lower rates of female literacy (Section D, Table 7). Using sex ratio as a proxy,

regression analyses show that countries with relatively more men show lower female empowerment on several variables, even controlling for a variety of socioeconomic differences (Section D.5.a). Among the measures of female empowerment analyzed was the age gap between husbands and wives: countries with higher male-to-female ratios have greater age gaps between husbands and wives. These findings hold, *and are actually stronger*, when the same analysis is limited only to developed countries.

Implications in North American Context

The picture emerging from both our application of evolutionary theory and the available quantitative data suggests that competition should be fierce for mates in polygynous communities or societies, even in North America. And, consistent with work in polygynous African societies where men pay bride-price to acquire wives (often in the form of cattle) or in New Guinea where men engage in "sister exchange", a 15-year long ethnographic study in the FLDS community in Colorado City/Centennial Park in the U.S. reveals similar dynamics. Anthropologist William Jankowiak writes (p.171):

There is a shortage of eligible women to marry in every polygynous society, and this is a primary factor responsible for intergenerational conflict in Colorado City/Centennial Park. Senior males are always on the marriage market and thus compete with younger men for mates in a limited pool of eligible women...in the 1960s a local policeman, without approval of the religious leadership, would threaten to arrest unmarried males who did not leave the community...The competition for mates is acute...Young men know...that if they do not find a girlfriend before they graduate from high school, they probably never will have one. Without a girlfriend, they will leave the community to find a wife (p. 172-173).

For those possessing contemporary Western values regarding gender equality it may be difficult to imagine how educated, modern North Americans could ever come to "compete" for women, or treat them as "resources" to be divided up. However, the social dynamics created by polygyny appear both powerful, and stable. In Colorado City/Centennial, which has been a polygynous community for well over a century, Jankowiak first describes the residents as integrated into mainstream American life, drinking coffee and alcohol, and visiting national parks and malls. Dinner conversations at polygynous tables range across topics such as current events, "the entertainment value of 'The Lord of the Rings'", "the benefits of flaxseed oil for preventing illness" and religious issues (p.165). In other words, a fairly normal picture of Middle America. Then, Jankowiak describes the social dynamics of marriage:

In this setting, fathers often exchanged daughters in order to marry them...men wanted to marry off their daughter before they could decide to select from within their age cohort. By the 1990's Second Ward fathers began to negotiate marital

exchanges not for themselves but for a favorite son, or in some cases a grandson (p. 171).

Within the First Ward, families also gave/give daughters as a kind of patronage to the prophet. Jankowiak writes:

The prophet's age does not restrict families from offering their daughters to him...the reason why fathers give their daughter to the prophet (often with a wife's encouragement) are to gain prestige and to obtain material and spiritual benefits (p. 171).

Concerns that the analyses presented in my affidavit are only applicable to the underdeveloped world, or somehow not relevant to Canada in the 21st century, are inconsistent with the available empirical data. Both the quantitative analyses of sex ratio, which are stronger in developed countries, and the qualitative studies of life on the ground in North American polygynous communities, which appear otherwise part of mainstream America, indicate no reason to suspect that North America is somehow exempt from the effects observed globally.

Conclusion

In summary, both evolutionary theory and some empirical evidence are consistent with the view that intra-familial violence, abuse, child mortality, neglect, stress levels, and sexual jealousy will be at least as bad, and probably worse, in polygynous families and societies as contrasted with their monogamously marrying families and societies. Neither evolutionary theory, as developed by Dr. Shackelford, nor the available empirical data—limited as it is—are consistent with the opposite view.

Discussion of Demographics from Bountiful Community

I was asked to examine the available demographic data from the FLDS community at Bountiful and consider it vis-à-vis other polygynous communities. Table 1 organizes the data I was provided.

Based on the data I was provided, the percentage of men who are polygynous is 33%, making this a “highly polygynous” community by global and historical standards. Of the 147 ethnographically and historically known polygynous societies that have been sufficiently quantified by anthropologists in the Standard Cross-Cultural Sample (White et al. 1988), the FLDS community at Bountiful is at the 83rd percentile. This means that only 17% of the 147 independent human communities for which there is sufficient anthropological data have a higher percentage of polygynously marrying males.⁶

⁶ Of course, many African societies of today have higher percentages of polygynous marriages. See my report.

The majority of married men (66%) are currently monogamously married, though probably many of those will eventually marry polygynously. Twenty percent of married men have two wives. Nine percent have three wives and four percent have five wives. Such proportions fit well with the illustrative example used in my report.

Consistent with the ethnography described above from the FLDS communities in the U.S., there is an imbalance between the numbers of men and women. Thirty percent of the adult men appear to be missing, or alternatively females have entered the community from elsewhere at a greater rate than males. Some imbalance is expected because women live longer than men, on-average. If we adjust for this, the imbalance is still over 20%. Moreover, this expected imbalance can even be observed among 16 and 17 year olds, where

there are 2.7 times as many females as males. Interestingly, while there is an excess of never-married males (compared to never-married female), the totals for currently unmarried adult males and females are equal. These patterns suggest some combination of an outflow of males and an inflow of females.

Overall, the FLDS community at Bountiful appears demographically similar to other polygynous communities found globally. Nothing in these numbers suggests that polygyny somehow operates differently in North America.

Table 1.	Male	Female	Total
Monogamous Married	30	30	60
Polygynous Married totals*	15	40	55
2 wives	9	18	27
3 wives	4	12	16
5 wives	2	10	12
Unmarried 18+	33	22	55
Single parent	1	8	9
Widowed	0	4	4
TOTAL ADULT	79	104	183
Children			
17 years old	1	7	8
16 years old	5	9	14
School Age <16			229
Pre-school age			114 appr.
TOTAL FLDS			548

References

- Breitman, N., and T. K. Shackelford. 2004. Couple Age Discrepany and Risk of Intimate Partner Homicide. *Violence and Victims* 19 (3):321-342.
- Buss, D. 2007. *Evolutionary Psychology: The New Science of the Mind*. 3rd ed. Boston: Allyn & Bacon.
- Daly, Martin, and Margo Wilson. 1980. Discriminative Parental Solicitude: A Biological Perspective. *Journal of Marriage and Family* 42 (2):277-288.
- Elbedour, S., A. J. Onwuegbuzie, C. Caridine, and H. Abu-Saad. 2002. The effect of polygamous marital structure on behavioral, emotional, and academic adjustment in children: A comprehensive review of the literature. *Clinical Child and Family Psychology Review* 5 (4):255-271.
- Ellinn, M., C. Ward, and R. J. Noone. 2005. Hormones and the Human Family. In *Handbook of Evolutionary Psychology*, edited by D. Buss. New York: Wiley.
- Gagebrandon, A. J. 1992. The Polygyny-Divorce Relationship - a Case-Study of Nigeria. *Journal of Marriage and the Family* 54 (2):285-292.
- Gibson, Kyle. 2009. Differential parental investment in families with both adopted and genetic children. *Evolution and Human Behavior* 30 (3):184-189.
- Heath, Kathleen Marie, and Craig Hadley. 1998. Dichotomous Male Reproductive Strategies in a Polygynous Human Society: Mating versus Parental Effort. Wenner-Gren Foundation.
- Jankowiak, W. 2008. Co-Wives, Husband, and the Mormon Polygynous Family. *Ethnology* 47 (2-3):163-180.
- Jankowiak, W., and M. Diderich. 2000. Sibling solidarity in a polygamous community in the USA: unpacking inclusive fitness. *Evolution and Human Behavior* 21 (2):125-139.
- Jankowiak, W., M. Sudakov, and B. C. Wilreker. 2005. Co-wife conflict and co-operation. *Ethnology* 44 (1):81-98.
- Mammen, K. 2009. All for One or Each for Her Own: Do Polygamous Families Share and Share Alike? : Columbia University.
- Strassmann, Beverly I. 1997. Polygyny as a Risk Factor for Child Mortality among the Dogon. Wenner-Gren Foundation.
- White, Douglas R, Laura Betzig, Monique Borgerhoff Mulder, Garry Chick, John Hartung, William Irons, Bobbi S Low, and Keith F Otterbein. 1988. Rethinking polygyny: co-wives, codes, and cultural systems. (Includes comments and author's reply). *Current Anthropology* 29 (4):529(44).

From: Robert Wickett [mailto:rwickett@maclaw.bc.ca]
Sent: Friday, November 5, 2010 4:46 PM
To: Jones, Craig E AG:EX
Cc: George Macintosh; Ludmila Herbst; Tim Dickson
Subject: RE: Request for FLDS Marriage and Demographic Data

Craig

The marriage records do not reflect ages, unless there is something I am missing. I've seen a sampling that were disclosed in the Oler criminal case and there are no indications of anything other than the names, date of marriage and the witnesses. The flds is involved in litigation with respect to these records and it cannot and does not consent to the transfer of these records to this, or any other jurisdiction. There are no marriage records in Bountiful.

In respect of the head count of people in Bountiful I am instructed as follows, keeping in mind this was a head count and so it is approximate in the sense that E and OE;

Total residents who are members of FLDS	548
pre school age children	114 roughly
children in school	251
home schooled children	a few
married persons	115
unmarried persons 18 or older	55 (22 females and 33 males)
17 year olds (all unmarried)	8 (7 females and 1 males)
16 year olds (all unmarried)	14 (9 females and 5 males)
married persons living in monogamy	60
married persons living in polygamy	55
of those in polygamy; family of 3	27
of those in polygamy; family of 4	16
of those in polygamy; family 5 or more	12

the largest polygamist family is a family of 6

there are 8 single mothers, 1 single father and 4 unmarried widows.

If I learn that there are errors to be corrected, I will let you know.

Anything arising, let me know.

Bob

Robert Wickett
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This is Exhibit "B" referred to in the
affidavit of Joseph Hennich
Sworn before me at Vancouver
in the Province of British Columbia, this
15 day of November, 2010
A Commissioner for Taking Affidavits
within the Province of British Columbia

**Affidavit #2 of Joseph Henrich
Sworn November 15, 2010**

**No. S-097767
Vancouver Registry**

IN THE SUPREME COURT OF BRITISH COLUMBIA

IN THE MATTER OF:

THE CONSTITUTIONAL QUESTION ACT, R.S.B.C. 1996, C.68

AND IN THE MATTER OF:

THE CANADIAN CHARTER OF RIGHTS AND FREEDOMS

AND IN THE MATTER OF:

A REFERENCE BY THE LIEUTENANT GOVERNOR IN COUNCIL SET OUT IN
ORDER IN COUNCIL NO. 533 DATED OCTOBER 22, 2009 CONCERNING THE
CONSTITUTIONALITY OF S. 293 OF THE CRIMINAL CODE OF CANADA,
R.S.C. 1985, c. C-46

AFFIDAVIT

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**CRAIG JONES
Barrister and Solicitor**