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Towards an ethnographic understanding of the European Marriage Pattern: Global correlates and links with female status

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Abstract: This contribution compares the EMP, and the associated Western European family system (inheritance practices, intergenerational co-residence and exogamy), with what is known about family systems and marriage patterns in the rest of the world, with a special focus on the consequences of these family systems for human capital formation (in view of recent interpretations that interpret the EMP as a step in the 'quantity-quality' switch in demographic behaviour). This is done in the following ways: first the EMP is defined as a family system characterized by monogamy, exogamy, consensus (no arranged marriages), neo-locality, and a relatively strong position of women in marriage. Next we compare these criteria with ethnographic data from other Eurasian societies (mainly based on George Murdock's ethnographic world atlas), and with global classifications of family systems presented by academics (anthropologists, political scientists and demographic and family historians) such as Emmanuel Todd. We present maps of the institutions determining marriage behavior, and show which features of the EMP can be found elsewhere. In the margin of the Eurasian landmass, marriage systems can be found with certain similarities to the EMP. In the 'core' of the continent, in China, Northern India, the Middle East, and Russia, institutions are diametrically opposed to those of the EMP. Finally, we briefly sketch the 'similar' marriage systems in Japan, Sumatra, Kerala, Sri Lanka and Burma, and try to find out if these relatively female-friendly systems produced high levels of human capital (as the EMP is supposed to have done).

Keywords: Marriage patterns, Ethnography, Female empowerment, Eurasia, Family, Inheritance, Kinship, Development

JEL Codes: J12, J16, Y1, O15

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Introduction

One of the major themes in the work of the Cambridge Group has been the European Marriage Pattern (EMP) (Hajnal 1965, 1982). To some extent this topic unites the two most influential branches of research that have emanated from the group since the 1970s; the reconstruction of English population development since the 16th century based on family reconstitutions by Wrigley and co-workers (Wrigley and Schofield 1981; Wrigley, Davies, Oeppen, and Schofield 1997) and the analysis of household size and structure by Laslett and co-workers (Laslett 1982). The first branch focused on the way in which demographic behavior was regulated, and concluded that marriage decisions, as analysed by Hajnal in his seminal papers, were key to explaining population growth. The second branch demonstrated, amongst other things that household size in England was typically quite small, and that servants played a relatively large role in them, conclusions that could only be understood against the background of Hajnal's EMP. So one could argue that the EMP – its functioning and consequences - has been at the core of the research carried out by the Cambridge Group over the years.

In recent years, the academic debate about the EMP has become part of a much wider debate about the Great Divergence, and in particular the 'unique' institutional framework that made Western Europe diverge in the long run from the rest of the world. The point that it helped, via its high age of marriage and large share of singles, to restrain population growth and diminish Malthusian tensions had already been made by Hajnal, and has returned in various versions in subsequent literature (Wrigley and Schofield 1981, Clark 2007). But, perhaps inspired by Unified Growth Theory, more recently other 'externalities' of the EMP have been stressed: it resulted in a new life cycle with more 'space' for human capital formation, it was relatively gender-friendly, empowering women who play a major role in human capital formation of the next generation (the list is much longer). In their Girlpower-paper De Moor and Van Zanden claim (2010a; 2010b) such a link between the EMP and high levels of human capital formation, and they presented evidence to underpin the argument. It is in particular this link between marriage system, female agency and the 'quality-quantity' trade off suggested by the theoretical literature that interests us here.

Much of the literature on the EMP is, however, rather Euro-centric, focusing on the 'unique' features of the EMP and its consequences for demographic and economic development. Hajnal (1965) and Guichard (1977) (and others) have developed an argument in which the differences between 'the West' and 'the Rest' are stressed, but 'the Rest' is often not clearly specified – in the Hajnal-case it is everything to the east of his famous Trieste – St. Petersburg line. Such an approach has two weaknesses: it appears to be quite difficult to really map the Hajnal-line (Szoltycek 2012), but more importantly, it is based on the assumption that 'the Rest' had one undifferentiated marriage pattern which in all respects was completely different from the EMP of Western Europe. It is clear that marriage systems in Russia, China and large parts of India were in certain respects really different from those found in North-Western Europe – as Hajnal already pointed out, age of marriage was usually much lower, in particular for women, and the share of singles there was tiny. But what about the rest of Eurasia? As, for example, Goody has shown in many publications (most forcefully in Goody 1989, also Goody 1996), there were large differences within Eurasia – in terms of the position of women within marriage, for instance, the South of India differed significantly from the North. So the question can be asked, how different family systems in, for example

Java, Burma or Sri Lanka (as we will see, regions with relatively women-friendly family practices) were from those in Western Europe.

The starting point of this paper are these two contrasting views: the Hajnal-interpretation that the EMP was 'unique', and Goody's views who finds many features of the West in the East (and vice versa). Part of the explanation of these differences is that Hajnal looked at outcomes of the marriage system such as high age of marriage, whereas Goody focused on the anthropological features (monogamy, exogamy, etc.) which some non-European regions shared with Western Europe. Our strategy is to analyse both, but our main focus is on the family related 'building-blocks' of the EMP.

The goal of this paper is to broaden the discussion about the links between marriage systems and economic development by 1. Redefining the EMP in ethnographic terms as a marriage system characterized by monogamy, exogamy, consensus (no arranged marriages), neo-locality, and a relatively strong position of women in marriage (as measured by age of marriage); 2. To find out, using available maps of the global distribution of marriage systems and ethnographic data of societies, which other regions of the world shared these characteristics – do we find similar/identical marriage systems elsewhere? 3. Focus on a limited number of societies with similar (but not identical) characteristics, to find out if these marriage systems had comparable consequences for demographic and economic development, and more specifically, on human capital formation (measured here by literacy levels).

This contribution builds on the 'Girlpower'-paper (De Moor and Van Zanden 2010a) in that it takes as its starting point the classical definition of the EMP as a marriage system with high age of marriage (of females), large share of singles, low spousal age gap, and a large group of co-resident unmarried servants, but tries to look at the underlying institutions which explain such marriage behavior. Smith already in 1980 argued that the search for the European Marriage pattern as a 'statistical artifact' should not lead us away from the issue 'to detect the wider social structural features that sustained it'(Smith 1980 102). Here we take an ethnographic route to address the same question, by selecting measures from the ethnographic literature which link to the basic elements of the EMP: centrality of the married couple, relatively strong bargaining power of women and an element of consensus in the marriage.

One of the most important institutions related to the EMP is the practice of neolocality. One of the driving factors behind high ages of marriage in North Western Europe is often argued to be the expectation that the newlyweds establish their own household independent of that of their parents. This is as opposed to systems where the young couple remains resident in the household of their parents. This in turn is linked to the matter of whether one's marriage partner is dictated by tradition and/or older generations or whether an element of choice exists. One way of measuring this is to look at whether a system of preferred cousin marriage exists. Where endogamous marriages are preferred this curtails one's options to choose a partner freely on the marriage market.

As the key element of the European Marriage Pattern is the conjugal couple, one of the building blocks of the associated family system is that of monogamy. Therefore a distinction must also be drawn between societies where polygamy is allowed, and those where it is prohibited. Monogamy is also associated with an improved female bargaining position but is

not the sole indicator used to capture this component of the EMP. To examine this element we also look at female ages of marriage and whether females can inherit (or rather whether the inheritance system is bilateral, matrilineal or patrilineal)

Table 1: the EMP in ethnographic terms

EMP building block	Related ethnographic variables
Central married couple	Nuclear households, neolocal residence, monogamous, endogamy
Relatively strong bargaining power of women	High age of marriage, monogamous, inheritance practices
Consensus in the marriage	Endogamy, premarital sex norms

The building block of consensus in the marriage and the relatively strong bargaining power of women are obviously interlinked, although, at least as far as endogamy is concerned, this practice curtails the freedom of both men and women.

Scanning Eurasia

In order to get a picture of how the various facets of the EMP sketched above distribute themselves on Eurasian scale we will be using a dataset based on the work of Emmanuel Todd and George Murdock (Todd, 1985 and Murdock 1969). This database has been compiled based on testing the overlaps between the two datasets and evaluating which should be followed for which part of the world (see Rijpma and Carmichael, 2014). These maps present a snap shot of the historical "ideal type" that various studies have ascribed to different societies and should not be taken of representative of the current day situation. In principle all maps cover the whole world, but for the purposes of this paper we concentrate on Eurasia (the North of Africa also appears on these maps, and we occasionally also comment on features of its family systems).

The Murdock Ethnographic Atlas was a project undertaken by George Murdock from 1962 until 1980, appearing as regular installments in the journal *Ethnology*. In 1967 the data as it stood was published as a book. Here we use a revised Ethnographic Atlas published in 1990.[1] This Atlas captures the behaviour of 1267 societies using 100 variables, ranging from agricultural practices to high gods to jurisdictional hierarchy. It builds upon the many ethnographies produced at the time to bring together the work of disparate researchers working in isolation into a comparative framework. Indeed one of Murdock's underlying motives for producing the Atlas was to facilitate comparative research, particularly of a cross-cultural nature. In this paper two versions of the dataset are used. The first is one where the society level variables have been converted to country level outcomes by Jutta Bolt, using the Atlas Narodov Mira (Bolt, 2012) to determine what share of the population belong to which ethnic group. We have then used these figures to create categorisations of the dominant practice using a 10% cut off point (i.e. if less than 10% of the population is included in the data the observation is set to missing). In most countries outside Africa this is relatively unproblematic due to the dominance of one ethnic group (see Rijpma and

[1] The revised Ethnographic Atlas that was used was published by the *World Cultures* journal: <eclectic.ss.uci.edu/~drwhite/worldcul/world.htm>. The data is available at <intersci.ss.uci.edu/wiki/pub/XC/EthnographicAtlasWCRevisedByWorldCultures.sav>.

Carmichael 2014 for more details). The second is the original Atlas to map practices at the level of individual societies within countries.

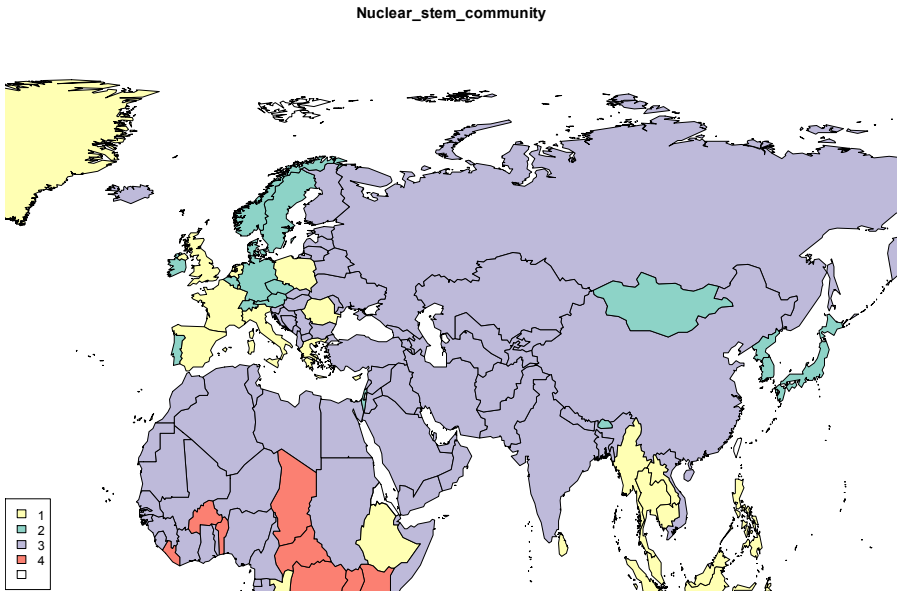
The Murdock Atlas is not without flaws, particularly in its categorisation of European countries it is problematic as the ethnographies of the time were largely conducted for societies outside of Europe. In order to see how the Atlas holds up to a cross-check the variables related to endogamy, extended versus nuclear households and inheritance rules were compared to those at the country level as proposed by Emmanuel Todd's work on family system. The results of this are presented in Rijpma and Carmichael (2014). The major conclusions are that the two datasets match to a large extent (roughly 70%) but that problems exist. In order to draw upon both datasets strengths' a hybrid dataset for the three variables mentioned above was compiled. The details of how choices were made as to which dataset to follow on a country basis can be found in the aforementioned paper. To summarise briefly the hybrid dataset follows Todd for Europe and Murdock for Asia and Africa.

Neo-locality
How families choose to organize themselves in terms of co-residence can have important implications for the roles different individuals have within the family structure. In a nuclear family model married couples do not co-reside. Newlyweds establish their own household outside that of their parents'. In the stem family system one child remains in the house of their parent with their spouse (this could be the oldest or the youngest child) while in the community (to use Todd's term), or extended family system all of the (male) children of a couple bring their spouses into the household of their parents.
There are two ways of looking at neo-locality; domestic organization and where the marital residence involves relocation to live with or close to the family of the groom or the bride.

Domestic Organisation

Map 1 below shows the Eurasian pattern as concerns the norms surrounding domestic organization.
Category 4 in the map below is polygamy where it is the dominant form of domestic organization; this occurs solely in Africa but has been left on the map for the time being.
Category 1 = nuclear
Category 2 = stem
Category 3 = extended
Category 4 = polygamy

Map 1: Domestic Organisation



The map clearly shows that for the bulk of the world extended households were the predominant ideal mode of household organisation. Such domestic organisation is observed throughout Central Asia, North Africa, the Middle East, parts of Eastern Europe and South East Asia. We observe pockets of simpler household organisation on the outskirts of the Eurasian continent. A particularly evident one is that of the Indochina peninsula and the surrounding countries of Indonesia, the Phillipines and Malaysia along with Sri Lanka. It is also found throughout Western and Southern Europe as well as in Poland, Romania, Ethiopia and Congo. The stem family variant is found even less frequently, in Japan and South and North Korea, Mongolia, Bhutan, and a handful of European countries.[2]

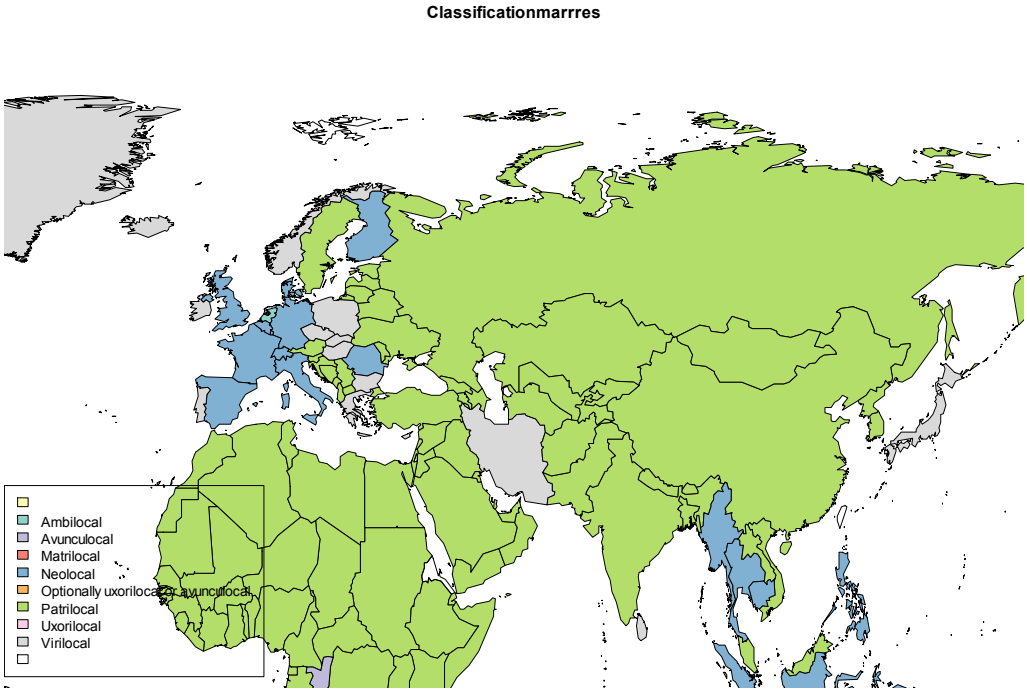
Marital co-residence

Another feature of the newly-weds home is whether the location of their household occurs along structural lines in proximity to their father's, or mother's household, or whether it is set up elsewhere. The following map shows the Eurasian patterns for this characteristic of households. This map uses a variable from Murdock which codes where the married couple lives in the years after the first years of marriage.[3] Patrilocal and virilocal residence both imply moving to live close to the husband's parents or other relatives of the groom while matrilocal and uxorilocal involve moving to relatives of the bride. Avunculocal involves moving to live with or near male relatives of the female line while Ambilocal mean that the couple lives either near the male or the female line.

Map 2: Marital residence location

[2] Mongolia is a case with conflicting literature on whether the family system should be classified as stem or extended. There does, however, seem to have been one favoured heir amongst the sons of a clan head lending itself to a stem classification however others suggest that if married sons move away from the central unit before their father dies this indicates a rift in the family and is frowned upon (Aberle, 1953).

[3] This data is taken from the Murdock Ethnographic Atlas directly with the exception of the observations for the former Soviet republics which were categorized as neolocal in Murdock. See Rijpma and Carmichael (2014) for an explanation of why Murdock's reading of the Russian sources is questionable. Here we use variable 12: marital residence after first years.



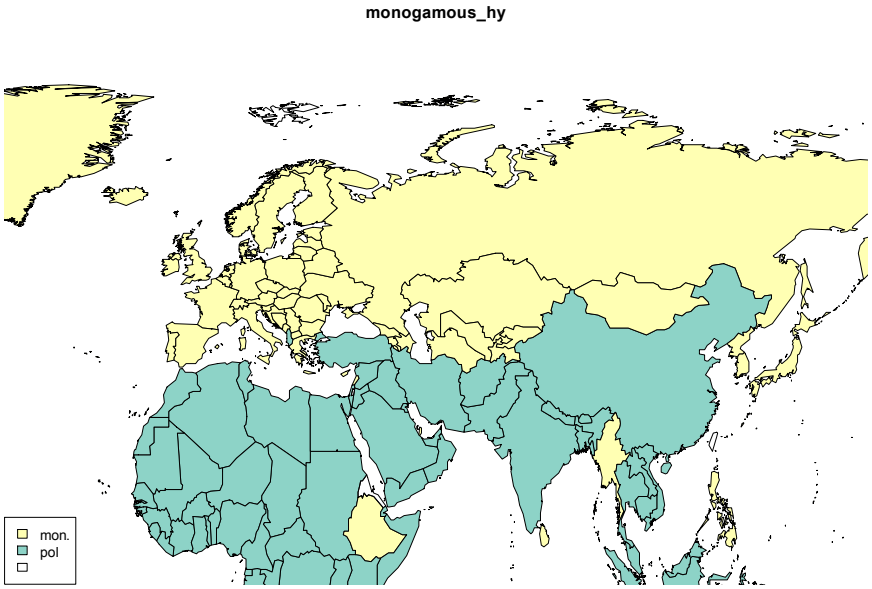
Here we see that the majority of Eurasia is characterized by patrilocality, with the associated form of virilocality. Neolocal residence occurs (unsurprisingly) in most of the same areas for which we found nuclear households with the exception of Laos, Malaysia, Norway and Sweden, where despite nuclear household domestic organization settlement near the husband's relatives appears to be the prescribed norm. Nowhere do we find dominant forms of matrilocal residence at the country level in Eurasia. Matrilocal and the related uxorilocal forms of residence do exist however. In the entire dataset 83 are listed as Uxorilocal and 58 as Matrilocal. The majority of these are however located in the Americas. Ten Uxorilocal societies exist outside the Americas and 29 Matrilocal. The societies which adhere to these practices are listed in the appendix along with a map of where the couple resides in the first years after marriage. They occur largely in South East Asia, islands in the Pacific and the along the east coast of Africa.

Monogamy

Another way to look at the centrality of the married couple is to look more closely at the practice of polygamy shown in map 1 above. Map 1 shows the countries where polygamy is the general form of domestic organization but in other parts of the world polygamy is still accepted even if not widely practiced. To construct a bird's eye view of whether the various peoples of Eurasia tolerate a man's marriage to more than wife the map below shows the practices by country in terms of monogamy versus polygamy.

Map 3: Monogamous or polygamous[4]

[4] The classifications in this map differ slightly from those in Map 1. The discrepancy arises from the fact these maps are derived from two different variables. In map 1 the data comes from the variables on domestic organization and therefore the polygamy variable included reflects the presence of societies where polygamy is the predominant form of domestic organization. Map 3 is based, rather, on societies where polygamy is the preferential arrangement. This entails that although, for instance, China is coded as extended in Map 1 it is also coded as polygamous in Map 3. The extended family coding represents the dominant form of domestic organization, while the polygamous classification is based on marital composition.

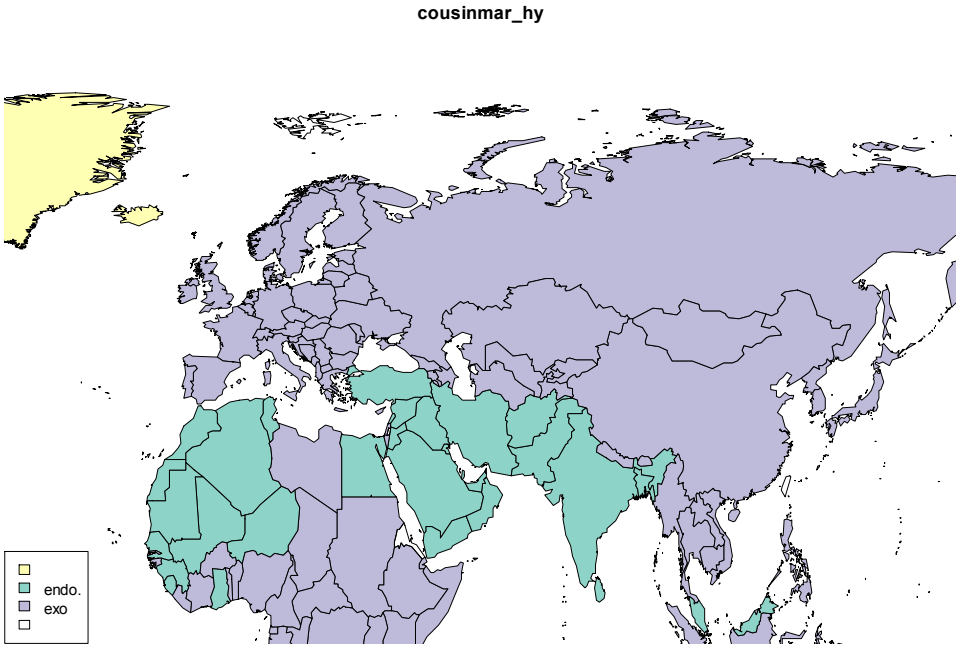


A number of countries stand out as the usual suspects based on the maps above in terms of their regional context; the Philippines, Sri Lanka, Burma and Ethiopia. The countries, despite regional prevalence of the acceptance of polygamy are coded as overwhelmingly monogamous.

Consensus?

The ethnographic variables available in Murdock do not quickly lend themselves to being interpreted as indicative of consensus within the union or not. One variable which might give us an indication of this is that of endogamy (or cousin marriage). In some countries one's marriage partner is prescribed by custom as being the daughter or son of one of your parent's siblings (i.e. a first cousin). Such practices of within family marriage are known as endogamy. In some countries such marriages are simply tolerated but in others they are the preferred mode of marriage. Where they preferred it is unlikely that the couple had much say in their choice of marriage partner, and therefore is indicative of a lack of consensus. The following map presents data on exogamy versus endogamy for Eurasia based on the classifications in the Murdock atlas, which concern preferred rather than permitted cousin marriage.

Map 4: Endogamy versus Exogamy



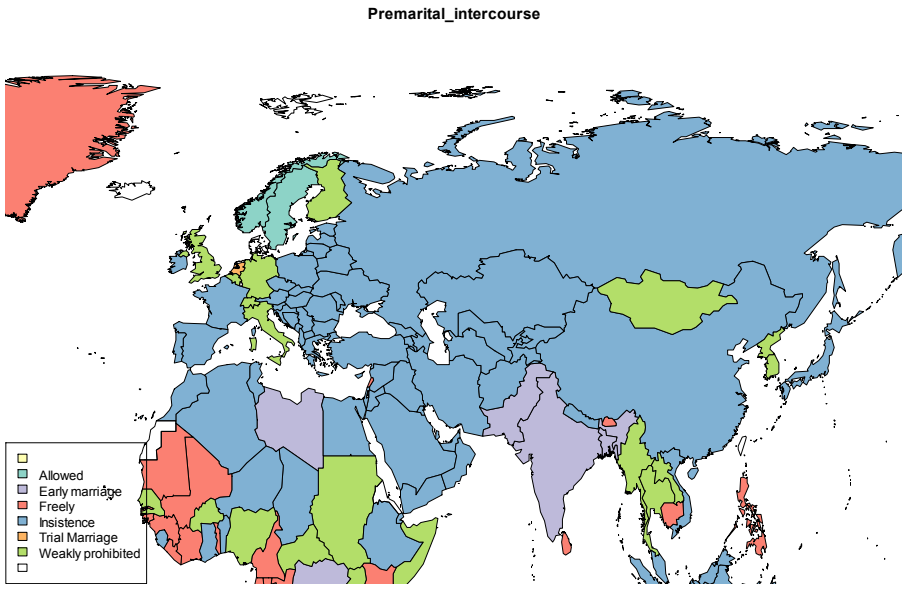
Here we see that preferred cousin marriage occurs in a band of countries across the MENA (Middle East and North Africa) region along with parts of South and South East Asia with Libya as a seeming break between two regions of preferred endogamy. Sri Lanka, with its close proximity to India, follows its neighbour's pattern of preferred endogamy.

Another possible way to capture consensus is through the norms surrounding pre-marital sex for young girls. Where strong norms concerning virginity of the woman exist it is likely that they have little say in the terms of their union as the family is under pressure to marry off their daughters before any suggestion of "impurity" arises. This is split into 6 categories listed below along with the shortened name used in the map key:

Table 2: Premarital sex norms

Early Marriage of Females (at or before puberty	Early marriage
Insistence on virginity	Insistence
Prohibited but weakly censured and not infrequent	Weakly prohibited
Allowed, censured only if pregnancy results	Allowed
Trial marriage, promiscuous relations prohibited	Trial Marriage
Freely permitted, even if pregnancy results	Freely

Map 5: Premarital Intercourse



Here a slightly different pattern emerges than in the earlier maps. The Iberian peninsula and France are shown, in this respect, to be similar to much of Central Asia and the Middle East with an apparent insistence upon the virginity of the bride. The Indian sub-continent along with Libya adhere to a system where early marriage is the prescribed ideal in order to ensure virginal brides. We see weak prohibition of premarital intercourse in the United Kingdom, Germany, Italy, Switzerland, Finland, Burma and Thailand while Sweden and Norway allow premarital sex as long as pregnancy does not occur. The Netherlands is the only country in Eurasia where pre-marital sex is governed by trial marriages. Possibly most interesting are those countries which freely permit premarital intercourse. These include Cambodia, the Philippines, Sri Lanka and a handful of African countries along with Greenland and Bhutan.

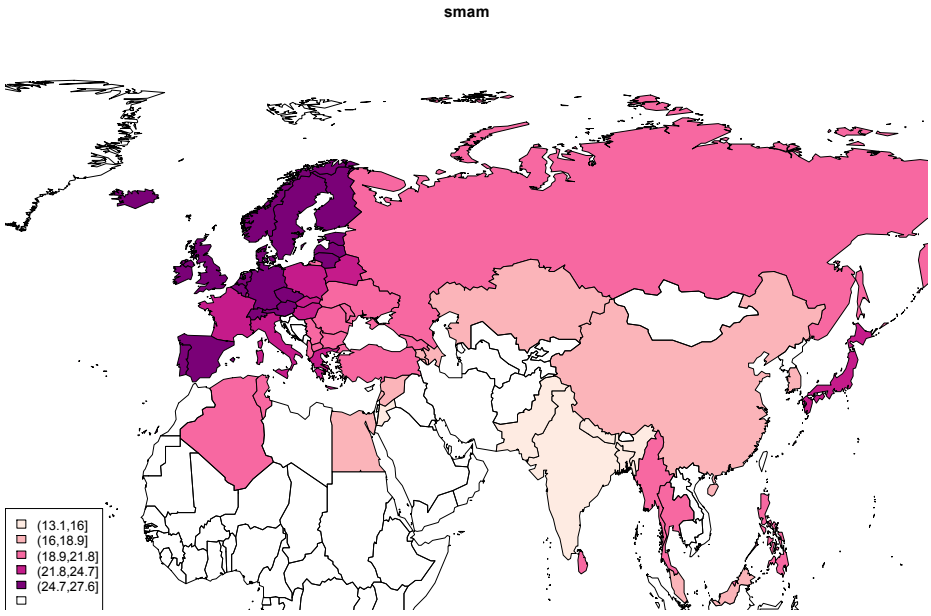
The indicator of premarital sex is closely linked to another indicator which is associated with the EMP building block of improved female bargaining position, that of female SMAM (singulate mean age at marriage). The map below shows female SMAMs in Eurasia averaged over the period 1850 to 1950 to give an idea of where different patterns of age at first marriage exist.

This data is less complete than that of the earlier maps as it is reliant on census data or other statistical sources.[5] We see here several types of marital behavior. The countries characterized by early marriage in the dataset above for premarital sex norms show up clearly as having marriage ages for girls of between 13 and 16 at the lowest end of the scale. Countries such as Egypt, China, Kazakhstan and Malaysia and North Korea, all of which, with the exception of Korea, had an insistence on the virginity of the bride make up the next group of countries where marriage occurs between 16 and 18.9. Thirdly we have a large group of countries with marriage ages between 18.9 and 21.8 in which Burma, Thailand, the Philippines and Sri Lanka stand out within their regional context of neighbouring India with its child marriage system and relatively young ages of marriage in China. Finally we have those countries with female ages of marriage of 21.8 and above split into two groups. Japan is the only Asian country with marriage ages above 21.8. All other instances of these ages of marriage are to be found in Europe where a distinction exists between those countries with

[5] For more on the dataset see Carmichael (2012) and Carmichael, Dilli and Rijpma (2014)

marriage ages between 21.8 and 24.7 and those with marriage ages above 24.7. Here we see the United Kingdom, Ireland, the Netherlands, Scandinavia, the Baltic States, along with the Iberian peninsula and Austria, Germany, Switzerland and the Czech Republic as having the highest ages of marriages for women in Eurasia. In contrast France, Italy, Poland, Slovakia, Greece and Belarus have slightly lower ages of marriage which other parts of Eastern Europe fall into the same category of ages of marriage as Burma, Thailand and the Philippines.

Map 6: Female SMAM averaged between 1850 and 1950

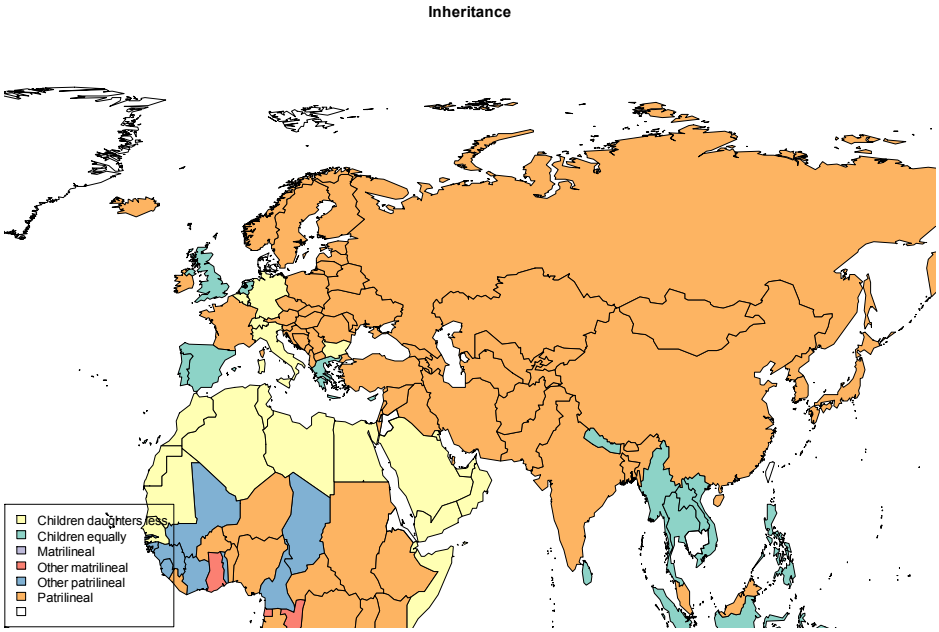


Inheritance

The norms surrounding inheritance are also important in determining the position of women within a society. The map below shows the patterns for inheritance norms for Eurasia, constructed using Murdock's variables on inheritance for immovable rather than movable property.

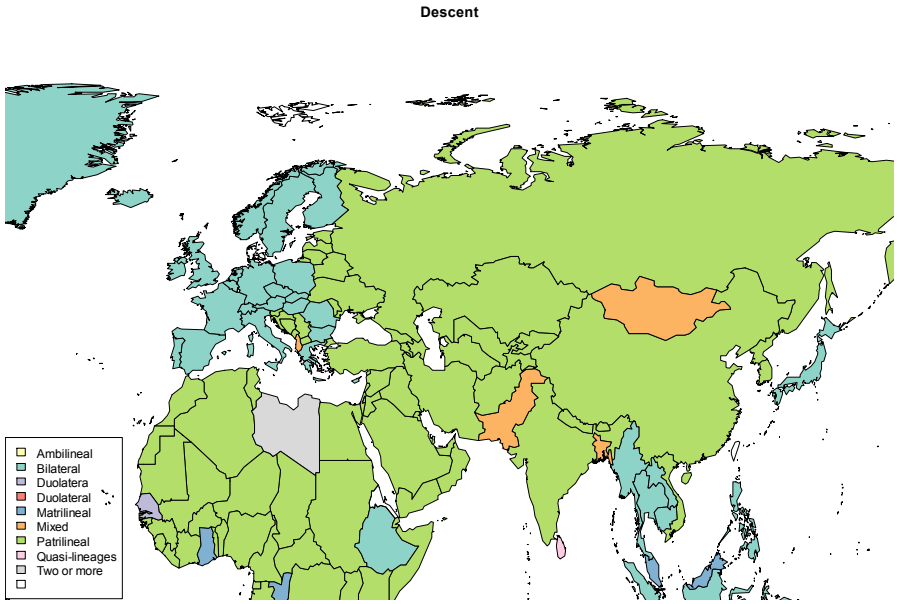
It is immediately clear that patrilineal inheritance systems, or those where daughters receive less, are by far the dominant type. Patrilineal inheritance characterizes large parts of Asia, Eastern Europe, Scandinavia, France and Ireland, while systems where daughters receive less are predominantly to be found in North Africa and parts of the Middle East along with France, Italy and Belgium amongst others. In contrast practices of equal inheritance are to be found only in a handful of countries in Europe along with a familiar group of countries in Asia (Thailand, Burma, Vietnam, Laos, Indonesia, the Philippines and Sri Lanka). Nepal is an island of equal inheritance systems surrounded by patrilineal systems as is Greece.

Map 7: Inheritance



Another way of looking at "inheritance" is to look at how societies organize systems of descent. The map below uses a composite variable from Murdock which looks at whether countries have large kin groups of a matrilineal, patrilineal or other type in order to classify them into different forms of descent. For instance in order to be classified as a society with bilateral descent a country must have no matrilineal or patrilineal kin groups and be classified as bilateral or ego-oriented bilateral kin groups in terms of cognatic kin groups.

Map 8: Descent

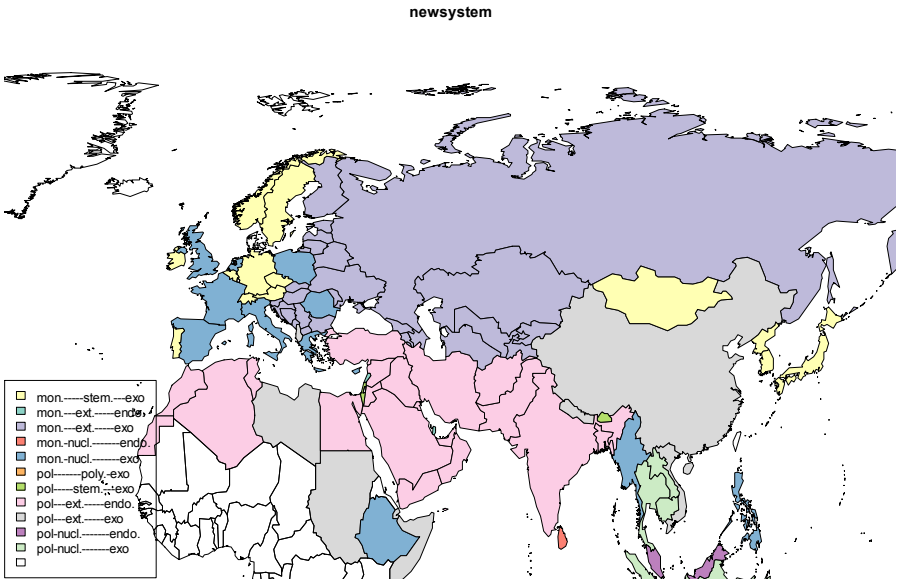


Despite inheritance practices in some parts of Europe which exclude women most of Europe is characterized by systems of descent which can be described as bilateral. A pocket of patrilineal descent can be seen in the countries of the former Yugoslavia. Albania, Mongolia,

Pakistan and Bangladesh are all characterized by mixed systems of decent. Sri Lanka meanwhile, distinguishes itself from the rest of Eurasia by being characterized by quasi-lineages where kin groups are based on filiation rather than on descent per se.

Monogamy, exogamy and nuclear all together
To bring together a number of the variables presented above and show how they work together the following map creates new categories based on monogamy versus polygamy, nuclear, stem and community and endogamy versus exogamy.

Map 9: New system



What becomes clear here, as should have become evident from the maps above is that there are a handful of countries outside the core area of North-Western/Southern Europe which exhibit similar if not identical family practices. These are Romania and Poland, Ethiopia, Burma and the Philippines. These five countries have the same combination of monogamy in conjunction with nuclear households and no preferred endogamy. Other parts of the Indochinese peninsula show similarities in two of the three variables with Laos, Cambodia, Thailand and Indonesia all practicing nuclear families and exogamy but combining this with a tolerance or acceptance of polygamy. An interesting case is that of Sri Lanka which stands out as the only country in Eurasia where the norms and practices of families entail monogamy and nuclear residence, but where cousin marriage is preferred, making it the only country in Eurasia with this combination of characteristics.
Furthermore, Japan and Mongolia are quite similar to the stem families of central Europe.

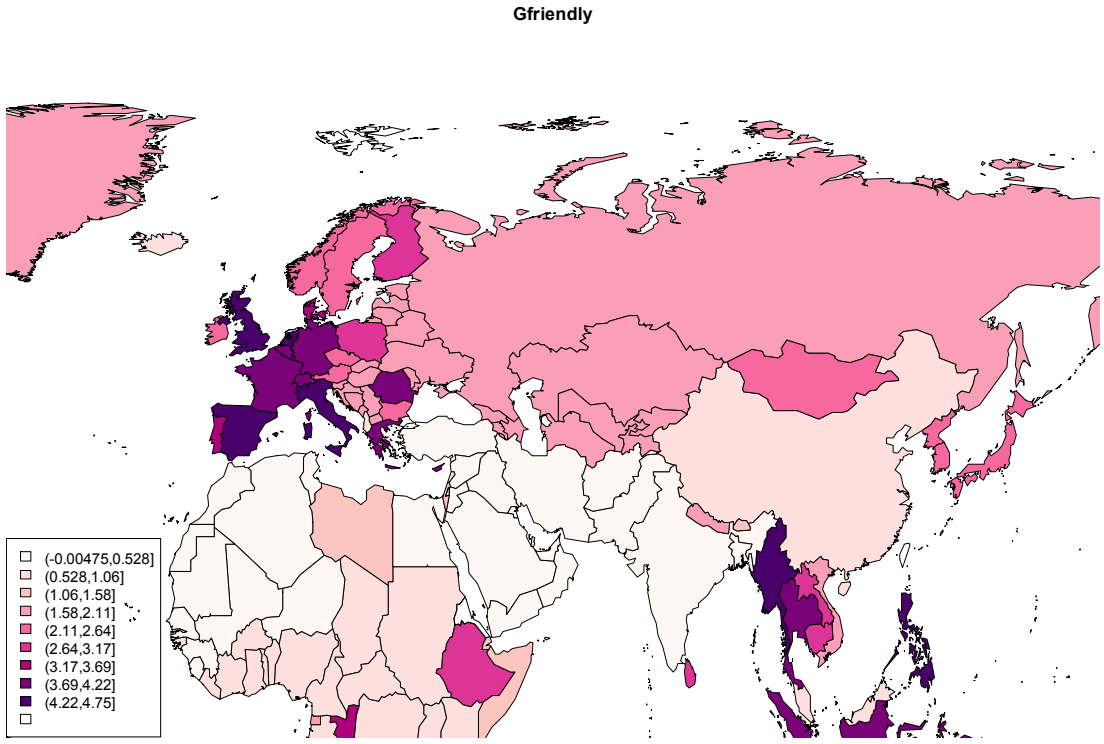
Finally, in order to give a general picture of how the interplay between the various features of the family system as they relate to the position of women looks on Eurasian scale a composite measure was made. The composite measure gives a sense of how gender friendly each society was based on the various components of its family system. The scoring was as follows with a maximum score of 6, which no country achieved:

Table 3: Girl friendly family systems scoring

Variable	Lowest Score	Intermediate Scores	Highest Score

Domestic Organisation	Extended – 0	Stem – 0.5	Nuclear – 1
Cousin Marriage	Endogamy – 0[6]		Exogamy – 1
Monogamy	Polygamy – 0		Monogamy – 1
Marital residence	Patrilocal and Virilocal – 0	Avunvulocal – 0.25 Ambilocal – 0.5 Neolocal – 0.75	Matrilocal - 1
Inheritance	Patrilineal – 0	Children daughters less – 0.5	Children equally – 1 Other matrilineal - 1

Map 10: Girl friendly family systems



Countries missing data on a component thus lowering their score:
Cambodia and East Timor – inheritance
Greenland – cousin marriage and inheritance
Denmark and Luxembourg - inheritance
Iceland – cousin marriage

Here the pattern observed above is repeated. Two pockets of relative female friendliness emerge on the edges of Eurasia, in Europe and in South-East Asia, but within both regions there is some regional variation as well. Japan, Sri Lanka and Mongolia show a score similar to northern and parts of central Europe. Malaysia is a noticeable anomaly in the overall picture of South-East Asia. It has a total score of 1, being coded as having nuclear families

[6] Assigning a score to the extended family variable and the endogamy is complicated as in some cases living in extended, endogamous families can be beneficial to women as it keeps their natal kin close-by and can provide them with a support mechanism in times of need. An argument could therefore be made for assigning a half point for the combination of the two however for simplicities sake this has not yet been implemented here (moreover it has only a marginal effect on the global distribution).

but at the same time endogamous, polygamous, with patrilocal residence and patrilineal inheritance. Interestingly however, descent in Malaysia is bilateral (not included in the composite index as it overlaps largely with the residence and inheritance variables). Interestingly the studies which Murdock used for his dataset suggest that nuclear families were to some extent being replaced by the extended form of household organization (Firth, 1966; Jones, 1981; Firth, 1966).

Case-studies, with special attention to consequences for human capital formation

So far we have established that marriage systems with comparable features favoring the position of women were only found in the margins of the Eurasian landmass: in Western Europe, Japan, the southern parts of the Indian subcontinent and South-East Asia. It is not the purpose of this paper to address the question why this was the case – why such marriage systems were not found in the Eurasian core regions. We limit ourselves to mentioning that an interesting hypothesis about the geography of marriage systems has recently been put forward by Emmanuel Todd (2011). He argues that simple, nuclear families are the original pattern found in hunter-gatherer societies, in which women often have a relatively strong position . The development of sedentary agriculture, of states and complex power structures also had its effects on power balances within the family: in the core regions where these processes originated – the Middle East (Fertile Crescent), North India, North China – this co-evolution of hierarchies at the level of the state and of the family started earliest and resulted in the rise of family systems in which the agency of women (and children) was severely constrained. In the margins, where agriculture and state hierarchies emerged much later, stem families (a 'compromise' between nuclear and community family patterns) and nuclear families developed or survived. This resulted in the spatial pattern that we find here (based, however, to some extent on Todd's own data from earlier publications). The price paid for early development was a demographic system in which women were stripped of their power – which may have had negative consequences for economic development.

But did the marriage system really matter for economic development? Such a case has been made for Western Europe and the EMP, where successful economic development and a gender-friendly marriage system coincide, and perhaps Korea and Japan fit into a similar argument, but Sri Lanka, Kerala, Burma and South-East Asia are not high income countries (and have, as far as we know, never topped the real income league). Obviously, the spatial distribution of economic development does not correlate perfectly with the map of marriage systems just presented. However, economic development is caused by a multitude of institutional (and non-institutional) factors, of which the marriage system is only one. So we cannot hope to explain the entire development process in this way, and have to focus our search for links between the marriage system and development. The link we want to investigate is: does the relatively strong position of women in certain regions result in higher levels of human capital formation - a link that is considered very important in the case of the EMP. The literature suggests a number of mechanisms to explain such a link: firstly, delayed marriage leaves more time for building up experience, networks and human capital; secondly, a stronger bargaining position of women within the household will result in less children and/or more investment into the education of children. We cannot test this in any detail but will scan the oldest sources available (for most regions: censuses for the 1900-1930 period) to measure the literacy (and marriage ages) of the women concerned.

Japan

We can be brief about the case of Japan, which is covered by a substantial literature and which 'case' already plays a central role in the international debate about marriage systems and economic development (see also this volume, paper by Saito). It is well documented stem-family system, in which the position of women was relatively strong, in particular compared with China – in terms of inheritance, sexual freedom before marriage, and

position within the household (a recent survey in Kok 2014). Saito (2005) characterizes the Japanese marriage system as a 'third pattern', in between Western Europe and the joint family systems of Russia and China (also Cornell 1987). By Asian standards, female age of marriage was relatively high at about 20 years, with large regional differences; in the less developed north it was lower than in the more commercial and urban south (data from the 17th and 18th centuries). Almost all women (and men) did marry, however – the large group of singles characteristic of the EMP is missing (Saito 2005 169-171). The spousal age gap was also quite high by EMP-standards (about 5 years).

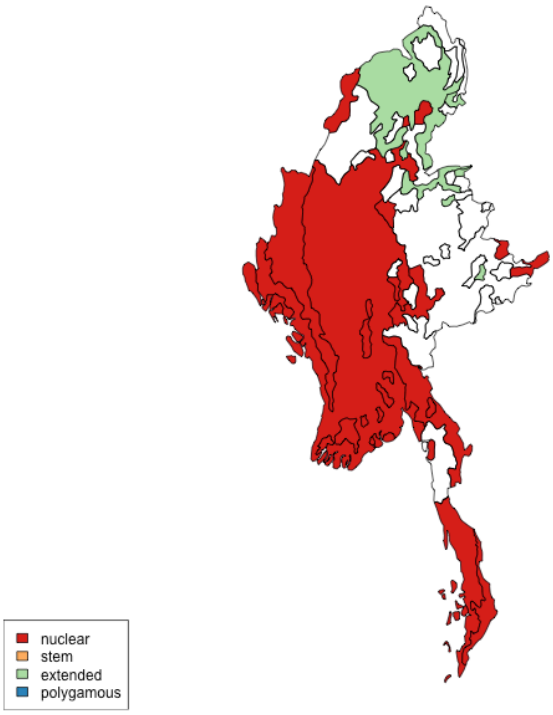
At the same time, during the Tokugawa period, Japan began to invest in its human capital. In the 18th century, the level of literacy and of book production/consumption was already quite high, probably higher than in China, the only serious Asian 'competitor' (Van Zanden 2009; also Baten and van Zanden 2008). Recent research has also shown that the economy of Japan was growing gradually during the period: urbanization increased, markets developed, and GDP per capita went up, in a way preparing for the post-1870 growth spurt (Bassino et.al. 2011; Hayami 2004).

Do we find evidence for this in Indian sub-continent/Sri Lanka/Burma?

Myanmar

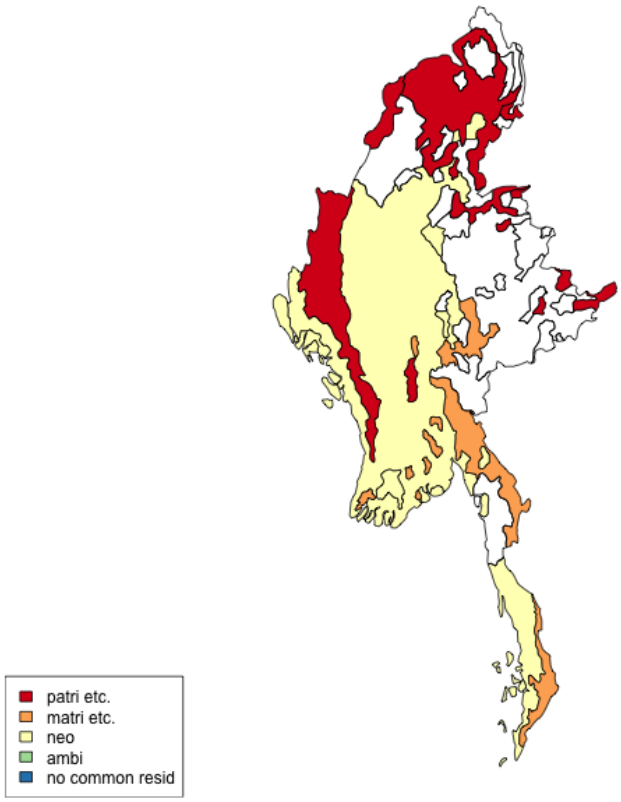
Burma is an ethnically diverse country with 135 distinct ethnic groups recognized by the government. However by far the most numerous group is that of the Bamar, or Burmese. In 1960 they constituted 73% of the population with the next largest group, the Karen, capturing 8.5% of the population. Here the focus will be on these two groups.

Map 11: Myanmar domestic organisation



The two groups have a number of similarities. Both live in predominantly nuclear households (as shown in map 11), practice monogamy and do not prefer cousin marriage as the preferred mode of choice of marriage partner. Both, also, adhere to systems of equal inheritance for children (with no distinction made between sons and daughters). When it comes to pre-marital sex norms both groups also prohibit pre-marital sex but only weakly enforce this norm. However while the Burmese practice neolocal residence the Karen follow a pattern of Uxorilocal marital residence as shown on map… below. Here we can also see that the ethnic groups of Northern Burma are characterized by patrilocal marital residence. The Burmese, therefore, adhere in all their practices to the same set of behaviours as can be found in parts of North-Western Europe. The Karen differ only in their practice of uxorilocal residence. These two groups can be seen clearly on the map below. The areas coloured red, indicating patrilocal residence, are those of the Chin and the Kachin both of whom represent less than 2% of the population of Burma.

Map 12: Myanmar marital residence



How did this relatively strong position of women in their family systems play through into their wider position within society? One interesting, although not unbiased, source to elucidate this comes from the reports of European travelers to Burma at the turn of the 19th century. The following three quotes give a sense of the general opinion to be found in the accounts of the Europeans to Visit Burma between 1890 and 1920.

> "Utterly unlike their miserable Mohamedan and Hindoo sisters, they enjoy absolute liberty – a liberty of which, if rumor prove true, they make ample use." (Gascoigne 1896)

> 'What is the position of women in Burma ? he would reply that he did not know what you meant. Women have no position, no fixed relation towards men beyond that fixed by the fact that women are women and men are men. They differ a great deal in many ways, so a Burman would say ; men are better in some things, women are better in others ; if they have a position, their relative superiority in certain things determines it. How else should it be determined? (Fielding, 1898, p.85)

> Since marriage is so purely a civil contract, divorce is almost as simple a matter. Either party may go before the elders and claim a separation, and it is seldom refused. Each party takes away what

> property they brought to the alliance, and property acquired during coverture is equally divided. Since it is the women who are the great workers and money-makers their interests are thoroughly guarded. No women in the East are freer, or are more safeguarded against adventurers, or drones, than the Burmese. Polygamy is not forbidden, but is not common. The rich sometimes have two establishments, particularly if they have business in different towns, but it is very rare for two wives to be under one roof. (Scott, 1921, p.85)

The picture that can be derived from these quotes is overwhelmingly positive (see also this volume, paper by Dyson). Elsewhere in Fielding's book he does mention that Burmese men still consider themselves superior to women by virtue of greater physical strength. However in general the picture that emerges from these sources is that Burmese women seem to have an unusually equal playing field in terms of property rights, and access to resources.

A very detailed picture of Burmese life comes from a book entitled *The Burman: his life and notions*, written by Shway Yoe (London 1910). At the time this book caused a sensation in London as the British, presuming it was written by a Burmese national, wondered at the quality of the English used. However Shway Yoe turned out to be the Burmese version of the name of a colonial administrator James George Scott. His is a very detailed account written during his 7 year stint in the country between 1875 and 1882. The picture he paints of Burmese women coincides with that sketched above:

> … they enjoy a much freer and happier position than in any other Eastern country, and in some respects are better off even than women in England. All the money and possessions which a girl brings with her on marriage are kept carefully separate for the benefit of her children or heirs, and she carries her property away with her if she is divorced, besides anything she may have added to it in the interim by her own trading or by inheritance. Thus a married Burmese woman is much more independent than any European even in the most advanced states. (Yoe, 1910, p. 52)

Another perspective on Burmese women comes from across the border in India. A 1899 quote from Lokamanya Tilak, a social reformer and Indian nationalist, shows how Burma compares to India :

> "all the reforms like absence of caste division, freedom of religion, education of women, late marriages, widow remarriage, system of divorce, on which some good people of india are in the habit of harping ad nauseam as constituting a condition precedent to the introduction of political reforms in India, had already been in actual practice in the province of Burma. . . . It is borne in upon us by the situation of the Sinhalese and the Burmese that the opinion of some wise person about the indispensability of social reform for national or industrial advancement of our country is entirely wrong. . . ." (Chousalkar 1990:214)

Some have argued that these late 19th/early 20th century perspectives are imbued with an orientalist slant which fails to take into account the limits to women's freedom in the religious or political sphere, and sees Burmese women only in terms of an "other", be that Indian or European women (Ikeya, 2006). However the ethnographies which Murdock employed come to similar conclusions about the position of Burmese women. Melford Spiro, for instance, mentions the structural equality between men and women, and that women outlive men (Spiro, 1977). Manning Nash also observes that spouses choose each other and that household authority is shared between husband and wife with men and women having near equal social position (Nash, 1965)

In the early 20th century censuses literacy statistics for Burma were recorded alongside those of the various Indian states. In 1921 45% of the male population and just under 10% of the female population was literate. By 1931 56% of the male population and 16% of the female population were now literate. For women these percentages do not look particularly impressive but when we compare them to the literacy levels found in neighbouring India, in the Northern State of Assam we see that Burma compares very favourably. In Assam in 1921 male literacy was 11% while female literacy hovered at 1.2%. By 1931 male literacy had improved slight reaching 15% while female literacy had increased by one percentage point to 2.2%. The percentages for Assam are close to those found for the whole of India on average (1921 male literacy of 12% female literacy of 1.8%). However some provinces stand out for their very high levels of literacy, for instance the Madras States Agency (consisting of several states in Southern India which are now part of Kerala, Tamil Nadu and Karnataka) with 40% literacy for men and 18% for women.

Sri Lanka

Sri Lanka is relatively ethnically homogenous with two groups accounting for 93% of the population (the Sinhalese at 69% and the Tamils at 24%) (see also this volume, paper by Saito). Between these two groups there are differences in how they deal with inheritance and co-residence. The table below shows how each of these ethnic groups, along with the very small hunter-gatherer society, the Veddas, is classified according to the Murdock Ethnographic Atlas.

Table 4: Sri Lankan ethnic groups

Ethnic group	Domestic Organisation	Cousin Marriage	Inheritance	Dowry or BridePrice
Tamils	Small extended	Symmetrical preference	Patrilineal equal	Dowry
Veddas	Small extended	Patrilateral preference	Patrilineal equal	Bride Price
Sinhalese	Nuclear	Matrilateral preference	Equally for both sexes	Dowry

That the Sinhalese chose to live predominantly nuclear can be found also in the work on Sri Lankan marriage patterns by Bruce Caldwell who argues that, in contrast to much of India, the preference in Sri Lanka is not for joint families but rather for the eventual establishment of a separate residence for the newlywed couple, even if many young couples do initially remain resident in the parental home. His book does not explore the differences between ethnic groups but as the Sinhalese are the largest ethnic group on the island it is likely that this observation is predominantly about their behaviour.

The Murdock Ethnographic dataset shows Sri Lanka as having a system whereby dowries were the predominant form of marital exchange, with parents transferring capital to their daughters. According to the Murdock data this was the case in 92% of marriages. This high percentage of marriages in which the woman receives a dowry is similar to that of Burma, but the high percentage sets it far apart from all its other Asian counterparts where the most common form of marital arrangement appears to be the Bride price, or wealth, transferred to the bride's family. Dowries given directly to the bride imply a system where it is not the families who directly benefit from the marriage of their children but the individuals getting married themselves. These various indicators of family systems in Sri Lanka imply that the family system of the Sinhalese majority in particular is one that is, relatively, friendly to women.
The differences between the family systems of the ethnic groups in the implied value which is placed on women are likely responsible in part for the observations made by Census Commissioner E. Denham in his report on the 1911 census. He notes that:

> "negotiations for the marriage of Sinhalese women were expected to start immediately after puberty had been reached. In contrast to this the custom among Moorish and Tamil women was for pre-pubescent marriage."(Denham, 1912)

Caldwell links this to how marriage differs between the ethnic groups. The Sinhalese left space for the individual (and most importantly the woman) to reach maturity while the Moors and the Tamils were highly concerned with the control of female sexuality and ensuring that no doubt could be cast on a woman's morality before she married.

When it comes to the literacy of Sri Lankan women the statistics from the censuses held in 1901 and 1911 reveal that Sri Lankan literacy for women is of a similar level to that found for Burmese women.

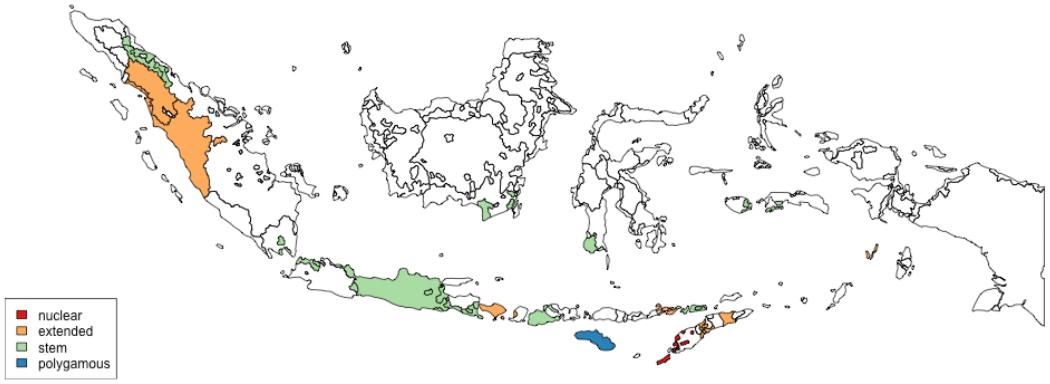
Table 5: Sri Lankan Literacy 1901 and 1911

Year	Group	%male literate	% female literate
1901	Total	34.7	6.9
1911	Total	43.3	11.7
1901	Low-country Sinhalese	40.8	11.1
1911	Low-country Sinhalese	47.8	17.5
1901	Ceylon Tamils	28.2	4.1
1911	Ceylon Tamils	46.7	11.1

By 1911 11% of women were literate, compared to 43% of the men. The Sinhalese also fair slightly better than the Tamils however both groups are far out performing the literacy levels to be found on average in India 20 years later, as referred to above (1921 male literacy of 12% female literacy of 1.8%).

Indonesia

Map 13: Indonesia domestic organisation



In the Indonesian archipelago we find an enormous variety of ethnic groups. The ones for which the Murdock Ethnographic Atlas contains data are mapped above where domestic organization is the variable displayed.

The most 'promising', gender-friendly marriage systems were present on Sumatra, in particular in the Lampong districts and the Minangkabau region. In the Lampong districts, in the south of Sumatra, the boy and the girl were main actors – even initiators - of the process, as a report from 1852 already makes clear.

> 'It takes a long and tedious delay in the Lampongs before a marriage is brought about. If a young man is in love with a girl, he makes her proposals in writing and sends love letters to her, writing on lonthar leaves. From the time he becomes a declared suitor, he no longer repairs to the village where his bride lives, but does everything by writing and leaves his relations and friends to act for him. They require not only to obtain the consent of the bride's parents, but also in the first place with them the amount of dowry (*jujur*).

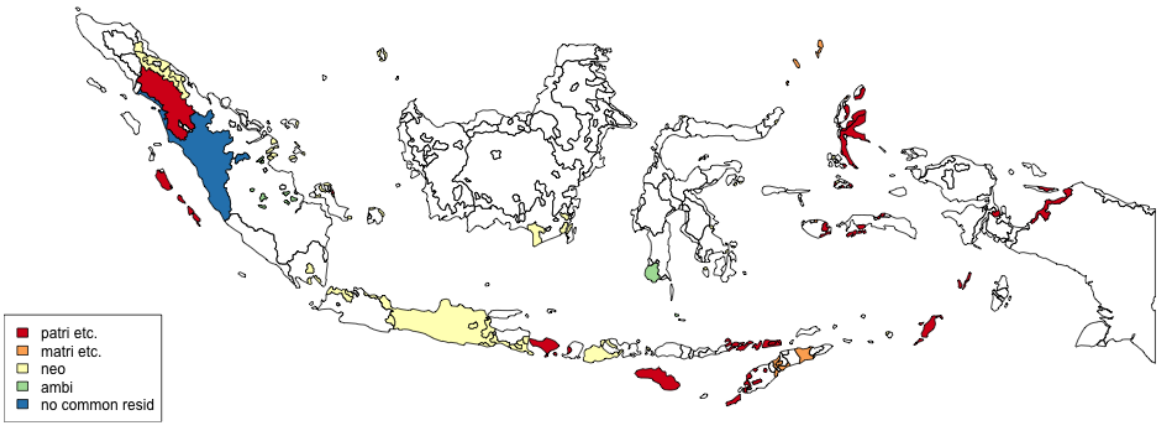
> … It often happens that a long time elapses before the suitor has collected the whole sum, and even that many never attain the whole and consequently die unmarried. This is the reason why such a large number of unmarried persons are found. Perhaps in this also consists one of the causes of the small population of the country' (Zollinger 1851: 697).

This is a mixed pattern, in which consensus between the future spouses was the starting point of long negotiations about the dowry, but which required the consent of the father of the bride. But it is remarkable that the boy and the girl communicated via letters, a practice that still existed in the 1920s; the Census of 1930 (volume VIII p. 29) for example writes, when noting the high level of literacy in this region:

> 'In the Lampong districts the high level of literacy has a special cause in the village game of young men and women, who court each other by writing letters' ('die met briefjes elkaar het hof maken (mandjau)'

An interesting aspect of this system was that the dowry was closely linked to the social status of the family of the father, and that the complexity of the social hierarchy in its turn was related to the degree to which a village/district had been integrated in Javanese socio-political structures. The part of the region that had been subordinate to the sultan of Banten, had copied an elaborate socio-political structure from this Javanese state, with a highly skewed system of dowries. Parts of the Lampong region which had been marginal to the Banten state, had not developed the same social hierarchies and related costly dowries (Broersma 1916).

Map 14: Indonesia marital residence



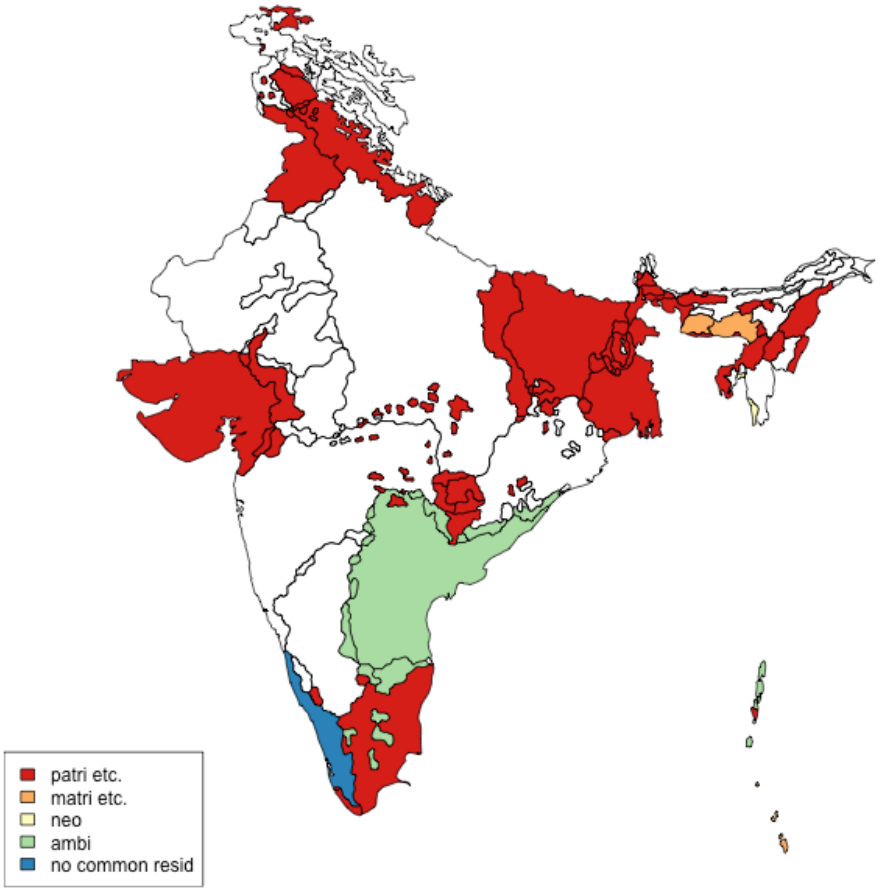
Another region with only very weak political structures – in which all villages were more or less independent political communities – is in Western Sumatra, inhabited by the Minangkabau, the 'embodiment of matriarchy' (Bachtiar 1967, 348). A rich literature has covered the ethnographic features of this society. Land and houses are inherited via the female lineage, and villages consist of large, matrilineal descent groups. Girls continue to live in the house of the mother; their spouse may live there as well (in particular when he is from outside the village), or more usually, continue to live in his ancestral house, and only visit her in the evening (a patterns also found in other matrilineal societies, such as Kerala). Often men are quite mobile and live elsewhere. This can be seen in map 14 where the Minangkabau are shown in dark blue on the westernmost island, coded as forming no common residence upon marriage. The Minangkabau are also Muslims, and the sharia (locally known and interpreted as *sjarak*) is another – to some extent alternative- source of social norms (Bachtiar 1967, 364). Marriage is relatively unregulated: 'the choice of a marriage partner may be made by the individuals concerned, the initiator being the man, the woman, a close relative, or an obliging friend' (note that parents are not mentioned here) (p.366). Usually a groomprice is paid, instead of a dowry (it is an exceptional case of the 'exchange of men' instead of the more usual 'exchange of women') (Krier 2000). Divorce is relatively easy and

frequent (which is a more general feature of marriage in the Malay world), in particular by men who are also allowed to have more than one wife; children stay in the household of the wife after divorce. Women have quite some agency in family matters – in particular 'the elder women may have the most to say in a family discussion' (Bachtiar 1967, 368), and important decisions are taken by a family gathering in which unanimity is the norm. The heads of the matrilineal descent group or clan are however men, who regulate relationships with the outside world; these *pengkulu* are usually recruited from the oldest brothers living in the family household. The position of men in these matrilineal societies , is rather complex: 'All in all, the position of a male in traditional Minangkabau society is a strange one in our eyes. He does not have any property, although he may manage and expand it for his sisters and his children. He does not really have a house or a place he can call his own" (Kato 1982:60). Or as explained by one of Krier's (2000; 890) informants: "The problem with being an in-married male (urang sumando) is that you always face financial loss. You invest in your wife's ancestral property, but then if she dies it goes back to her lineage'.

Did these Sumatran marriage systems also 'produce' high levels of literacy? The censuses of 1920 and 1930 show that in general, literacy in Indonesia was very low; according to the census of 1920, only 6,5 percent of the male Indonesians (older than 15 years) were able to read and write, and only 0.5% of the women; in 1930 this had increase to 13,2% and 2,3% respectively. There were, however, a few regions with much higher levels of literacy. Lampong (western Sumatra) is the best example: here 48% of men and a staggering 35% of women were literate in 1920. In 1930 these scores were somewhat lower: 30,4% and 22,5%, still much higher than the Indonesian average. The Minangkabau however did only slightly better than the national average (1930: 14,1% for men, 3,9% for women), but easily surpassed the surrounding regions of Sumatra such as Riouw (9,8 and 1,0) and Djambi (13,1 and 0,8). Only in the (partly) Christian regions of Manado (northern Sulawesi) and Ambon also stand out, with similar or even higher levels of literacy (in 1920: Menado: 53/35%, Ambon 36/37% - in the latter island women were according to these statistics even slightly more literate than men). These high levels of literacy reflect the activities of missionaries there, and the access people in these regions had to employment in the colonial army (and administration).

India

Map 15: India marital residence



There are many similarities between marriage systems of the Minangkabau and those in Kerala, in south-west India (shown in blue on the map above indicating no common marital residence). The story of Kerala has been told before (Jeffrey 1992): the largest ethnic group, the Nayars, lived in matrilineal households, where (certainly by Indian standards) women enjoyed an exceptional strong position. After marriage, women and men continued to live in the household of their mother, husbands visiting their spouses only occasionally. Women had a say in the choice of marriage partner, and divorce was easy and occurred regularly. The marriage ceremony was also quite basic. Jeffrey (1992: 35) for example concludes 'Matrilinty in Kerala was humane....it accorded [women] greater freedom, choice and respect than they would have found elsewhere in the world until the twentieth century'. He explains how this system resulted in high levels of education, a vibrant civil society (emerging already in the Interwar period), which became the basis for the progressive social-economic policies that became the hallmark of the 'Kerala model ' of the 1960s and 1970s (Jeffrey 1992). His data on human capital formation and advanced marriage ages are confirmed by the 1931 census: Kerala men have a literacy rate of 21,3%, women are almost as literate with 19,3%; the male level of literacy was not exceptional (Tamil Nadu, also in the south, scored highest with more than 40%, the Indian average was about 15%), the female literacy was (Indian average 4%, nearest competitor Tamil Nadu with 16,7%) (see also the paper by Dyson in this volume).

Conclusion

In this paper we approached the EMP from a global – or more precisely Eurasian – perspective. The question we addressed is how 'unique' this marriage system was, that has been so important for the in depth research carried out by the Cambridge group in the past fifty years. To answer this question, we redefined the EMP in ethnographic terms, as a marriage system characterized by monogamy, exogamy, consensus (no arranged marriages), neo-locality, and a relatively strong position of women in marriage (as measured by age of marriage). Thanks to Murdock's Ethnographic Atlas, and Emmanuel Todd's work on the spatial distribution of family systems, we could map the various dimensions of the institutions making up the EMP on world maps (of which we presented the parts of Eurasia). This allowed us to map the spread of marriage systems on the Eurasian landmass.

We can now turn to the question which is right: Hajnal's eurocentrism or Goody's cultural relativism? Hajnal definitely has a point that marriage systems (and related institutions concerning inheritance) in Western Europe are clearly different from what we find in the in the greater part of Eurasia. This is very clear when looking at female age of marriage in which Western Europe really stands out (only Japan comes close), but this was already more or less known (or could be suspected on the basis of the available literature). What we could demonstrate now, is that the various institutions (and cultural norms) determining marriage behavior, were also quite different from the overwhelming rest of Eurasia. If one scores these institutions on a 'gender-scale', as we tried to do in this paper, the contrast between Western Europe and India, China, Russia and the Middle East is indeed remarkable. In the centre of Eurasia really different marriage systems dominate, which were characterized by different outcomes (e.g. much lower ages of marriage) and underlying institutions (endogamy, polygamy, patrilocality, patri-lineal inheritance, etc.)

However, Goody does have a point that in the margins of these Eurasian marriage systems we find marriage arrangements which shows parallels with the EMP; moreover, there is also more variation within Western Europe than the original Hajnal classification suggests. This second point has already been made frequently by scholars who followed in his footsteps, and resulted in literature stressing the importance of the stem family (of central Europe), of a separate Southern European system, and the diverse nature of Eastern European family systems (Laslett 1982, Szoltycek 2012 etc). The heterogeneity of marriage system in the rest of Eurasia, and in particular in the outskirts of the landmass, has recently been stressed by Todd (2011) and is one of the main concerns of Goody (1989). South-East Asia in particular is a region characterized by a large variation in marriage systems (and related institutions). Kerala and Sri Lanka, even Japan can be seen as extensions of the region of diversity, in which a number of relatively gender-friendly family characteristics persisted (if we accept Todd's analysis of the phenomenon). In spatial terms, South-East Asia in a way mirrors Western Europe as the region without strong versions of patrilocality, endogamy and polygamy.

Finally, we tried to establish if the pockets of female-friendly marriage systems in the margins of the Eurasian continent produced higher levels of human capital formation (as has been suggested for the EMP). We were unable to test this link systematically, because data for this are still scarce and patchy, but the data we found do not contradict this claim: Japan is a case confirming this hypothesis, the same applies, but at a lower level, to the Sumatran Lampong districts (a rare non-European case of marriage based on consensus, where the boy and girl wrote letters to each other as part of their courtship), Kerala, Burma and Sri Lanka. Female literacy among the Minangkabau was only marginally higher than in Indonesia as a whole, but the differences with neighbouring regions were quite large. These regions all excelled in female literacy, but male literacy was also in general higher than in the rest of the country concerned. We therefore find confirmation of the hypothesis that female-friendly family systems enhance human capital formation.

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Appendix table 1: Matrilocal and uxorilocal societies

Society name	**Country**	**Matrilocal or Uxorilocal**
Yukaghir	North Eastern Russia	Uxorilocal
Nicobares	Andaman and Nicobar	Uxorilocal
Hanunoo	Philippines	Uxorilocal
Toradja	Indonesia	Uxorilocal
Ontong-ja	Solomon Islands	Uxorilocal
Karen	Burma	Uxorilocal
Tagbanua	Philippines	Uxorilocal
Jibu	Nigeria	Uxorilocal
Puyuma	Taiwan	Uxorilocal
Kalinga	Philippines	Uxorilocal
Garo	India	Matrilocal
Mnonggar	Vietnam	Matrilocal
Trukese	Micronesia	Matrilocal

Vedda	Sri Lanka	Matrilocal
Belu	East Timor	Matrilocal
Lesu	Papua New Guinea	Matrilocal
Ponapeans	Micronesia	Matrilocal
Yao	Mozambique	Matrilocal
Rotuman	Fiji	Matrilocal
Khasi	India	Matrilocal
Nomoians	Micronesia	Matrilocal
Bikinians	Marshall Islands	Matrilocal
Nauruans	Marshall Islands	Matrilocal
Rhade	Vietnam	Matrilocal
Carolinia	Northern Mariana Islands	Matrilocal
Luguru	Tanzania	Matrilocal
Cham	Vietnam	Matrilocal
Nyanja	Mozambique	Matrilocal
Nyasa	Mozambique	Matrilocal
Sena	Mozambique	Matrilocal
Kwere	Tanzania	Matrilocal
Zigula	Zanzibar	Matrilocal
Daka	Nigeria	Matrilocal
Ami	Indonesia	Matrilocal
Mimika	Indonesia	Matrilocal
Lamotrk	Micronesia	Matrilocal
Kaguru	Tanzania	Matrilocal
Negrisemb	Laos	Matrilocal
Marshalle	Marshall Islands	Matrilocal

There are a further 8 societies in which the society prescribes a situation in which no common residence is established:

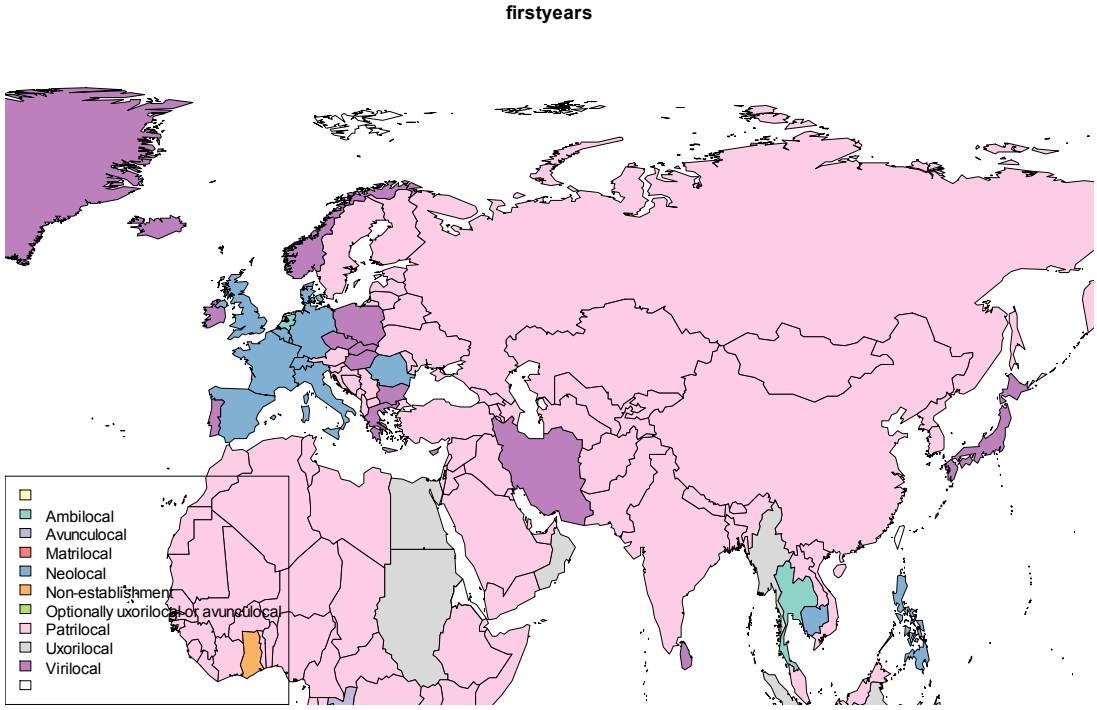
Appendix table 2: No common residence and neolocal societies

Kerala	India	No common residence
Minangkabau	Indonesia	No common residence
Kutubu	Papua New Guinea	No common residence
Siane	Papua New Guinea	No common residence
Fur	Sudan	No common residence
Ga	Ghana	No common residence
Marindani	Indonesia	No common residence
Aua	Papua New Guinea	No common residence

Bajun	Kenya	Neolocal
Konso	Ethiopia	Neolocal
Javanese	Indonesia	Neolocal

Romans	Italy	Neolocal
Hutsul	Ukraine	Neolocal
Kumyk	South Western Russia (by Azerbaijani border)	Neolocal
Burmese	Burma	Neolocal
Nyakyusa	Tanzania	Neolocal
Walloons	Belgium	Neolocal
Cambodian	Cambodia	Neolocal
Selung	Burma	Neolocal
Ganda	Uganda	Neolocal
Cheremis	South Western Russia (by Azerbaijani border)	Neolocal
Siamese	Thailand	Neolocal
Chamorro	Northern Mariana Islands	Neolocal
Neapolita	Italy	Neolocal
Bena	Tanzania	Neolocal
Spaniards	Spain	Neolocal
Ngonde	Tanzania	Neolocal
Barea	Eritrea	Neolocal
Kunama	Eritrea	Neolocal
Ancient Egyptians	Ancient Egypt	Neolocal
Sugbuhano	Philippines	Neolocal
Sumbawene	Indonesia	Neolocal
Romanians	Romania	Neolocal
Bilaan	Philippines	Neolocal
Bisayan	Philippines	Neolocal
Chekiang	China, Shanghai	Neolocal
Khmer	Cambodia	Neolocal

Appendix map 1: First years marital residence


firstyears
Ambilocal
Avunculocal
Matrilocal
Neolocal
Non-establishment
Optionally uxorilocal or avunculocal
Patrilocal
Uxorilocal
Virilocal