Adoption, Survival and Culture: Application and Comparative Review of Joan Silks Kinship Theory of Adoption with Select Cultures from Various Geographic Locations

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Adoption, Survival and Culture: Application and Comparative Review of Joan Silks Kinship Theory of Adoption with Select Cultures from Various Geographic Locations

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Abstract: Adoption is a rather peculiar phenomenon of human society which is almost exclusive to our species, at least so far in how prolific it is. Adoption always involves some altruistic behavior at least initially (Silk 1987:40), and in our modern society it would certainly seem to be just that. Adoption of course is not simply an invention of modern times or western culture though as some may think, but exists cross-culturally; in an HRAF search of 258 cultures 162 cultures are shown to have some form of adoption. The prevalence of adoption has led many anthropologists to attempt to explain how it could have developed from an evolutionary perspective, a pursuit many would consider folly. Much of the attention anthropologists have devoted to studying this phenomenon has been directed to the cultures of the Oceania island nations, where adoption is common, and so much of the current theories on adoption are based on the forms of adoption that exist there, which has been explained by anthropologist like Joan Silk as an adaptive mechanism used to improve one’s own inclusive fitness. In her theory she gives that the reasons and expectations for adoption being among others: 1.) Family labor balancing, 2.) Adjustment of family and composition, and 3.) Replacement of a lost child, or a solution for infertility. I have used the Resources available through the eHRAF to perform a cross-cultural comparison of Silk’s theories and predictions on adoption with other cultures in different parts of the world in order to see if Silk’s Kin selection in adoption theory can hold up as a general theory for human adoption cross culturally.

Introduction
Adoption is "the reduction or termination of investment in offspring by natural parents and the initiation of investment by other adults" (Silk 1980:801), and is an institution that has deep roots in our society, one that I myself had always associated with the developed world, and as something that happens between complete strangers. However, as one delves deep into the anthropological study of social and kinship structures across the globe it soon becomes quite clear that adoption is practiced by many cultures from all over the world, from small tribal societies to complex state level societies who practice adoption to various degrees and ends. We even have about half of adoptions in 1960s America taking place between relatives (Carroll 1970:5) which is completely contrary to my own assumptions about adoption in this country. Early anthropological studies of adoption, such as the ones summarized in Carrol's Adoption in Eastern Oceania, have met with a great amount of difficulty in accurately describing the practice of adoption or in coming up with a theory that can properly explain the reasons for its existence. This is especially difficult since adoption has always been considered an altruistic behavior and therefore the prevalence of its practice, it was presumed, could not be explained by an evolutionary perspective, such as that of the kin selection theory (Silk 1980:801; Silk 1987:2). For this reason much of the original anthropological studies on adoption up till 1980 have attempted to study adoption as being a purely cultural phenomenon (Carroll 1970), an example of human beings separation from the Darwinian forces of evolution (Silk 1980).

Altruistic behavior has always been a topic that has consistently done an effective job of throwing a wrench into the evolutionary biologist's theories of selfish genes and genetic fitness by contradicting the very logic of natural selection on which these theories and explanations are based (Silk 1980:800; Silk 1987:320), and as such has led many scrambling to explain its existence away with in the perspective of Darwinian evolution. Early attempts at explaining the evolutionary benefits of this phenomenon have revolved around the concepts of group advantages (Silk 1980:800), the basic concept being that groups who encourage and practice altruistic behavior will be far more successful than groups who operate entirely based on their own selfish impulses. This explanation has proven insufficient due to its inability to account for the fundamental principle of Darwinian evolution: organisms will tend to act in their own genetic interests as opposed to the interests of others (Silk 1980: 800). This lack of consistency has led many researchers to create new theories of altruism.
that better explain its existence in terms of individual evolutionary investments.

Anthropologists have long taken issue with the use of kin selection theories in explaining cultural behaviors. Much of this resistance has come out of the anthropological insight that the use of English words and concepts as blanket terms in the cross-cultural analyses and description of various behavioral phenomena prejudices our understanding of these phenomena (Carroll 1970:1). It does this by injecting assumptions of our own culture into our observations of these phenomena (Carroll 1970:1). However, the danger here lies in how these assumptions can possibly distort our data unconsciously (Carroll 1970). Under such a revelation it may seem like the comparative cross-cultural study of any phenomenon would seem like an impossibility, but Carroll says that a definition of adoption can be made effective by using a general theory of kinship as a reference point (Carroll 1970). However from the rest of his writings Carroll means kinship in the culturally constructed sense of kin terminologies mostly and not so much in the description of the degree of genetic relatedness between any particular individuals in a group, this limits any study of kinship to that of the culturally created world. This can be seen in Carroll’s predictions of adoption: according to Carroll we would expect to see adoption practices where ever a culture reinforces the need to care for one’s own children so heavily that childless adults begin to feel incredibly deprived (Carroll 1970:8). In his study and review of the studies of adoption in Eastern Oceania we do see that there is a universal desire to have children throughout the region, and that childlessness due to infertility does seem to be a problem for many groups (Carroll 1970:11). His culturally based predictions do bring up some serious contradictions though. For one many of the individuals in Oceania already have children of their own at the time of adoption which should mean their desires to care for a child are already sated (Carroll 1970). A second issue is that under Carroll’s predictions we would expect that parents would be incredibly reluctant to give up their own children unless they are completely unable to take care of that child themselves, and yet the data from Oceania shows that many of the children that are put up for adoption come from families that are more than capable of taking care of that child sufficiently (Carroll 1970). Carroll seems to suggest that this may be due to some lack of attachment with the child be giving up, but if this was true then why do we not see higher rates of infanticide and abandonment in these societies (Carroll 1970). This statement would also imply a contradiction with the basic principle that his theory is based on; if Oceania cultures value childcare so much then the situation where
parents feel little to no attachment to one of their own children to the extent that they have no qualms with severing ties with that child should be a rare phenomenon. Clearly a purely cultural explanation of adoption was not sufficient for explaining all of the instances under which adoption takes place, and has caused a renewed effort in explaining adoption through other paradigms.

One of the most well accepted theories that came out of this renewed search is that of the kin selection theory. As is stated in Joan Silk's 1980 paper on Adoption and Kinship in Oceania, and reinforced in her 1987 papers on adoption and fosterage among the West Africans and the Inuit, kin selection theory comes from the insights of Fischer on how relatives have overlapping genetic interests (Silk 1980:800). This creates a situation where the reproductive success of relatives increase the probability that an individual's genetic material will show up in the population of future generations to a degree that is directly proportional to the degree of relatedness they share with other members of that population (Silk 1980:800). The concept applied to this is that of inclusive fitness, which refers to how one's genetic fitness can be increased through both personal reproduction and the reproduction of relatives (Silk 1980:800). Inclusive fitness implies that people can improve their fitness by being selectively altruistic towards relatives, especially close relatives (Silk 1980:800; Silk 1987:41). Through much of the ethnographic evidence we can see that most altruistic behavior does occur under the basic predictions set forth by kin selection theory particularly in terms of adoption (Silk 1980; 1987).

The application of kin selection theory to that of adoption is one that originally led to some resistance as to just how applicable such a theory would be to a practice that is so overtly altruistic that it would seem to defy the adopted parents much in the way of their own inclusive fitness (Silk 1980). This is an issue that is directly addressed by anthropologist Joan B. Silk in her previously mentioned (and cited) paper on adoption practices in Polynesia. In this paper, through the perspective of kin selection theory, Silk provides a set of hypotheses that, under specific conditions, adoption practices would occur so as to increase the inclusive fitness of the individual, as would be necessary for adoption to be considered in an evolutionary context. Her theory was based on heavy analysis of adoption practices found across the cultures located in the geographic area known as Oceania, an area of the world with very high rates of adoption by tribal societies, thus providing a strong case area in which to formulate theories on adoption practices, and then reinforced her theory through additional studies of adoption practices in both West Africa and the Inuit of North America. The basic theoretical framework that she provides is one of general
cross cultural applicability that is intended to be one that could possibly be used to describe the circumstances under which the majority of adoption practices occur in other tribal/traditional societies from across the globe. Indeed at the end of her paper she calls for just such a cross cultural study in order to create a more complete general theory of adoption in kin selection theory.

This paper will look at several non-Polynesian traditional/tribal cultures selected from an HRAF culture search for the occurrence of adoption in order to compare and evaluate these practices under theoretical framework laid out by Silk. We will begin with a general summary of Silks theory of adoption and the maintenance of inclusive fitness. Then move on to a general description of each culture selected for comparison, going over their geographic location and the research on their traditional adoption practices. This will be followed by an in-depth discussion as to the utility of Silks adoption theory for explaining the conditions under which adoption takes place for these societies. This is meant to provide a frame work for the continued research into the subject of adoption.

Overview of Silks Theory of Adoption

Silks theory revolves around the adjustment of natural variation in family size being the fundamental consequence of adoption, so any benefits to inclusive fitness would have to be primarily originating in the alteration of family sizes to that of an optimal number of children. According to Silk “the regulation of the number, timing, and sex ratio of offspring is a critical element of parental reproductive success in many species” (1980:801) and that inevitably the true measure of parental fitness is whether or not the offspring produced are able to reproduce themselves (Silk 1980). From here we have two strategies by which parents can maximize their own parental fitness: quantity and quality (Silk 1980). The ideal would be to produce as many offspring as possible while still ensuring that all offspring that are produced are able to survive long enough to reproduce themselves. The main issue here is that the quality of parenting is inversely related to the number of children produced. Under these circumstances any adaptation that would allow a parent to increase the number of children they produce without decreasing the quality of care they are able to give to each child would be incredibly advantageous to their inclusive fitness (Silk 1980:801). According to Silk, adoption is one method by which just such an ends can be met. Silk provides two models by which adoption accomplishes this based on the understanding that the fitness of the children in the adopting
family, the children in the natal family and the adopted child itself are potentially affected by adoption (Silk 1980:802).

Model one states that, assuming a limited number of resources are available to parents for the raising of children, adoption will always benefit the children of the natal family while there will always have detrimental effects to the adoptive family (Silk 1980:802). As far as the adopted child is concerned, they will only receive benefit if the adopted family is noticeably smaller than their natal family (Silk 1980:802). In these situations the detrimental effects that the adoptive family will inevitably bear are adjusted through the kinship ties of the two families, since the fitness of one set of parents indirectly influences the inclusive fitness of the other set of related parents by the amount of relatedness between the parents (Silk 1980). Therefore we would expect adoption to benefit the adoptive parents only when the indirect benefits achieved by taking on the responsibility of improving the fitness of the adoptive child exceeds the direct cost on the fitness of the existing natural children of the adoptive parents (Silk 1980:802; Silk 1987:321). Here the existence and use of kinship between family’s acts to increase the likelihood that adoption will be advantageous to the adoptive parents through the increase of their inclusive fitness by increasing the personal fitness of close relatives as well as the natal parents who benefit by being able to increase their quantity of their offspring without decreasing the quality of their offspring (Silk 1980; Silk 1987).

In her second model the family is considered as functioning as a viable economic unit that may only operate effectively and efficiently if it contains a “critical” number of children capable of participating in the subsistence activities of the family unit (farming, hunting, gathering, etc.) (Silk 1980:802; Silk 1987:321; Silk 1987:44). Under this framework any family below the threshold should benefit economically from adopting another child (Silk 1980:802; Silk 1987:321-322). Families who are at or above the threshold will only benefit from adoption by giving up a child for adoption (Silk 1980:803). This creates a situation in which adoptive parents will actually directly benefit economically from adoption transactions (Silk 1980:803). Again the presence of kinship between both sets of parents will help to adjust the range under which they both will benefit (Silk 1980: 803).

From these two models she creates four empirical predictions of adoption and adoption transactions; 1) adoption is expected to occur...
primarily among kin; 2) differences in the degree of relatedness between adoptive parents and natal parents might potentially create a situation of unequal treatment of the adoptive child which is expected to be directly proportional to the degree of relatedness of the adopted child to his adopted parents; 3) in order to control for the possibilities in the second prediction natal parents are expected to maintain, to some degree, an active role in continuing to ensure the welfare of their adopted children, as well as to take a great interest in just who is going to be adopting their child, with preferences for individuals who can provide greater economic benefits for the child than what the adoptive child would be able to receive with their natal family; and 4) adoptions are expected to result in the modification of extreme family sizes for the benefit of both natal and adoptive parents. Within her paper she provides detailed evidence and explanations of each of these predictions from the ethnographic evidence available from Oceania.

In her study of adoption transactions among Oceania, Inuit and West African populations she was able to find considerable evidence in support of the first prediction; adoption is expected to occur primarily among kin. She shows quite decisively that an individual’s kinship ties factor in heavily in the vast majority of all adoption transactions throughout Oceania, Inuit tribes, and West Africa (Silk 1980; Silk 1987). In places like Hawaii 100% of all children adopted were related to adopted parents in some way (Silk 1980:806). This is shown to be supportive of the general principals of kin selection theory in that it predicts that altruism will be directed towards relatives more often than towards non-relatives, since relatives would be the only ones who would receive any benefits from the increase of inclusive fitness of the natal family and child (Silk 1980). Furthermore her data showed a strong preference for the adoptive family to be related to the adopted child by between 0.125 and 0.25² (Silk 1980: 807). This fits in with Model 1 that shows that the increase in relatedness between the two sets of parents in adoption transactions will bring about an increase in the benefits to inclusive fitness received by the adoptive family. In other societies we would expect to see the same preference for the adoptive family to be related to the adopted child by preferably 0.25 (so in other words to have at least one adoptive parent be a sibling of one of the adopted child’s biological parents). We would also predict a greater prevalence of adoption transactions in societies with a higher rate of relatedness amongst its members (Silk 1980).
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The neglect of the adoptive child by their adoptive parents
does create a less than desirable situation for that child’s natural parents
who would see their own inclusive fitness reduced by this neglect (Silk
1980). This could make adoption possibly counter-productive for the
natural parents, since the point of giving up one’s child is to increase
that child’s economic standing thereby increasing the parents own
inclusive fitness. It is because of this we would expect to see Silk’s
third prediction; In order to control for the possibilities of neglect in
prediction two natal parents are expected to maintain, to some degree,
an active role in continuing to ensure the welfare of their adopted
children, as well as taking an interest in by whom the child is adopted.
The issue here is that in adoption it is generally assumed that there will
be a transfer of legal authority over the child from natal parent to
biological parent. According to Silk, 1980 however the degree to which
this authority is transferred between the two sets of parents can
theoretically range along a continuum of authority transfer; from
exclusive control by adoptive parents to mutual authority over the child
from both sets of parents. The reason for this varying degree of jural
authority transfer is most likely related to the degree the biological
parents would wish to control for the neglect of their child at the hands
of the adopted parents, as was outlined in the previous paragraph. In
this instance “sharing jural authority over natural children with the
adoptive parents may be a relatively low cost means of protecting the
welfare of the adopted child” (Silk 1980:813). This would be greatly
beneficial to the natal parents because, as stated above, any amount of
neglect that their natural children experience at the hands of their
adoptive parents would only lower the inclusive fitness of the natural
parents (Silk 1980). The most common and effective means natural
parents have over insuring that their child is not being neglected is the
retaining of the right to terminate the adoption at any point (Silk
1980:814). Further buffering against the neglect of an adopted child
comes from strong social sanctions against the exploitation or neglect
of adopted children which usually comes in the form of banning
individuals guilty of neglect from adopting again (Silk 1980:814). If
the original adoption came about from economic necessity than the
prevention of future adoptions could create considerable economic
dilemmas for the adoptive parents.

The economic necessity that is seen as the cause of many of
adoptions, as well as what makes the banning of an individual from
adoption so economically detrimental, lies in Silk’s fourth prediction;
Adoptions are expected to result in the modification of extreme family sizes. In many societies family size and composition have related economic needs that can create a strong motive for adoption in these societies (Silk 1980:814). In the previously stated models, and to some extent the expectations listed above, the benefit a child will receive from being adopted is expected to be inversely proportional to the number of natural children their adoptive family already has. In this sense the optimal situation is for a child to be adopted by a childless family (Silk 1980:814). One would also expect that an adoption would not take place unless the natal family has enough children to begin putting their family under enough strain. Another aspect of family size adjustment is the adjustment of the sex ratio in a family (Silk 1980:814; Silk 1987:326). This can be very important since a family’s economic and social success can depend heavily on proper balance of gender among their children; families will benefit from daughters through the bride price they can get for them and they benefit from sons by having someone to inherit your property in your death (Lotar 1928). Also sons can play a very important role as an investment in their parent’s social security, since it is most often the sons who take care of their parents in old age (Lotar 1928; Silk 1987:327). Often times a family with no sons or no daughters will adopt one from another family who was blessed with an abundance of sons or daughters and in this sense the adopted child would be expected to benefit more from being adopted by a family that does not have any children of the same gender as it (Silk 1980). This prediction also dictates that an adoption would not be likely to take place if the natal family is economically better off than the adopting family or if by adopting a child the adoptive families natural children’s subsistence would be noticeably reduced (Silk 1980:815).

Silk also states that according to this prediction we would expect that an adoptive family would only adopt a child that is “old enough to be useful” (1980:815). However the ethnographic evidence shows quite definitively that this is not the case, such as is seen throughout Oceania, the Inuit groups, the Hausa, the Iban, and the Santal (Archer 1984; Freeman 1955; Silk 1980; Smith 1955). In fact there is clearly a strong preference that the child being adopted be as young as possible at the time of adoption across the Oceania and Inuit cultures (Silk 1980; 1987). Most adoptions will actually take place almost immediately after the child is weaned from their mother such as in the Hausa (Baba of Kago & Smith 1954), and in the case of most of the Inuit cultures adoption will take place immediately after the child is
born (Silk 1987:323). This is somewhat reminiscent to that of puppy adoptions here in the US which generally takes place as soon as the puppy stops suckling. The reason giving for this by Silk, J.B. 1980 is twofold; 1) by adopting the child early the amount of investment by natal parents in the adopted child is greatly reduced making the adoption more economic for them; and 2) early adoption may foster greater emotional attachment between the adopted family and adopted child, increasing potential for cooperation among them (Silk 1980; Silk 1987:323).

Goals, Methods, and Limitations

Before moving on to evaluating the theoretical framework laid out by Silk, it is important to point out once more that this theory was entirely based on adoption practices in one particular cultural area of the world, that of Oceania. Through her follow up research in 1987 into the Inuit and West African cultures she was able to show that her theory seems to be very applicable cross-culturally. The goal of this paper is to take this another step further by trying to apply her theories to an even greater diversity of cultures. This is accomplished through the use of the Human Relations Area File to search for cultures that had large amounts of ethnographic data concerning their adoption practices and there were several cultures with extensive data on adoption, although most of this information comes from approximately the 1950-1960s and, as is the fluid nature of cultures and societies, the information being presented may no longer be accurate or up-to-date.

First Geographic Case Study: African Tribal Cultures

This paper begins its discussion in Africa with case studies of the Amhara, the Azande, the Hausa, the Nuer and the Somali. These five cultures had a considerable amount of data concerning their adoption practices as compared to that of the other African cultures available in the eHRAF, which also shows that high rates of adoption are common in these five cultures. We also see adoption taking on different forms between these five different cultures, representative of the great diversity in their different cultural beliefs and practices. One thing that separates the Amhara and the Azande from the cultures that Silk examined in her three papers is that both cultures have essentially two different types of adoption. Complete adoption and partial adoption, for the purposes of this paper we will focus mainly on full adoption.
The first culture that will be examined is that of the Amhara. Among the Amhara, when a couple decides to adopt they usually prefer to adopt an orphan, specifically an orphan of a closely related family member, as is expected under the first prediction of Silk’s theory, or that of a well-liked family friend (Messing and Bender 1985:199). Once a child has been chosen for adoption they can then choose to either adopt a child fully or partially. The partial adoption is used among the Amhara primarily in regards to step children where the new parent will adopt his new spouse’s children, however this form of adoption is not as tenuous and it seems there are far less sanctions against the exploitation and neglect of a partially adopted children (Messing and Bender 1980:189, 199), which is what we would expect to happen according to the second prediction of Silk’s theory that says the amount the adoptive parents exploits and neglects their adopted child should be inversely related to the degree of genetic or kin relatedness. But we do see heavy sanctions against neglect in full adoptions as is predicted in Silks third prediction (Messing and Bender 1980:189, 199). The Amhara do follow Silk’s fourth prediction perfectly since in all circumstances of Amharan adoption, with possibly the exception of the adoption of step-children, it is probably safe to assume that the child being adopted will always benefit in some way by being adopted since they are almost always an orphan beforehand, so any form of parentage will be a major improvement over their current situation. Silk’s fourth prediction is further fulfilled since among the Amhara the most common reason for full adoption is almost always that of a union that has been unable to produce any children (Messing and Bender 1985), this of course is exactly as what would be expected under the fourth prediction of Silk’s theory.

Another major reason given as to why parents would decide to take on an adopted child is so they will have someone to take care of them in their old age, and also so they may have someone who is of their kinship to inherit their lands and their property, both of these reasons given also meet Silk, J.B. 1980’s fourth prediction and part of her second prediction of adoption in that adoption can be used to manipulate land inheritance rights and adjust sex ratios, and are reasons touched upon in her papers on Inuit and African adoption.
Among the Azande adoption seems to be a solution to the primogenitor issue, in that it deals with childlessness and imbalanced sex ratios in accordance to the predictions of Silk's fourth prediction. In Azande society when adoption occurs it is almost always because a man and his wife where either not able to have any children or they were not able to have any sons who can inherit their land and take care of their funerary rites, or in the case of the adoption of a daughter to ensure that they can have access to bride price (Litor 1928:24-29B). In this case closely following Silk's first prediction the Azande may adopt the youngest nephew of the paternal side or he may adopt the youngest nephew of the maternal side if the paternal side is without sons (Litor 1928:24-29D). The adoption of the youngest paternal nephew in order to adjust family size or sex ratio fulfills all of the predictions that are laid out in Silk's theory of adoption. First they will almost only adopt a child who is related to them by at least .25 thereby maximizing the indirect benefits the adoptive parent would receive to their inclusive fitness as is predicted in Silk's first prediction. Since the child is being adopted by a very close relative with no natural children the high quality of care they are reported to receive is expected under Silk's second prediction. In this instance the amount of neglect the child is likely to receive from his parents will be minimal since he will not have to compete with any biological siblings or at least none with inheritance rights, thus insures the adopted child will inherit all of the adopted fathers land. In terms of the amount of shared jural authority in the case of the Azande at the time of reporting all authority would be given to that of the adopted parents. Although since the Azande are a patrilineal and patrilocal society the biological parents are generally not too far away so as not to be aware of any form of neglect that may happen, allowing the natural parents to maintain an interest in their child's welfare (Litor 1928) as predicted by Silk's third prediction; of course the main goal in Azande adoption is to adjust family size and composition, and by requiring that adoptive parents may only adopt their youngest nephew, a child who is considered to have no chance of inheriting land normally, the child is always going into a situation in which they are clearly better off than they were before as is what we would expect under Silk's fourth prediction (Litor 1928).

This brings us to our first anomalous case: that of the polygynous Hausa of Northern Nigeria. Among the Hausa adoption is very common, with most families having at least one adopted child (Baba and Smith 1954) the main reason for this does not seem to be due to any of Silk’s predictions, except for her prediction that communities with a high degree of relatedness will have a high degree of adoption, the reason for it is that the Hausa have a cultural taboo
involving the first born child. Among the Hausa it is considered an insult to the family if the parents were to associate with any of their first born children, to the point that they are not even allowed to live near each other or even speak each other's names (Baba and Smith, 1954; Smith 1955). This separation begins after the child is weaned at about two years where it is then sent off to be adopted by close relatives in another community, either to live with its grandparents, who are paradoxically expected to have a very close relationship to the first born, or to another closely related relative such as an aunt or uncle, there are few to no cases in which a child is sent off to live with non-relatives (Baba and Smith 1954; Smith 1955). It is because of this taboo concerning the first born child that the practice of adoption is so prevalent, and while the reasoning behind these adoptions does not fall into any of Silk's predictions the choice of the adoptive family does.

In all cases, as is mentioned above, a child who is sent off for adoption is always sent off to live with a close relative, either a grandparent or an aunt/uncle (Baba and Smith 1954:26) as would be expected from the first prediction of Silk's theory of adoption. In all cases the biological father always retains the right to terminate the adoption at any time if he deems the adoptive parents are not doing a sufficient job of taking care of their child\textsuperscript{10}, again evidence for Silk's third prediction. There is also a strong preference for the adoptive family to be fairly well off and more than capable of undertaking the additional burden of adopting the child: this along with the fact that a child is usually adopted by a mother who has none of her own children shows that adoption is undertaken in such a way as to ensure that the child being adopted will receive the maximum benefit from being adopted (Smith 1955:39) as is outlined in Silk's fourth prediction. So even though the reasons behind their high rates of adoption are not what we would expect from Silk's theories, after we control for the cultural forces behind Hausa adoption we actually find that their adoption practices do follow the predictions of Silk's theory fairly well.

The two final African groups, the Nuer and the Somali, are examples of adoption that do not seem to follow any of the predictions laid out in Silk's theory of adoption. In both cases adoption is mainly used as a tool of assimilation (Cerulli 1964; Evans-Pritchard 1933; Helander 1988; Johnson 1994). In both cases what will generally happen is that a particular clan will either adopt an outsider, an outsider and his family, or just a general group of outsiders into their clan so as
to help promote cohabitation between the two groups (Cerulli 1964; Evans-Pritchard 1933; Helander 1988; Johnson 1994).

The Second Geographic Case area: Southern & South-East Asia

Now to draw your attention to two Asian cultures whose adoption practices have been heavily reported on, the Iban and the Santal. Adoption in both groups is fairly common and particularly in the Iban, makes up an important component of their life.

The Iban are a culture in Malaysian Borneo that has a markedly high rate of adoption, with about 36% of all families having adopted a child at some point (Freeman 1955:5). There are two main reasons given for this incredibly high rate of adoption among the Iban: firstly the Iban have an incredibly high rate of marriage, in one study of three long houses everyone over the age of 30 had been married at some point, except for three men who were mentally and physically handicapped (Freeman 1955:7). Secondly the Iban also have an unusually high rate of childless marriages, with about 20% of all marriages of over ten years in Freeman’s study resulting in no offspring either due to infant mortality or sterility (Freeman 1955:7). This creates a situation where you have a large number of couples who have not been able to produce children, which presents a very pressing dilemma for the Iban whose primary purpose in life is the continuation of their Bilek (family household and name) through procreation (Freeman 1955). If the situation arises in which a dwindling Bilek is in danger of disappearing the preferred remedy for this is that of adoption (Freeman 1955). In Freeman 1955’s study of 107 sample Bilek families, 17 or ~16% depended on adoption for their future existence. Clearly we can see right away that the Iban example of adoption is following the fourth prediction of Silk, J.B. 1980’s theory on adoption.

When the Iban adopt a child they clearly prefer to adopt from one of their own siblings children, with 58% of adoptions in Freeman’s study coming from siblings in other Bileks, followed by a preference for children of cousins and then to a lesser extent the children of unrelated friends or captives from war. This clearly follows Silk’s first prediction of adoption. Here, especially when adopting from a sibling, an adoption can always be made before birth especially if there is seen to be a pressing need for this adoption to take place (Freeman 1955). Before every adoption there is always a very ceremonial negotiation over the terms of the adoption which always end in the agreement that a child’s rights to their former Bilek will be severed and that he will gain full rights to his new Bilek as if he had been born in it, including inheritance that are at least equal to that which would be received by a
natural born son (this fits in with Silk’s third prediction) (Freeman 1955:8). Throughout the ceremony the adoptive parents will continually remark on how any adopted child will be treated just as well, if not better, than that of a natural child (Freeman 1955:8). Even after adoption it is generally accepted by all Iban that for the most part an adoptive child will actually receive better treatment than that of a biological child, and there certainly seems to be no evidence here to the contrary (Freeman 1955). This is where we start to see contradictory evidence as to the level of care which an adopted child receives in proportion to its relatedness to the adoptive family; in Silk’s theory we would expect to see some evidence of neglectful care by the adopted parents towards children of little to no relation to them. In Freeman’s study of the Iban, however, he could find no evidence of any adopted child receiving anything less than stellar treatment by their adopted parents. Even among children of other clans captured during war their does not seem to be any reduction in the quality of care they receive at the hands of their new parents, and there are several records of anecdotal evidence that show that the love and attention that adopted children who were originally captives of war received was so high that even when the Iban offered them the chance to be repatriated back into their own tribe they would usually refuse, preferring to stay with their adopted families (Freeman 1955). This continuous high quality of care towards adopted children regardless of their degree of relatedness is most likely due to two things: 1) the fact that these children are almost always adopted into a family with no other kids of their own so there would be no competition over resources and parental attention and 2) the adopted child usually plays such an incredibly important and key role in the life of the Bilek that it is not such a stretch to say that as far as the Bilek is concerned adopted children are even more crucial than the natural children in that Bilek and the level of care adopted children receive most likely reflects that. It is worth mentioning here that in the past the Iban would commonly practice the enslavement of captives from war raids and the like, up until about the 1880s, when most slavery was made illegal and the Iban adopted most of their slaves into Iban society (Sandin and Sather 1980:81). This represents an interesting usage of a pre-existing tribal institution to solve a novel issue, the royal prohibition of slavery (Sandin and Sather 1980:81).

Moving onto the Santal, a tribal society in northern India, where adoption is quite common, and follows many of the same patterns we saw in the Azande and the Amhara, but like the Iban they have shown to have other interesting uses for this institution that differ from what we would expect from Silk’s theory on adoption in kin selection. Among the Santal (as we have seen among the other societies
in this paper) adoption happens either because a marriage has resulted
in a childless union or if they have no sons (Archer 1974 1984). This is
expected according to Silk’s prediction on the adjustment of family size
and composition. In the case of a lack of children/sons the parents
actually have two choices available to them in order to remedy it, the
husband can either take on a second wife, as is sometimes done with
the Amhara, but what will happen more often is that the husband will
opt to simply adopt a son rather than risking the extra stress of taking
on a second wife (Archer 1974:275). When the decision is made to
adopt the husband will commonly choose to adopt a youth from his
side of the family. He will usually adopt the son or grandson of his
brother (degree of relatedness=.25-.125) although he may choose to
adopt the grandson or great grandson of a paternal uncle (degree of
relatedness=.125-.0625) (Archer 1974: 275). However, if there are no
available heirs on the husbands side or if the husband is on bad terms
with his side of the family they may than adopt a child from the wife’s
side of the family and barring any lack of possible candidates they may
than choose to adopt outside their own kin group (clan) although this is
very rare (Archer 1974: 275). Again this matches up quite well with
Silk’s first prediction that adoption will happen along lines of kinship.

Among the Santal there are several cultural sanctions
governing who a husband may adopt a son from; generally he may only
adopt a son from a family who has many to spare, and while there is no
social bar in the adoption of an only son it is very rare that such an
adoption would take place since the reason for adoption is to insure the
inheritance of property, and to have a son to take care of you in old age
(Archer 1980:54). Meaning that the adoption of an only son would put
the natal family at a huge economic and social disadvantage while not
ensuring that the economic advantages the adoptive child would receive
through adoption are maximized, as is predicted under Silk’s fourth
prediction. We also find that while the trend is for the adoption of
youths adoption commonly takes place along a continuum; from
shortly after birth to early manhood (Archer 1974:275) this seems to
fulfill part of the expectation of Silk’s fourth prediction that seemed to
have been proven false in her study of Oceania, that is we would expect
adoption to take place when the child is older and more capable of
adding to the subsistence activities of the household, and it would seem
that at least in the case of the Santal this seems to be partly true (Archer

One of the peculiarities in the Santal practice of adoption is
how it relates to the third prediction in Silk’s theory, that being the
prediction that the natal family will share some form of jural authority
with the adopted family over the adopted child. Among the Santal the

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amount of authority the natal parents actually retain seems to be almost non-existent, even when adoption is first agreed upon the adopting family does not need the approval of the biological family but instead only requires the approval of the village in order for the adoption to take place, and while the child’s agnates may voice their disapproval over the adoption their arguments carry no real weight (Archer 1984). Even after the child is adopted the biological parents need to go through the village to get their formal approval to terminate the adoption regardless of the reason (Archer 1984). There are strong cultural sanctions against the neglect and unequal treatment of the adopted child in Santal society however that ensure the adopted child is treated as well as any biological children, there are especially strong sanctions against the unequal treatment of adopted children when it comes to the matter of inheritance; here the entire village will enforce the adopted child’s full right to inherit a share of his adopted fathers land that is at least equal to that of the biological children (Archer 1984). This practice seemingly makes up for the biological parent’s lack of jural authority over their former child.

As mentioned before like the Iban, Nuer, and Somali the Santal also have uses of adoption other than that put forth by Silk’s kin selection theory of adoption. Among the Santal, who observe strict rules of exogamy, there exists a type of fake adoption that can be used to get around the rules of exogamy (Archer 1974:91). If a man and woman from the same clan were to fall in love together and refuse to marry anyone other than one another what will often happen is that the girl will be informally adopted by another clan (Archer 1974:91). However it is made perfectly clear to her that she is a member of this clan in name only and that she has no rights with in that clan nor does anyone in that clan have any form of responsibility for her in any way (Archer 1974:91).

Conclusion

Throughout my research has found that for the most part the models and predictions of adoption laid out in Silk’s three papers seem to be quite accurate in predicting the adoption practices of cultures outside of Oceania. We find that in the vast majority of cases that involve formal child adoption they happen along the lines of Silk’s theory of adoption, with most children being adopted by parents with a degree of relatedness of approximately 0.25-0.125, which would seem to provide further evidence for the theory that altruistic behavior serves to enhance an individual’s inclusive fitness and happens along the lines of inclusive fitness. We also find, with few exceptions outside that of
the Nuer and Somali that adoption happens almost exactly as predicted by her fourth prediction of adjustment of family size and composition being a consequence and influence behind adoption. In fact, in the societies studied for this paper it would seem that this is almost always the main if not the only reason behind the decision to adopt, since adoption only ever seemed to happen where the couple either had no kids or had no sons Although in her first paper Silk seemed to imply that it would be the natal parents who would take the initiative in giving up a child to adopt since according to her it would be they who would receive the majority of benefits of adoption since they would receive the biggest boost to their inclusive fitness, although in her preceding papers on adoption among the Inuit and West African cultures, she showed that this is most likely not the case. The findings in her last two papers in regards to who tends to initiate adoption are reinforced by my own research. In all 6 of the cultures studied it is the adoptive parents who will always initiate the adoption transaction. The ethnographies on the Amhara, Azande, Hausa, Iban, Santal and even the ethnographies of the Nuer and Somali seem to suggest that it is the adoptive group who would receive much of the benefit from adoption, through the addition of another body for increased economic output and most importantly the insurance that they would be taken care of in their old age. It is this social security aspect being a fundamental motivation for adoption that seemed to be lacking in Silk's original 1980 paper on Oceania but that she was able to address in her later papers, for it seems that in the societies included in this paper the social security investment seems to be considered the most important duty of a child in terms of their relationship to their parents. For the most part Silk’s first paper seemed to focus almost entirely on the immediate economic benefits of child rearing; that of increasing the subsistence output of the household. In her first study she seemed to play down this aspect of having a child, but it was clear in her 1987 papers on the Inuit and West Africans that she reworked her theory to consider this as an important aspect of both having a child and deciding to adopt.

Overall, Silk's kin selection theory of adoption is quite effective as a general theory of human adoption, although it needs to be reworked to better account for both cultural and economic variables not just genetic ones. Although as is stated by Silk at the end of her first paper, any attempt at creating such a general theory of human adoption practices will require a substantial amount of research cross culturally into these practices and would most likely require extensive
ethnographic field research into the cultures in which the current records on their adoption practices are lacking in. In order for these ethnographic studies to be able to provide accurate and relevant information that can be used to further refine such a theory they will have to be structured and focused on gathering census data on the number of adopted individuals in any tribe as well as an accurate record of their degree of genetic relatedness to those who adopted them something that Silk explains is incredibly difficult. Than they will need to create a qualitative data gathering methodology designed around Silk’s four predictions that will allow us to create an accurate picture of the mechanisms that control the adoption practices of any particular culture so that they can be compared cross-culturally.

Footnotes
1 In the traditional models of adoption when one takes on the adoption of another child this will always equate to a reduction in the amount of resources and attention that the adoptive parents have available to give to their natural children which means that adoption will always result in the reduction of the fitness of natural children (Silk 1980;1987).
2 As calculated for the coefficient r in r=(1/2)^2 (Silk, J.B. 1980:806).
3 An economic and cultural phenomenon existent in most agricultural based societies that is generally considered a critical determinant of success among horticultural and agricultural communities such as those found in Oceania (Silk, 1980)
4 In this adoption allows one to possibly manipulate land rights in an attempt to either gain land for the adopted child that he would not have otherwise or to deny land to other individuals or both making redistribution of land among kin an important motive for adoption (Silk, 1980:810).
5 As in the circumstances described in model two.
6 Meaning they are over the threshold family size.
7 It is also worth noting that among the Amhara an adolescent orphan boy may take the initiative in being adopted by a chosen father and ingratiating him with ceremonial gifts, however the boy usually will only initiate adoption with a father he knows will treat him favorably, such as an uncle (Messing & Bender, 1985:189).
8 This includes both actual and imagined kinship.
9 A childless union.
10 Although they rarely ask that the child return to them since it is usually a first born (Smith, M.G. 1955).
11 Excluding the Nuer and Somali for little information seems to be available on this topic in regards to them.
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