1. Description
1.1 Name of society, language, and language family: Mura (Mura-Piraha), Mura, Muran (8)
1.2 ISO code (3 letter code from ethnologue.com): 639 (listed under alternative name of Piraha)

1.3 Location (latitude/longitude): The traditional homeland of the Mura was located in the basins of the Madeira and Purus rivers, though they are now located in the lower Rio Madeira Basin of the Brazilian Amazon (2).

1.4 Brief history: The Mura reacted very strongly against European encroachment, and violently resisted the Portuguese. “The Mura originally inhabited the right bank of the lower Madeira River near the mouth of the Jamari River. Contact with whites led them to adopt guerrilla tactics; they spread downstream to the Purus River, raiding sedentary farmers along the way. By 1774 the Mura expansion had been countered by a local Brazilian campaign of extermination. In 1786, weakened by disease and by losses suffered at the hands of the aggressive Mundurukú, the Mura made peace with the whites.” (3)

1.5 Influence of missionaries/schools/governments/powerful neighbors: The Mura violently resisted missionary and other European influence, until unexpectedly declaring peace (3). In modern times, the Mura have become more acculturated, losing all but one dialect of the Muran family languages (9, 622). “The Mura have mostly shifted to Portuguese” (8).

1.6 Ecology: “The Mura’s homeland was a labrinyth of lakes and channels in the varzea flooded forest at the mouth of the Madeira and along the lower Solimoes” (1, 109).

1.7 Population size, mean village size, home range size, density: Population size is disputed. “The image of the “Gigantic Mura” suggests that the real population size was considerably augmented by the inclusion of thousands of people occupying the forests thought to be Mura territory. These would have been “deserters from colonial settlements who sought refuge among the Mura from the hard labor they were submitted in the villages” (6, 361).

2. Economy
2.1 Main carbohydrate staple(s): While the degree that the Mura depended on domesticated crops is disputed, they practiced some slash and burn horticulture. “They raised maize and bananas and possibly some manioc in the Autazes, but continued to derive much of their subsistence from the waterways long after settling there” (11, 56).

2.2 Main protein-lipid sources: Fish, as well as other marine mammals, make up a large portion of the diet of the Mura. “Fishing and the pursuit of turtles and manatees, though also less significant than agriculture in many places, assume a primary position among such river tribes as the Ipurina, Mura, and Paumar (4, 430).” In fact, the Mura were particularly known for their fishing abilities. “In addition to maintaining their exceptional abilities with the long bow and arrow, they earned a reputation as the most skillful fishermen and hunters of turtle and manatee in the region” (11, 56).

2.3 Weapons: Bow and arrow, blowguns?: “The Muras’ weapons were long bows and arrows, which they preferred to shoot by lying on their backs, so as to secure the bow with their feet and project the arrow with such force that it could penetrate the entire body of its victim.” (11, 55).

2.4 Food storage: Rectangular, straw baskets are used to hold vegetable foods (3).

2.5 Sexual division of production: Sexual division of labor was present in agricultural labor. “Men clear the land, but women perform all other agricultural operations (4, 430).”

2.6 Land tenure: Unknown

2.7 Ceramics: Ceramics were not present. “Loom-weaving occurs only sporadically, but pottery is made by all tribes except the Mura (4, 430).”

2.8 Specified (prescribed or proscribed) sharing patterns: Unknown

2.9 Food taboos: Unknown

2.10 Canoes/watercraft? The Mura are described in ethnographic accounts as accomplished boatman who used canoes to navigate the lakes and channels that covered their homeland (1, 109) “Excellent bark canoes, or occasionally dugouts, are made (4, 430).” However, other varieties of canoes existed among the Mura, and they were known to occupy them for extended periods of time. “They learned to travel about in long, narrow canoes made of the bark from a single tree tied together with vines, which carried up to fifteen people and were much faster than the broader and heavier dugouts of most dwellers along the Amazon. The men might live in these canoes for weeks on end during the far-ranging raiding expeditions with which they occupied themselves when the river’s waters were low” (11, 56).
3. Anthropometry
3.1 Mean adult height (m and f): Unknown
3.2 Mean adult weight (m and f): Unknown

4. Life History, mating, marriage
4.1 Age at menarche (f): Unknown
4.2 Age at first birth (m and f): Unknown
4.3 Completed family size (m and f): Unknown
4.4 Inter-birth-interval (f): Unknown
4.5 Age first marriage (m and f): Unknown
4.6 Proportion of marriages ending in divorce: Unknown

4.7 Percent marriages polygynous, percent males married polygynously: Monogamy or else limited sororal polygyny prevails, and residence is usually matrilocal with bride-service (4, 430).”

4.8 Bride purchase (price), bride service, dowry?
   Bride service is typically present, though exact customs are not stated (4, 430). See above quote.

4.9 Inheritance patterns: Unknown
4.10 Parent-offspring interactions and conflict: Unknown
4.11 Homosexual activities, social attitudes towards homosexuals: Unknown

4.12 Pattern of exogamy (endogamy): Cross-cousins were the preferred marriage partner, but further information is unknown about marriage partner selection (2).

4.13 What is the belief of the role of males in conception; is paternity partible? Are these “other fathers” recognized? Unknown
4.14 What is the belief of the mother’s role in procreation exactly? (e.g., “receptacle in which fetus grows”) Unknown
4.15 Is conception believed to be an incremental process (i.e., semen builds up over time)? Unknown
4.16 Occurrence of sexual coercion, rape: Unknown

4.17 Preferential category for spouse (e.g., cross cousin): Cross cousin marriages were the preferred form (2).

4.18 Do females enjoy sexual freedoms? Unknown
4.19 Evidence of giving gifts to extramarital partners or extramarital offspring: Unknown
4.20 If mother dies, whose raises children? Unknown

4.21 Adult sex ratio: number of adult males divided by number of (reproductive) females: Exact data not known, but warfare significantly affected the size of the male population (5, 22). See quote under Warfare 4.14.

4.22 Evidence for couvades: Unknown
4.23 Different distinctions for potential fathers (e.g., lesser/younger vs. major/older) Unknown
4.24 Kin avoidance and respect? Unknown
4.25 Patterns of descent (e.g., bilateral, matrilineal) for certain rights, names or associations: Unknown
4.26 Incest avoidance rules: Unknown

4.27 Is there a formal marriage ceremony? Mentions of a formal marriage ceremony are not found, but there is a documented ritual accompanying one form of marriage. In the case of cross-cousin marriages, a man would ceremonially pretend to steal his new wife from her home (3).

4.28 In what way(s) does one get a name, change their name, and obtain another name? Unknown
4.29 Is marriage usually (or preferred to be) within community or outside community? (m/f difference?) Unknown
4.30 Are marriages arranged? Who arranges (e.g., parents, close kin)? Unknown
4.31 Evidence for conflict of interest over who marries who: Unknown
Warfare/homicide
4.14 Percent adult (male) deaths due to warfare:
No exact figures are given, but during the late 18th century, male populations were significantly decreased due to warfare. “The devastation of the male combatants, leaving a community with a majority of women and children, may have made it difficult to persevere in what increasingly seemed to be a war of diminishing returns for the Mura” (5, 22).

4.15 Outgroup vs ingroup cause of violent death: Unknown

4.16 Reported causes of in-group and out-group killing: The Mura constantly attacked Portuguese settlers, as well as Jesuit Missionaries, of whom they had a particular dislike. This dislike stemmed from an earlier misunderstanding, when a group of Mura who had agreed to go and live with the Jesuits ended up being sold into slavery instead.

When the Muras who had been left behind learned what had happened, they were confirmed in an attitude of undying hatred for the whites -and in particular for the Jesuits whose talk of resettlement in a mission village, they presumed quite reasonably, had been a pre-text for cruel enslavement. Since that time, reported Daniel, the Muras had engaged in continuous hostilities against all whites and their domestic Indian followers-attacking mission stations and cacao collecting expeditions wherever they found them. (11, 55)

4.17 Number, diversity and relationship with neighboring societies (external relations): One way that the Mura interacted with surrounding tribes was by assimilated members into their group, whether voluntary or not. “The institution of Murification, the assimilation of other Indians into Mura society, was another important process. It was at times defined as a voluntary action by Indians of different groups, settled or not, who joined the Mura; at other times it was seen as a practice derived from intertribal warfare in which prisoners of war would be integrated into the group” (6, 362). The Mura also appear to have carried out raids and other attacks against the neighboring tribe of Mundurukú. “He attributes the quantitative development to the power and warring strength of the tribe, which thus protected its gardens against the attacks, thefts, and raids frequently carried out by other tribes, especially the Mura” (7, 3)

4.18 Cannibalism? Unknown

5. Socio-Political organization and interaction
5.1 Mean local residential (village) group size: Unknown

5.2 Mobility pattern: (seasonality): During early periods of war with the Portuguese, the Mura were described as less settled than other neighboring tribes. “The Mura were nonseientary and had little agriculture” (9, 148). Warfare and raiding was often a cause for the group’s movement. “Daniel understood them to be a nonseientary people who lacked permanent settlements and were usually at war with both Indians and whites, roving and raiding over a wide territory from their base between the Madeira and Purus rivers” (11, 55).

5.3 Political system: (chiefs, clans etc, wealth or status classes): Individual villages remain independent in their leadership, though there is a system of leadership within the village. “Each village is politically autonomous under a local headman (4, 430).” There is little evidence for the presence of wealth. “They lived very simply, with few villages or possessions beyond their canoes and weapons; and although they wore cloth aprons and tiara-like straw visors, they were otherwise unkempt and unadorned” (1, 109).

5.4 Post marital residence: The Mura practice a matrilocal residence pattern after marriage. (2)

5.5 Territoriality? (defined boundaries, active defense):
The Mura roamed over a large area, often because of warfare (11, 55). See quote at 5.2. They also defended their territory, and Europeans were often too scared to enter Mura land. “Moreover, they had developed and used with fearsome effect the special tactic of laying ambush from hiding places in the forest and showering arrows on any passing canoe. So dangerous had they made themselves on the Madeira, he confirmed, that by the late 1740s the cacao crews were avoiding that river altogether, making their way instead to the more distant and less abundant but safer banks of the Solimoes” (11, 56).

5.6 Social interaction divisions ? (age and sex): Unknown

5.7 Special friendships/joking relationships: Unknown

5.8 Village and house organization: House organization is reported to consist of single-family homes. “This tribe, which is also differentiated from its neighbors in possessing only elementary thatched shelters accommodating but a single family, quite possibly reflects an earlier, pre-agricultural and nomadic cultural phase (4, 430).” However, this is contradicted by another report, which has the Mura living in multifamily residences. “In the Autazes, as the Portuguese who warred against them were to learn a generation later, the Muras lived in a great number of dispersed mulocus, or multifamily thatched houses, located along a far-flung network of lakes and igurupb (Amazonian bayous)” (11, 55).
5.9 Specialized village structures (mens’ houses): Unknown

5.10 Sleep in hammocks or on ground or elsewhere? The Mura slept in hammocks. “Neither men nor women used clothing of any kind; their bark canoes, their crudely woven hammocks, and their weapons appeared to be the same as before the Muras’ half-century of intense interaction through war and peace with the Portuguese” (11, 75).

5.11 Social organization, clans, moieties, lineages, etc: Unknown

5.12 Trade: During the 1700s, the Mura were in a state of violent resistance against the Portuguese, however, trade still seemed to occur between the two groups. “Moreover, the Mura were willing to exchange fish and forest products with the Portuguese for tools and other items they needed” (5, 22). Additionally, the Mura acquired goods from neighbors through raids and theft (7, 3). See 4.17 for relevant quote.

5.13 Indications of social hierarchies?
Villages are not described as having social hierarchies. “Their villages are very small, without much organization.” (3)

6. Ritual/Ceremony/Religion (RCR)

6.1 Specialization (shamans and medicine): Shamanism was practiced, but more information is unknown (3). See quote at 6.4.

6.2 Stimulants: Stimulants included a drug produced from a parica tree (3). See quote at 6.4.

6.3 Passage rituals (birth, death, puberty, seasonal): Unknown

6.4 Other rituals: “They are nominally Christian, but their rituals include the use of a narcotic made from the parica tree, flagellation rites, and shamanism” (3).

6.5 Myths (Creation): The Piraha, the only surviving speakers of the Muran language family, have a documented lack of creation stories, which may shed light on the creation stories of the Mura, as no ethnographic information is available. “It has no creation myths—its texts are almost always descriptions of immediate experience or interpretations of experience; it has some stories about the past, but only of one or two generations back” (9, 622).

6.6 Cultural material (art, music, games): Flutes made with attached bamboo tubes are found among the Mura, and small bows are also used as instruments among children. Games are also an important part of their culture, and help to teach children skills needed for adulthood. Boys learn how to produce bows and arrows, while girls help look after younger children and play with spindles (2).

6.7 Sex differences in RCR: Unknown

6.8 Missionary effect: Currently, there is some practicing of Christianity, though this is not specified. (3). See quote at 6.4.

6.9 RCR revival: Unknown

6.10 Death and afterlife beliefs: Unknown

6.11 Taboo of naming dead people? Unknown

6.12 Is there teknonymy? Unknown

6.13 Briefly describe religion (animism, ancestor worship, deism, magic, totems etc.) Unknown

7. Adornment

7.1 Body paint: Unknown

7.2 Piercings: Unknown

7.3 Haircut: In modern times, hair is cut using scissors and combs. Previously, piranha jaws had been used (2).

7.4 Scarification: Unknown

7.5 Adornment (beads, feathers, lip plates, etc.):
Typical adornment among the Mura can be seen in a description of an important Mura figure, chief Ambrozio. “He is described as a huge man, tall and muscular, with two wild boar bones perforating his upper and lower lips, following the Mura custom” (6, 361). The following is also said about Mura adornment, “The Mura also wore necklaces and belts. Nowadays, Pirahã ornaments consist only of necklaces, armbands and rings” (2).

7.6 Ceremonial/Ritual adornment: Unknown

7.7 Sex differences in adornment: Unknown

7.8 Missionary effect: Unknown

7.9 Cultural revival in adornment: Unknown
8. **Kinship systems**

8.1 Sibling classification system: Unknown
8.2 Sororate, levirate: Sororal marriages occur among the Mura (4, 430). See quote for 4.7.
8.3 Other notable kinship typology, especially cross-cousin (MBD/FZD) typology (Crow/Hawaiian/Omaha etc.): Unknown

9. **Other interesting cultural features (list them):**

1. The only language of the Muran language family to still be spoken is Piraha, which has a number of unusual features setting it apart from other languages, and could potentially give insight into Mura culture.

   This study began as a description of the absence of numerals, number, and counting in Piraha, the only surviving member of the Muran language family. However, after considering the implications of these unusual features of Piraha language and culture, I came to the conclusion defended in this paper, namely, that there is an important relation between the absence of number, numerals, and counting, on the one hand, and the striking absence of other forms of precision quantification in Piraha semantics and culture, on the other. A summary of the surprising facts will include at least the following: Piraha is the only language known without number, numerals, or a concept of counting. It also lacks terms for quantification such as “all,” “each,” “every,” “most,” and “some.” It is the only language known without color terms. (9, 622)

2. After a period of warfare between the Mura and the Portuguese, the eventual peace inspired the first work of literature in the Amazon. “The peace with the Mura inspired Amazonia’s first literary work—an epic poem called The Muhraida or The Conversion and Reconciliation of the Mura Heathen, by an officer called Henrique Joao Wilkens” (1, 111).

3. The Mura were best known for being dangerous warriors, as well as accomplished boatman. “The Mura were known in the early colonial period as the pirates of the waterways” (10, 148).

**Numbered references**