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Klaus Hamberger

*Ecole des Hautes Etudes en Sciences Sociales*, klaus.hamberger@ehess.fr

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# Engendering Houses: The Topological Conception of Gender Pioneered by Stephen and Christine Hugh-Jones

**Klaus Hamberger**

Laboratoire d'Anthropologie Sociale  
École des Hautes Études en Sciences Sociales  
FRANCE

## Introduction

That not only bodies but also artifacts, dwellings, landscapes, and entire spatial coordinate systems are gendered is a well-known fact, and perhaps this has been nowhere so thoroughly demonstrated as in Northwest Amazonia (see, among many others, Arhem 1981; Bidou 1972; Goldman 1963; Guyot 1972; Hill 2001; Jackson 1983, 1992; Karadimas 2008a, 2008b; Reichel-Dolmatoff 1971, 1996). The wealth of ethnographies considering this region that retrace gender polarity from the fundamental cosmological structures down to the minutiae of everyday life is enormous, and at times almost excessive, reaching its climax in Gerardo Reichel-Dolmatoff's (1971) work, where each and every item of Amazonian thought appears as a reference to phallic or vaginal images. At first sight, the work of Stephen and Christine Hugh-Jones, beginning with their contributions to the centenary Congress of the Society of Americanists on Space and Time (1977c, 1977s)<sup>a</sup> and two monographs on Barasana society (1979c, 1979s), seems to form part of this general current of classical structuralist ethnography, which at the time was about reaching its saturation point. However, even without mentioning Stephen's later (1993s, 1995s, 2001s, 2017s, 2018s) contributions to the anthropology of gendered space, the twin 1979 publications already went far beyond the standard inventories of structuralist dichotomies (high/low, east/west, inside/outside, etc.) through which "analogical" thought was deemed to "project" gender polarity onto space. In fact, Christine's and Stephen's analyses were probably the first to invert the traditional perspective: rather than asking how gender polarity structures space, they opened the way toward conceiving this polarity itself as genuinely spatial.

Traditional structuralist analyses had taken gender to be a self-evident, primitive dichotomy that did not itself require analysis. Even if they did not reduce it to the penis/vagina distinction, they ultimately conceptualized it as having some correspondence to the genital criterion, be this metaphorical (the dart resembles a penis, the pot a vagina) or metonymical (penis-owners make and use darts, vagina-owners make and use pots). As a consequence, these works never asked according to which criterion darts and penises were "male" and pots and vaginas were "female," and whether the analysis of hunting and pottery might teach us more about the use of the genital organs than vice versa.

The analytical orientation of Stephen and Christine was sensibly different, perhaps due to the fortunate fact that they did not start with darts and pots but with flutes and beer troughs, that is, objects whose gender value was impossible to define in an absolute, context-independent way (1979c:191; 2001s:263; see also Christine's personal communication cited in Jackson 1983:190). The same turned out to be the case for the gender values of place and direction: both depended fundamentally on the reference system and the point of view. The Barasana house is male in initiation and female in ceremonial exchange. Its front opening is now a male mouth, now a female vagina. Front and back doors are called "root" and "tip" in the male perspective and the inverse in a female perspective (S. Hugh-Jones, pers. comm.). The west-east orientation is male by day and female at night, and so on. It would have been all too easy

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<sup>a</sup> In order to avoid repetition and ambiguity the works of Stephen Hugh-Jones and Christine Hugh-Jones will be referenced according to year of publication with an "s" or "c" suffix added (for Stephen and Christine respectively) throughout the article and the Hugh-Jones surname of both authors will be omitted.

to ascribe this profound variability and relativity of gender to a supposed fluidity of Amazonian thought. Stephen and Christine drew the opposite conclusion: the apparent ambiguities indicated gender depended on perspective and scale. As a consequence, a change of the spatial coordinate system implied not only a transformation of the relation between left and right, or between front and back, but also between male and female. This insight was not entirely new—Pierre Bourdieu (1970) had already demonstrated it in his seminal study on the Kabyle house—but Christine and Stephen were the first to turn it into a systematic method of transformational analysis. This was not only an important step toward a topological refinement of the notion of transformation; it also had a fundamental impact on the gender concept itself. For if spatial transformations can alter gender, it only takes one additional step to ask whether these perspective- and scale-dependent variations of gender are not just expressions of gender itself being basically a form of situating oneself in space.

The perspective change brought about by Stephen's and Christine's work was closely related to the gendered setting of their joint ethnography, where each respectively focused on a distinct area of research: ritual and myth (for Stephen, who worked with the men at the front door of the Barasana house) and domestic production (for Christine, who worked with the women at the back door). What initially seemed a division of space into male and female domains, with all its implications of exclusion, inequality, and devaluation (see 1979c:xiv ff.), ultimately turned out to be polar perspectives on basically similar processes. Starting from the observation that the operational chain of female manioc processing is essentially the same as that of male initiation rites,<sup>1</sup> Christine's 1979 monograph in particular concerned integrating these perspectives within an encompassing transformational analysis (1979c:180ff.). To simplify her argument, we might say that male initiation is manioc processing from the point of view of the tubers, and manioc processing is male initiation from the point of view of the longhouse. This observation was all the more fundamental given that the processes of male initiation and manioc production actually produce men and women on a (respectively) ritual and everyday basis. The analysis of these spatiotemporal processes is thus required to understand what "male" and "female" means in Northwest Amazonia (and beyond). Rather than describing the gendered divisions of space in terms of the gendered bodies that operate in it, this approach, upon which Stephen's (1993s, 1995s) comparative analyses of Barasana ritual further elaborated, made it possible to understand gendered bodies as integral parts of a space polarized by the operations that take place in it.

In this contribution, I propose to further develop this approach by following the track of Stephen's and Christine's Barasana materials. The purpose of the essay is not exegetical. Nor do I imagine that Stephen and Christine would agree with every step in my argument, which took shape in a quite different cultural context, albeit from a perspective thoroughly shaped by my reading of them. Rather, to borrow an idiom of Barasana topology, I consider this text an exploratory fish which, emerging from the huge anaconda body constituted by their work, swims through an argumentative river that is itself a transformation of this body. I leave it to Stephen and Christine to judge to what extent this journey is carried on the current of their thought or runs against it. Either way, I hope it will prove fertile.

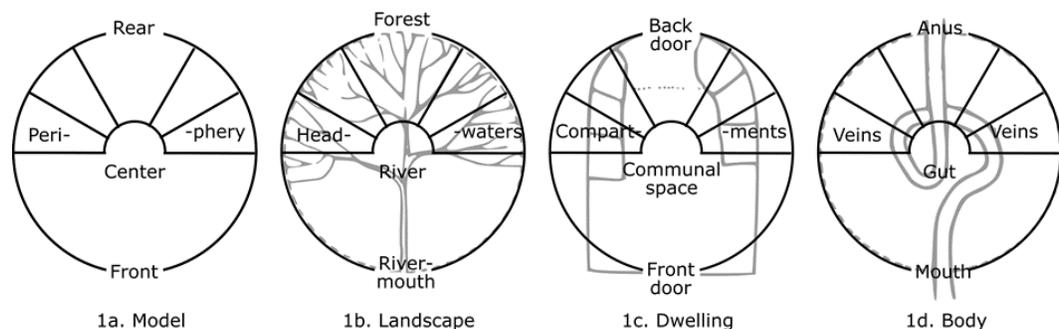
### **Gender as Mode of Spatial Interaction**

Space can be seen both as a structure of contiguity relations and as a group of transformations that change some of these relations while leaving others invariant. The most basic contiguity relation, left unchanged even by the largest groups of transformations, is the relation between container and contained. Reduced to its topological fundamentals, space is a system of containers. Each of the sites that constitute a given space—be they landscapes, dwellings, human or nonhuman bodies, artifacts, etc.—can be considered both as containing other sites and as being contained in other sites. An anaconda is a container of the people it carries in its body like a canoe (1993s:102; 2001s:272); at the same time it is contained in the river where it swims like an intestinal worm in the digestive gut (1979c:243). The relation of container and content may be conceived of in terms of mediation. Interaction with the container mediates interaction with the content; one has to pass through the one in order to get to the other. From this fundamental relation derive the most elementary spatial concepts. Without necessarily evolving into a formal typology (such as presented, for example, by Hillier and Hanson 1984), this topological reconceptualization is a prerequisite for comparing spatial structures of different

shapes and scales. For any given site, we can thus define its location as the totality of sites that contain it, its interior as the totality of sites it contains, its exterior as the totality of sites it does not contain, and its openings as the sites it shares with containers other than those which contain it. Clearly, the concrete meaning of an “opening” depends on the sensual medium of the interaction concerned. The boundaries of most containers (such as the walls of houses or the skin of bodies) may be considered interfaces or barriers depending on whether we stress their capacity of mediating or blocking, for example, optic, acoustic, thermic, or olfactory interactions.

These basic concepts allow us to describe both the internal morphology of containers and their mutual relations in topological terms. Thus we can characterize them as open or closed according to whether they have an opening or not, and as recipients, tubes, and so forth according to whether they have one, two, or more distinct openings.<sup>2</sup> It further allows us to characterize two sites as adjacent if there is an opening leading from one to the other and as connected if there is a site to which they both are adjacent or connected. The notion of connection gives rise to a rudimentary idea of betweenness and closeness independent of distance: if the removal of a site would disconnect two other sites, then it is situated between them, and is closer to each of them than they are to each other. If a site contains several sites, we may distinguish more central sites from those more peripheral according to the number of sites they lie between. If there is only one opening, we may distinguish more or less anterior or posterior sites according to whether they are more or less close to it.<sup>3</sup> This ranking of the composite sites of a container can also be accomplished with respect to the temporal order in which mobile content passes through them. The polarity between anterior and posterior openings may thus take the various forms of headwaters and confluence (1979c:239–41; 1979s:26), east and west (1979c: 267–8; 1979s:144), mouth and anus (1979c:248; 1985:93; 1993:111) and so forth, according to whether the content is water in the riverbed, stars in the firmament, or food in the alimentary canal. Even without reference to movement, a container with more than one opening can be oriented with reference to encompassing one-opening containers of higher scales. For example, to the extent that the Barasana house mediates access to the gardens behind it, the back door constitutes an internal passageway between the house and the garden, while the front door connects the encompassing house and garden site to the external world represented by the river (cf. 1979c:249).

These few principles of spatial construction suffice to characterize the basic topological model prevailing in a given cultural area by comparison with other areas. Thus Northwest Amazonian space shares with West African space the polarization between a frontal central area, directly accessible from the exterior, and a segmented, interior periphery in the rear (1979c:47, 253; 1993s:111–2; 1995s:230). On the other hand, while West African spaces (homesteads, clay mounds, masks, etc.) are mainly single-opening recipients, Northwest Amazonian spaces (longhouses, anaconda bodies, sacred flutes, etc.), are typically double-opening tubes (2017s), whose importance for Amerindian thought has been noted by Lévi-Strauss (1985:216, 242). Figure 1 summarizes the basic layout of Barasana space for various scales (landscape, dwelling, body), based on Christine’s (1979:252) synoptic representation:<sup>4</sup>



**Figure 1.** Topological schema of Barasana space (a) and applications to scale of landscape (b), dwelling (c), and body (d), after C. Hugh-Jones 1979:252

The notions deployed hitherto have been primarily based on a static relation between content and container. Movement, that is, a change in this relation, has only been introduced

for the sake of orienting an otherwise symmetrical tubular container. However, movement becomes decisive as soon as we consider container and content not just as sites but as agents engaged in mutual interaction. Each of the two possible changes of the container-content relation (that is, a movement of content into or out of the container) can be considered an action of the container (which receives or expels the content) or of the content (which penetrates into or emerges from the container). What is more, the static relation (whether the content is inside or outside the container) can also be considered to be the result of an action on the part of either the container in retaining or rejecting the content or of the content in occupying or avoiding the container:

Type of (non-)Movement	Action of Container	Action of Content
Out [Non-Entry]	Rejection	Avoidance
Entry [Out-In]	Reception	Penetration
In [Non-Exit]	Retention	Occupation
Exit [In-Out]	Expulsion	Emergence

**Table 1.** Content-Container Operations

This topology of interactional forms lies at the core of the gender concept. As I will try to show, what we commonly call the “sexual division of labor” resides basically in a polarization of human interactions (with the human and the nonhuman world) between “container”- and “content”-operations. By this I mean not only that men and women tend to specialize respectively in operations of the “content”- or the “container”-type but that the difference between men and women is itself a result of this specialization. Men and women only exist to the degree that the forms of interaction are polarized, and this polarization rests on a separation between the uses of contents and containers,<sup>5</sup> even if other spatial criteria—such as the exterior or interior localization of the operation, or its externalization from organs to tools—increase its overall complexity. The division of tasks in sexual reproduction is a special case of this polarization, without necessarily being its foundation. Body parts become organs only to the degree that they are used in a certain way, and anatomical dispositions, no less than physical size or strength, are a consequence as much as a cause of the sexual division of labor. From a topological viewpoint, Northwest Amazonian pottery is as characteristically female as pregnancy, and blowpipe hunting as characteristically male as insemination.

This does not mean that container-operations are always female and content-actions always male, but that the network of operations done in the same places or by the same bodies roughly falls into two zones dominated respectively by container- and content-actions. Each of these zones may include operations of the opposite type (which is unavoidable if the operational chains are complex), and both may be connected to each other by a more or less important intermediate zone of variable or shared operations. Many operations combine content- and container-aspects, in which case their gender value depends on the cluster of other operations to which they are connected within the polarized network. The degree as well as the gradient of this polarization varies widely from one society to the next. Even in the most polarized societies, many if not most operations (such as prehension or ingestion) are common to all human beings. On the other hand, even in the most undifferentiated societies, gender polarity goes far beyond anatomy.

The example of Barasana society can serve to illustrate some general principles of this polarization. Let us first consider the “container” pole of the spectrum. In its weakest form, the action of a container does not change the form of the content, but only changes its place (transport) or prevents it from changing its place (storage). Even in its most immobile and neutral mode, containment remains a form of action (as Claude Lévi-Strauss has underlined with respect to the distinctive “jealousy” of containers [1985:235]). In most cases, however, storage implies some sort of transformation. Examples include the transformations of starch and fiber in the course of processing manioc, which, as Christine has shown, formally

corresponds to the transformations of secluded girls and boys during menarche and initiation, respectively (1979c:189). In all these cases, content is put into a container (starch into a pot placed on the ground, fiber into a sieve suspended on a tripod, and boys and girls into seclusion compartments at the front and back of the house, respectively [1979c:135; 1979s:84]), where it sours (starch, girls) or rots (fiber, boys). Rotted products moreover require drainage as an additional step in their processing. Except for the boys' seclusion (controlled by the shaman, whose gender is ambiguous), all these processes take place in the female part of the house and under women's control.

Drainage of manioc fiber, another characteristically female task, represents an intensified degree of container-action. It is accomplished by passing the fiber through the manioc squeezer, a cylindrical tube made from basketry that hangs from a horizontal pole. The poisonous liquid is pressed through the walls of the squeezer, after which the dried fiber is tipped out through the upper end (1979c:179), a process locally conceived of as a form of externalized digestion (1979c:186). The initiatory longhouse (and the anaconda it incarnates) accomplishes a similar sequence of operations on boys who are swallowed, secluded, and re-vomited in hardened, purified form through initiation (1979c:188–9). The hardening process entails whipping, which in former times was done while holding the initiates by the hands and feet in a horizontal position (1979s:207). Again, both manioc processing and initiation involve identical operations of suspension, stretching, and external percussion (which, in Leroi-Gourhan's [1964] definition, includes pressing as well as beating).

A still more intensive and transformative container-action, universally assigned to women, is cooking (1979c:170), which the Barasana, like many others, assimilate to pregnancy (1979c:194). Contrary to the manioc squeezer or the gut, which act mechanically on their content, the cooking pot and the womb act on their content by thermochemical processes mediated by liquids. The articulation between female bodies and external containers in the transformation process is even more pronounced in the production of manioc beer, which is brewed from boiled juice mixed with ingredients that are chewed and spat out by the women to promote fermentation (1979c:179 and in particular 2018s). Pottery, another widespread female art (1979c:170), combines transformation by the application of pressure (as in the case of squeezing) and heat (as in the case of cooking), though at different stages, both of which mobilize container-actions. First the potter's hands forming, pressing, and smoothing the clay, then the burning logs surrounding the vessels (Silva 1962:180–1). As Lévi-Strauss has noted (1985:232 ff.), in Amazonian mythology the transformation of clay into pots by modelling and firing inverts the transformation of food into excrement by cooking and digestion. Finally, the most interior and most covert form of container-action, pregnancy, is also the most exclusively female.

Let us now turn to content. The most radical forms of content-action on a container, destined to transform the container and not the content, consist essentially in the penetration of the former by the latter—be it in order to hollow it out (as in the case of carving), to divide it (cutting or felling), to catch it (angling with hook and line) or to kill it (spearing, harpooning, or shooting with dart, arrow, or bullet). These outside-oriented, purely penetrative forms of hunting, fishing, or woodworking are all exclusively male (1979c:170). Where penetration takes an inward orientation and combines with a prolonged retention of the content by the container, it entails the cooperation of women. Thus, men bring the food they have gained through hunting or fishing into the house to be cooked by women (1979c:192–4, 200). In a comparatively reduced manner, the male contribution to child production consists in “filling” women's bodies by repeated sexual intercourse until enough semen accumulates to form a fetus (1979c:115). To a still lesser degree, men's contribution to manioc production consists in carrying to the garden the sticks to be planted (an action that some myths compare to insemination [1979c:182–3]). Women handle the subsequent planting, weeding, and harvesting. In all these cases, the male operation consists in placing male content into a female container (pot, womb, or earth), where it is subsequently transformed through a purely female (culinary, procreative, or vegetative) process. Horticulture in Amazonia is a predominantly female sphere (except for the case of male coca planting, where the connotation of insemination is most pronounced) (S. Hugh-Jones, pers. comm. 2018; also see 1979c:129, 182, 212; 2001s:262). Barasana consider manioc tubers to be women's children (1979c:182; 1979s:223, 2017s:48). Both human and vegetal children are born in the garden behind the house, and both are brought to the female back door of the house along a path compared to the vagina,

and which (in myth and practice) serves as a place for sexual intercourse (1979c:115, 182). The garden thus appears continuous with the womb. Both are places where female products such as tubers or children are grown and processed largely independently of men.

This feminization of the almost entire agricultural process (except felling) is specific to regions (such as Northwest Amazonia) where female horticulture combines with male hunting and fishing. While the initial clearance of land is almost everywhere in the world male and harvesting often female (inasmuch as it involves transport), the intermediate operations of agriculture, which combine content- and container-actions, are typical “swing activities” whose male and female aspects are accentuated or diminished according to the role of other male and female activities in the overall economic system (Murdock and Provost 1973; Sanday 1974). Planting and extracting tubers in particular are markedly male in certain societies. Horticulture is not the only example of an intermediary or transitional domain. Just as Barasana women use contents such as manioc sticks, Barasana men use containers such as woven fish traps, and both genders participate in gathering, including poison fishing (1979c:171). The polarization of these latter operations rests mainly on spatial location (high- vs. low-growing resources or large vs. narrow range [1979c:170]). Moreover, women and men both deploy various culinary techniques involving woven above-ground containers (such as sieves), flat, hot dry containers (such as pots and clay griddles for toasting) and containers serving as supports for diffuse percussion (such as mortars) for processing, respectively, manioc in the back parts of the house or coca and tobacco in the front parts (1979c:201, 213; 1979s:108–9). In all these cases, the association of activities with the female or male pole cannot be accounted for exclusively by their intrinsic morphology but depends on their relative position within the encompassing social space.

The diversity and complexity of this continuum of operations does not, however, alter the principle that underlies its polarization. Gender is the result (rather than the basis) of this polarization. Containers and contents become female and male to the degree that they are spatially separated and morphologically differentiated. So artifacts or organs that preserve an undifferentiated unity as contents and containers show an “androgynous” or “bisexual” character as soon as we retrospectively impose a gendered reference frame on them. The most famous Northwest Amazonian example of such androgynous bodies are the sacred Yuruparí flutes. In their “container” aspect, these are instruments that pour water and blow breath over the initiates’ heads and genitals (1979s:80; 2001s:253) and emit diffuse, enveloping clouds of noise and stench like the excessively open, farting, and vomiting bodies of the mythical heroes whom they incarnate (1979s:199–200). Their mouthpieces are compared to vaginas (Reichel-Dolmatoff 1987:10). In their “content” aspect, on the other hand, the flutes are instruments that open the containers which they penetrate: women whom they make menstruate (1979s:198–9 and references cited there; 2017s:48), children in whom they cause diarrhea (1979s:200), initiates whom they make vomit (1979s:200), and ceremonial houses in which they move back and forth (1979c:154). Endowed with flutes, the boys become capable of using their penises. What makes the flutes male or female is thus not their (oblong and/or hollow) form, but their mode of operation, which may use the one or the other form (a point already stressed by Marilyn Strathern in her discussion of the sacred flutes of the Gimi of Papua New Guinea<sup>6</sup>). In the “content” mode the flutes penetrate a container, while in the “container” mode they emit a content, or rather, they emit another container (air, liquid, sound), which in turn envelops another content (the initiate’s head or penis). In fact, if the emitted content penetrates rather than envelops its target (such as when the mythical women use the flutes as blowpipes against men), the flutes become male instruments that turn their victims into women (2017s:48). According to which aspect is stressed, they may appear vaginal or phallic. Or rather, as Stephen (2001s:253) has later formulated in a more topological idiom, they may either incarnate the “internal reproductive capacities of women” or the “external,” “male capacity to elicit and activate” the latter. This morphological polyvalence qualifies the flutes as instruments that pass from women to men in myth (2001s:255) and separate the genders in ritual (1979c:142; 1979s:31, 72–3).<sup>7</sup>

Examples of artifacts, bodies, or larger spatial structures that can adopt a male or female aspect according to whether they are considered contents or containers can be infinitely multiplied. One might, for instance, cite the manioc squeezer, whose action as a container of fiber resembles the peristalsis of the intestinal gut, while as an oblong content suspended in the longhouse it resembles a penis from which the rotten manioc juice drips as “urine” into a

female pot deposited underneath (1979c:186–8). Another example is the longhouse, whose front door may appear as a female vagina or as a male mouth surrounded by facial paintings (1979c:48, 249; 1993s:102, 111), according to whether it is viewed as a container that shapes the bodies of its inhabitants or as a content that shapes the encompassing environment. In Barasana myth, ancestral houses are identified with anacondas, whose twofold action (as containers and contents) constitutes the origin of both people and landscape. The anaconda bears the ancestors in its body before giving birth to them by vomiting them out, and it channels the river system by penetrating the forest interior (1993s:102-105; 1995s:240; 2017s:41,49). More generally, the androgynous body of the anaconda provides a basic model of a contained container, the numerous transformations of which—into sacred flutes, manioc squeezers, longhouses, rivers, and so on—generate virtually the entire structure of Northwest Amazonian space. Stephen’s recent (2017s) analysis of the “tube” as a fundamental generative schema of Northwest Amazonian topology formalizes this vernacular anaconda model.

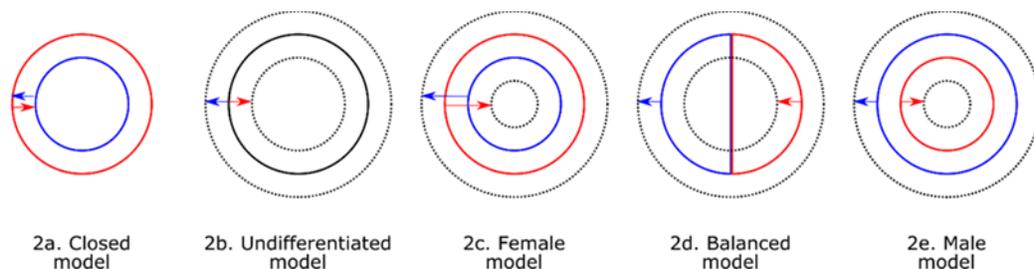
Now if the emergence of gender can be viewed as the differentiation between “content”-anacondas and “container”-anacondas, one might ask why such differentiation takes a bipolar form. It is, after all, theoretically possible to envisage the polymorphic interactional forms inventoried in the above table giving rise to a multiplicity of genders. Instead of differentiating men and women as contents and containers, we might instead differentiate them into recipients, retainers, penetrators, extractors, and so forth. We could also combine various container- and content-actions so as to distinguish penetrator-recipients or extractor-retainers; and we could further differentiate each of them according to the number and position of the (oral, anal, vaginal, etc.) cavities and the (buccal, digital, penile, etc.) protrusions their operations involve. This combinatorics is explored in Lévi-Strauss’s *The Jealous Potter* (1985) that draws heavily on Northwest Amazonian mythology (including Stephen’s and Christine’s ethnographies). Though his analysis is restricted to the domain of pottery (i.e., the production of recipients and retainers) and the corresponding disposition of jealousy (i.e., a desire for reception and retention), the bestiary of types described contains virtually all variants of container-actions listed in the table above.<sup>8</sup> Closed containers characterized by fasting and constipation are typified by Sloth (no-exit/no-entry), a variant of the Barasana No-Anus Spirit whose body transforms into potter’s clay (1979c:198–200). Ray typifies unilateral recipients characterized by sexual voracity or sterility (entry/no-exit). Inverted recipients characterized by logorrhea or diarrhea (no-entry/exit) are typified both by Howler Monkey and Whites, the latter being the species that produces the most noise. Nightjar (entry/exit) is a bipermeable tube characterized by both gluttony and incontinence. To be sure, all these “container”-figures exemplify some aspect of femininity. The jealous Nightjar whose excrement becomes the potter’s clay is female (as are Amerindian potters in general). The constipated Sloth that excels in the art of weaving is a sterile woman. Ray’s body is a transformation of female genital. Howler Monkey is closely associated with the sacred Yuruparí flutes (1979s:197–8), whose female aspects have been noted above. However, none of these figures is unambiguously gendered. The same holds for the mythological figures on the “content” side, all of which exhibit masculine aspects, but never exclusively. The Serpent who commits incest with his mother, the pottery jar, is simultaneously characterized by the female capacity of skin shedding, for example. And even Tapir, emblematic phallic seducer within Amazonian mythology, appears as an anti-mother, aspirating children through a flute into his anus.<sup>9</sup>

This mythological menagerie suffices to demonstrate the logical possibility of a multidimensional, nonbinary social organization differentiated into  $n$  genders.<sup>10</sup> Why then is human society organized into men and women rather than, for instance, into howler monkeys, tapirs and nightjars? I think a key to answering this question lies in the fact that gender polarization is not only a differentiation between spatial forms of interaction but a division of space itself as well. It is not only about how people interact with each other and with the nonhuman world but also of where these interactions take place. The concentration of interactional dispositions in different bodies (which we call “male” and “female”) is just a particular aspect of a more general concentration in different places, or, to put it another way, in different regions of the encompassing collective body of which these individual bodies form part.

## Gender as Structure of Space

Collectivities, like living bodies, are containers animated by the movements of their contents while also restraining and coordinating them. These containers are material entities—territories enclosed by mountains or rapids (1979s:139, 144), longhouses delimited by roofs and walls (1979c:248; 1979s:144), human bodies enveloped by painted skins (1985s:93; 1993s:111). “Houses,” in the broadest sense of the term that comprises not only dwellings but workplaces, landmarks, and rituals, are the material devices that delimit and structure the space of human collectivities. Leroi-Gourhan (1964, II:139 ff. and passim) describes houses as externalized organs by means of which collective human bodies trace their boundaries, regulate their vital rhythms, and articulate their interaction with the environment. Accordingly, as Christine (1979c:237) notes, they are constituted and brought to life through ongoing interactions with their contents. The constitution of a social group by the coordinate action of its members is an example of content-action that not only shapes but creates its container. On the other hand, the coercion exerted by the social group on each of its members represents a case of a container-action that gives birth (or rebirth) to its contents. A paradigmatic Barasana example of this two-sided constitution of collectives is male initiation. Initiated men collectively reconstitute the ancestral anaconda, thus transforming the ceremonial house into a living person (1979s:151–5). Exclusively composed of men, this collective body is nevertheless female. At the climax of the ritual, the house is filled with the vaginal odor of the beeswax gourd (1979c:154; 1979s:79, 167), which condenses all female characters of Barasana mythology (1979s:175).

This female gendering of the collective body is in a sense just a logical consequence of characterizing gender polarity in terms of container- and content-modes of interaction, as proposed in the preceding section. In fact, the conception of the longhouse during initiation as a woman composed of men expresses a closed model of interaction between (female) container and (male) content (Figure 2a below). But the longhouse is not closed upon itself. It interacts with the nonhuman world that surrounds it as container, such as river or forest, or enters it as content, such as fish or manioc tubers. In an open model, the content/container distinction thus becomes entirely relative, and the collective body can be characterized as either male or female (Figure 2b below), according to whether it is considered in relation to its exterior environment or to its interior components (1993s:111–2; 1995s:245).



**Figure 2.** Comparative models of gendered space. Gendered spheres are indicated by color (red for female, blue for male)

Neither formulation, however, tells us anything about the internal differentiation of this collective body into male and female members. This differentiation can only arise when male and female modes of interaction become concentrated in different regions of social space, that is, when different, specialized parts of the collective human body interact with the nonhuman world either in the content-mode (by penetrating it like teeth and claws) or in the container-mode (by enveloping it like throats and guts). Anchored in a spatial polarization of male and female activities, the dimorphism of male and female bodies (in the extended sense that includes their tools as externalized organs) thus becomes a morphological differentiation of the collective whole into separate parts whose relative localization corresponds to their relative endowment with protrusions or cavities and to their relative specialization in content- or container-operations.

This differentiation of human space into male and female spheres can itself be analyzed in terms of the content/container relation, as concerns both the degree to which each sphere

contains or is contained by the other, and the degree to which each is contained (interior) or uncontained (exterior) by the encompassing container (such as the house). We thus pass from a binary to a ternary version of the container/contained relation.<sup>11</sup>

The logically most consistent model would suggest a configuration in which the female sphere contains the male sphere (Figure 2c). The collective body thus would consistently act as a (female) container, both toward the exterior (which it rejects or receives) and toward the interior (which it retains or expels), while its actions as a (male) content would be either restricted to the interior or mediated by female action (as the dart has to pass through the blow-pipe). This model is frequently found in mythical situations, for example where women use an enclosed male as a source of ritual power or sexual pleasure (Murphy 1958:73–6; cf. Lévi-Strauss 1964:65–6 for the Mundurucu “secluded boy” myth). In rare cases, it may also apply to aspects of real social life. Among the historical Iroquois, male warfare was propelled by an encompassing female body incarnated in the matrilineal longhouse, which incorporated its male enemies as adopted children or devoured prey (Désveaux 2001:261 ff.; Chodowicz 1972:63 ff.). Such examples notwithstanding, models of an encompassing female space remain exceptional.

A second possible model is one in which both male and female spheres interact directly with the outside without encompassing each other (Figure 2d). In this case social space would have a female half, a container ready to receive an external content (like a trap), and a male half, a content ready to penetrate an external container (like an arrow). The historical societies of the North American Plains come close to this model, adopting a symmetric (left-right) dualism of male and female sides combined with a seasonal alternation of reception and penetration. The high value put on male hunting and warfare here goes along with important ritual and social functions assigned to women in attracting or snaring strangers, enemies, and prey animals (see Lévi-Strauss 1971; Désveaux 2007:247 ff.; Hamberger 2016 and references cited there).

The third possible model situates the female sphere inside the male sphere (Figure 2e), so that interactions with the exterior take the predominant form of penetration or extraction by men, while female interactions are either restricted to the interior or mediated by male action (as female meat preparation presupposes male hunting, female horticulture presupposes male land clearing, etc.). The Barasana house exemplifies this schema: male activities are concentrated toward the outside (in the central, communal front area), female activities toward the inside (in the peripheral, private rear area of the family compartments) (1979c:48, 246; 1979s:28; 1993s:112). This is the model adopted by the great majority of human societies. The polarization of social space here comes close to the polarization of the mammal body between the overt snout endowed with tusks and horns and the covert belly for digestion and reproduction, or, on a lower scale, to the polarization of dentition between incisors and canines for cutting and piercing at the front and molars for grinding at the back. The differentiated spatial positions of content- and container-activities correspond to their contrastive extroverted or introverted orientations. The localization of male content-activities at the outer border favors a mobile, in- and outgoing mode of penetration and extraction over the stationary “occupation” mode. Thus, the male frontal zone of the Barasana house is the preferred place of visitors, outsiders, and (highly mobile) young unmarried men (1979c:48; 1979s:31; 1995s:228–30), contents that frequently change containers. An “introverted” content that remains perpetually inside loses part of its male character, as can be seen from the feminization of male novices during seclusion (1979c:148, 257; 1979s:84, 184). Correspondingly, the typical male gesture acts on its object by punctiform or linear percussion perpendicular to the surface (such as shooting, spearing, cutting, carving etc.). By contrast, the localization of female container-activities in the interior favors the stationary modes of interaction with an internal content over the modes of reception and expulsion. An “extroverted” container, focused more on swallowing and regurgitating its contents than on digesting and transforming them, loses much of its female character, as can be seen from the frequently hybrid or male aspect of initiatory entities (such as the anaconda). As a corollary, the typical female gesture acts on its object by diffuse percussion parallel to the surface (such as kneading, grating, grinding, wiping, etc.), as Alain Testart’s (1986:67 ff.; 2014:49, 86) cross-cultural comparison of the sexual division of percussion gestures has demonstrated.<sup>12</sup>

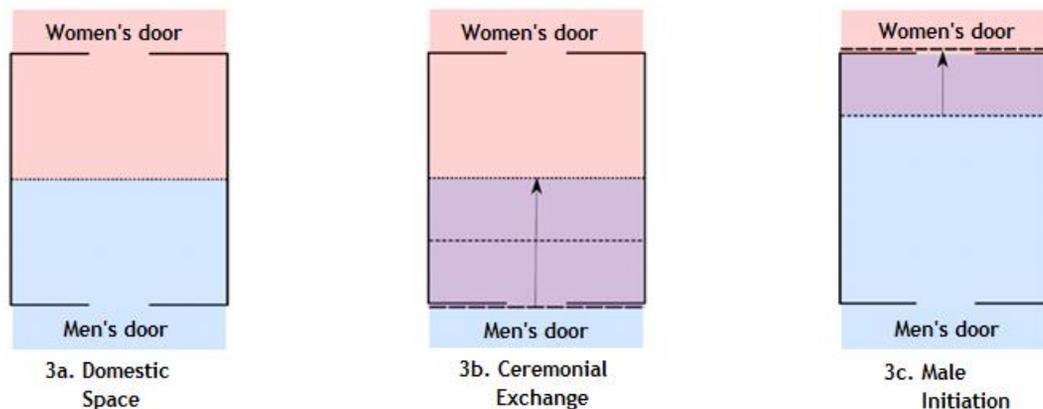
Clearly, encompassment of the (female) container by the (male) content constitutes a sort of topological paradox, which has to be resolved by conceiving it either, as does Strathern

(1988:336–7) for the Melanesian case, as distributed containment by a plural male body, or as virtual containment by a space under male control (where “control” topologically means mediation of access). In both cases, the configuration involves a reversal of the logical hierarchy, as is spelled out in the numerous origin myths that depict “male domination” as the outcome of overthrown matriarchy. To be sure, the standard architecture of social space as an introverted female core encompassed by an extroverted male front represents an ideal type. The three models depicted in Figures 2c–e actually form part of a continuum, where the female, neutral, or male value of the encompassing house varies not only as a function of perspective but also as a function of the relation between its female and male parts.

These variations occur both between societies and within a given society. Barasana dwellings are ritual as well as domestic structures (the local term for “ritual” is identical to that for “house” [1993s:101]), and, as Stephen (1993s, 1995s) has shown in a comparison of ceremonial exchange and male initiation, the coordinate system of the house changes both its orientation and its scale according to the context. I shall not reproduce his analysis here but will concentrate on the aspects that directly involve gender polarity.

Ceremonial exchange accentuates the complementarity of female and male spheres as well as the external relations between affines (1979c:52; 1993s:96–7, 112; 2001s:266). Though localized in the house of a given agnatic group, the ritual involves a wider community differentiated into allied groups (1979c:206; 1979s:35–6). Disembarking from the river, the guests enter the house bringing meat or fish (male produce of the river in front of the house), which the inhabitants reciprocate with beer and cassava (female produce of the manioc gardens behind the house). By contrast male initiation accentuates the transition from the female (rear) to the male (front) sphere (1979s:72–78, 109) along with internal relations between agnates (1979c:52; 1979s:38; 1993s:96–7, 112; 2001s:266). The ritual is situated at the level of the agnatic group, as the assembly of the exclusively male initiates reconstitutes the body of the anaconda ancestor (1993s:111; 2001s:266).

In both the cases of exchange and initiation, a mobile content enters an immobile container and this container is polarized between a male front and a female rear. This configuration also holds for the domestic setting, as we have noted above with respect to meat production. What changes is the location of the boundary between male and female zones, as well as the neatness or porosity of their separation (see Figure 3).



**Figure 3.** Gender division of domestic and ritual spaces. Male and female spheres are indicated by color (red for female, blue for male, violet for spaces of transition)

In the domestic setting (Figure 3a), the boundary traverses the house interior, loosely separating front and rear areas as respective foci of male and female activities (as expressed by the gender values of the front “men’s door” and the rear “women’s door”), without hindering women from circulating in the men’s area and vice versa.

In the ceremonial exchange setting (Figure 3b), the boundary moves outward, separating the entire house interior (as a female space inhabited by the men and women of the local group) from the house exterior where the male guests install themselves (cf. 1979c:208). While strictly separated from the house group at the beginning of the ritual, the visitor group becomes progressively incorporated (1993s:101; 2001s:266–7), so that the boundary moves

further and further inside while concurrently becoming more and more porous. Initially camping outside, the visitors enter the frontal part of the house (facing the house group in the rear part) and finally mingle with their hosts, like husbands and wives (1993s:101), with an explicit emphasis on sexual relations (2001s:267; cf. Arhem 1981:199).

In male initiation ritual (Figure 3c), the opposite process is at work. The boundary moves inward to the rear part of the house, where women are barred behind a ritual screen. When the flutes, coming from the river, enter the house through the front door, women rush through the back door to the scrub behind the house in order to flee the threat of sterility (1979s:72–3, 75). The entire house interior then becomes a male space, while at the same time the separation of the sexes is radicalized by the presence of the disjunctive ritual instruments. This said, even within this exclusive male space of initiation the gender polarity remains active: the relation between the human officiants who pass the first night at the female back end of the house and the agnatic ancestors who supposedly dwell at the male front end is explicitly analogous to the relation between the beer-offering hosts at the female end and the fish-offering visitors at the male end that inaugurates ceremonial exchange (1979s:81).

The continuity between the two ritual settings becomes even more apparent if one adds a third, the fruit ritual, a prelude to initiation that adopts the “food-giving” style of ceremonial exchange but among agnatically related groups (2001s:261; 1979s:65 ff.). In this intermediary variant, women are likewise first barred behind the ritual screen (1979s:51; 2001s:259) and then chased from the house, this time by fruit thrown against the screen or directly at the women (2001s:259). Since the fruit is considered as both content and detachable component of the flutes (2001s:259, 261), the women are in effect chased away by the flutes as in the male initiation rite. However, to the extent that the fruit represents male-collected food like fish, the gesture of throwing it at the women also recalls the mingling of the sexes in the exchange ritual, including its sexual connotations. Here, as in other settings all over the world, two recurrent male attitudes toward women—seduction by presents and sexual provocation, or intimidation by violence and sexual aggression—are poles of a continuum.

In all these settings, the front door ideally (though not necessarily in practice) points downstream/eastwards toward the mouth of the river (1979c:43, 244; 1979s:151). Nevertheless, the orientation of the house in each case is not the same. In ceremonial exchange, modelled on sexual intercourse, the house is conceived of as a female body oriented upstream: the front door corresponds to a vagina through which it receives its affines as male guests (1995s:233; 2001s:259). In male initiation, modelled on devouring and digestion, the anaconda body is oriented in the same direction as the river it transforms. The front door corresponds to its mouth, through which it swallows and regurgitates the neophytes (1979s:218). The shifting of the boundary between male front and female rear thus affects the container in scale (territorial/local), orientation (upstream/downstream), perspective (internal/external), and overall gender value (female/male).<sup>13</sup> By contrast, the content is characterized as male or destined to become male, whatever its mutually transformable variants: be it men who carry meat and fish in domestic production and ceremonial exchange (1993s:101; 1995s:232–3), flutes and neophytes in male initiation (1979s:77; 2001s:260), or fruit (gathered by men and identified with initiated boys) in the intermediary ritual (2001s:261).

Note, however, that these male contents tend to be transformed into containers once they are inside the house. The guests’ bodies are filled with female-produced manioc beer (1993s:101; 1995s:232–3), the novice’s bodies with male-produced coca, tobacco, and yagé (2001s:262; cf. 1979s:108–9). These transfusions of substances from an encompassing into an encompassed container recall the maternal nurture of a fetus or suckling infant—yagé is considered a form of milk (1979c:231; 1979s:182; 2001s:262–3). In the initiatory context, it even appears as a form of penetration—yagé is an anaconda that causes hallucinations by thrashing around inside the body (1979c:210). Paradoxical as it may appear, content can remain content only by becoming periodically uncontained; prolonged containment tends to transform content into a container. The content/container distinction is coordinated with a switch between mobility and metamorphosis—it is profoundly dynamic in character.

### Gender as Mode of Spatial Transformation

The two preceding sections have conceptualized gender as resulting from a polarization of container- and content-operations between the inner and outer regions of domestic space.

This polarization is not just an abstract construction or a historical speculation, but can be observed at the ontogenetic level as a bifurcation of male and female trajectories. While all children start as contents inside a container, boys move outside without losing their status as a content; girls turn into containers without leaving the inside. More generally, this dichotomous transformation of children (interior contents) into men (exterior contents) and women (interior containers) provides the schema for understanding gender polarization as consisting of two modes of transforming the relation between container and content.

This dynamic conception also helps us understand how gender polarization involving (exterior and interior) zones within the collective body of the house is linked to gender polarization involving (content- or container-) modes of interaction between this collective body and other (typically nonhuman) bodies. Male space emerges at the external border of the encompassing container as content starts to move from one container to another. Female space emerges at the interior of the encompassing container as content starts to turn into container. Males are produced by changing the position of the content relative to the container; females are produced by changing the scale of the content, which becomes a container in turn. The former transformation results from movement, the latter from growth. Even the differentiation between container and contained, which I have treated as primordial, can be envisaged in these contrastive dynamic modes: as the transition of one body through another (movement mode), or as the emergence of one body within another (growth mode).

Now it appears that these two modes of spatial transformation characterize not only the production of gender but also gender itself—as if male and female forms of interaction were aspects of an ongoing process of becoming male or female. The close association of maleness with movement and of femaleness with growth, which most clearly evidences this dynamic constitution of gender, seems to lie at the root of many of the other dichotomies by which gender polarity has been (more or less inadequately) theorized, such as activity versus passivity, transcendence versus immanence, culture versus nature, and so forth. Thus, even if female bodies are not considered immobile in an absolute sense, their movement is frequently attributed to a corresponding movement of the encompassing container (so that their relative position remains unchanged), whereas male bodies typically move in the opposite direction, penetrating or shedding their containers (or, conversely, being swallowed or ejected by them). In the Barasana context, this is exemplified by movement in rivers and gravitational fields. Female movements correspond to the current and the force of gravity: they are oriented downstream and top-down, as in the processes of digestion, menstruation, parturition, or burial (1979c:272). Male movements by contrast are oriented upstream and bottom-up, as in ejaculation, vomiting (1979s:216–7; 2001s:251, 265; 2017s:48), or the ritual exhumation of the ancestor-flutes (1979c:142; 1979s:159). These features are not specific to Northwest Amazonia. Simone de Beauvoir (1949:165) pointed to the orientation of bodily (in particular sexual) fluids in order to contrast the “passive” correspondence of female (downward) movement to the “natural” processes of the body with the “active” tendency of male (upward) movement to transcend natural constraints by their “cultural” inversion. This conception was critical to Sherry Ortner’s (1974) grounding of gender in the nature/culture dichotomy, and some of Stephen’s and Christine’s early interpretations can be read in a similar vein (1979c:173, 249, 271–2; 1979s:217).

The nature/culture model of gender has been repeatedly contested, and I will not restate the criticisms here (see MacCormack and Strathern [1980] for an early critique). In fact, neither the nature/culture-dichotomy nor the active/passive distinction help us understand gender polarization in Barasana thought. For example, the processes of top-down menstruation and bottom-up ejaculation are both conceptualized as equally “natural” and “cultural,” and both may be “active” or “passive.” While menstruation may appear as a specifically female activity incarnated in Romi Kumu, whose menstrual flow is the rain (1979c:156; 1979s:179), ejaculation can appear as the result of a feminine initiative that elicits a passive male reaction. Such is the case when Yawira uses love-making to kill her brother-in-law (1979c:212; 2001s:262). More generally, while moving in and out of a container is a fundamental feature of maleness, it may be imagined not only in the active mode of penetration or extraction (such as clearing land, hollowing canoes, or “opening up” women through sexual intercourse) but also in the passive mode of reception or ejection by an active container (such as the anaconda who swallows and regurgitates male initiates and ancestors).

Analogous observations apply to the connection between femaleness and internal growth. While the container-mode of interaction may be represented as the passive experience of uncontrollable processes within the body, it may also figure as a specifically female mode of creation. In particular, as indicated above, the product of female containers is frequently itself a container. Pottery is a well-known example of this, where the resulting containers replicate the potter's body (Lévi-Strauss 1985:238–9)—as can be seen from the prohibitions that apply to this craft during menstruation, since pots made by a menstruating woman would be unable to retain their content (1979c:194). The vegetative reproduction of manioc tubers, which is itself akin to female reproduction, is another example (2001s:251). But the classic model of a container transforming its content into an internal replica of itself is undoubtedly pregnancy. As Stephen formulated it, the child in the womb is a tube within a tube, attached to the latter by a tube (2017s:49). Taken to its extreme, the similarity between the outer and the inner container makes the former appear as a garment or skin from which the latter emerges through an act of stripping or skinning. In Northwest Amazonia, skin shedding is a capacity shared by (molting) snakes, (metamorphosing) insects, and (menstruating) women (1979c:140; 1979s:182–3).<sup>14</sup> This is the rationale for the female production of ritual paints and garters, considered to be second skins (1979c:170–1). It is transformations of this kind which Lévi-Strauss (1985:214) tried to conceptually capture by the image of Klein's bottle, a self-containing container. Contrary to the basic male process of moving in and out of containers, the basic female process turns the containers inside out, thereby converting the contents into containers.

The dialectic of these two types of transformations is exemplified in the mythical journey of the anaconda that created the Barasana world. The anaconda swims upriver (in the male mode), stopping at various sites where it turns into a group of disembarking people (in the female mode). By dancing, these people, in turn, create the rocks and rapids that constitute the “transformation houses” (1979c:33–5; 1993s:102) in which these dances take place (in the male mode). Finally, the anaconda turns around so that its body, now oriented downstream, becomes identical with the river (1979c:243; 1979s:152; 1993s:108; 1995s:240), thus replicating its container (in the female mode). At every given level of the hierarchy of containers, a penetrating content-action elicits a birth-giving container-action that at the same time corresponds to a change in level and the transformation of content into container. The coincidence of inversion of direction with content-container transformation may even be more explicit: in some versions the anaconda sheds its skin backwards so that an interior anaconda emerges, whose head ends up where the tail formerly was (S. Hugh-Jones, pers. comm. 2018). Dumont's (1980:241) hierarchical perspectivism—value reversal as a consequence of level change—here takes a concrete spatial form.

Note that the two transformations producing male contents and female containers (and characterizing their respective modes of interaction) are not complementary but operate in different logical directions. Male movement, while relativizing the difference between inside and outside, reinforces the difference between content and container. Female growth, without altering the relation between inside and outside, relativizes the status of container and content. The former is a process of mutual differentiation; the latter is a process of self-replication. As a consequence, the first process reinforces the difference between male and female and fundamentally involves cross-sex interaction; the second relativizes the gender difference and can thus equally be an all-female, or even all-male, affair.

This can be seen as soon as we pass from the individual to the collective scale. While ceremonial and marriage exchange are characterized, like heterosexual intercourse, by differentiating (cross-sex) interactions between content and container, the model of same-sex self-replication applies not only to female self-reproduction as exemplified by skin-shedding but also to the reproduction of the collective bodies constituted by men, as exemplified by male initiation or agnatic clan segmentation. Like a molting snake, the primordial anaconda disintegrates into self-similar segments that constitute the ancestral houses of the various sibs (1979c:34–5; 1979s:152–3; 2017s:49). The distinction between the two basic modes of complementary (cross-sex) and self-similar (same-sex) interaction, extensively explored by Marilyn Strathern (1988) in the Melanesian case,<sup>15</sup> thus not only applies to Amazonia, as Stephen (2001s:261 ff.) has shown in his discussion of the Strathernian model, but appears intimately linked to the process that produces the gender polarity itself. It characterizes not just relative but absolute gender. In other words, male and female gender imply different modes of

referencing each other (or not). The production of men proceeds by complementary differentiation between content and container and thus inherently involves opposition to women (if only by excluding them). The production of women proceeds by assimilating a content to its container, without necessarily involving any reference to men. This reference nevertheless appears as soon as both processes are considered as a whole, since any kind of same-sex reproduction must be preceded and elicited by some kind of cross-sex exchange. This is, in a sense, no more than the basic formula of sociality—the other is necessary to reproduce the self—given a topological meaning: to replicate a container requires an alien content.<sup>16</sup> Women have to be filled with semen by men in order to produce children inside their bodies, while men have to wrest children from women in order to produce initiates inside the house. In the same vein the canoe-anaconda has to swim up the river-anaconda for house-anacondas to emerge all along the banks.

The classical association of gender polarization with the dichotomy between (male) exchange and (female) reproduction thus ultimately leads back to the two modes of spatial transformation we have characterized as movement and growth, each being the condition of the other.<sup>17</sup> Reversing the Lévi-Straussian formula, the basic form of this reproductive exchange consists in the circulation of male contents between female containers. This form remains valid even when these female containers circulate between encompassing agnatic houses, as in the virilocal Barasana case. Reciprocally, even in the uxori-local settings of central Brazil, access to the village space encompassing the uterine houses is mediated by a male center, homologous to the front area of the Barasana house (see Hamberger 2012 and references cited there). In both settings, the containers, oriented towards inward reproduction, interact with each other through the intermediary of moving, outward oriented contents. Nor is this pattern of interaction limited to Amazonia. While the form and degree of polarization varies widely, from low-scale differentiation in nomadic hunter-gatherer societies to extreme segregation in Islamic or nineteenth-century European upper classes, the same basic pattern is found in almost all societies: men, as in- and outgoing contents, mediate the relations of women with the external world; women, as contained containers, mediate the relations of men with the world to come.

## Conclusion

To be sure, there is no “natural” reason why internal containers should not move outside, nor why external contents should not become containers. It needs a collective effort to keep girls inside, and it needs more than the lack of a uterus to keep boys from engaging in container-actions. In fact, most societies allow for nonconforming genders. The best-known example is that of shamans, interior males who voyage between vertical layers rather than between inside and outside (1979c:260; 1979s:124–6), and who have sometimes been interpreted as a “third gender” (e.g., Saladin d’Anglure 1986). Another common example is that of the heterogeneous category of “public” women often labelled as “prostitutes,” exterior females who circulate between changing partners and often form an integral part of male space (for Amazonian examples see Nimuendajú [1942:62 ff.] and Crocker [1969]). The frequent marginalization and/or sacralization of these variants testify both to the force of gender polarization and to its historically contingent character.

How shall we explain this polarization? The narrative of “male domination” common to numerous scientific theories and vernacular myths (including the Barasana) is of little help here, for it presupposes gender difference and thus cannot serve as its explanation, any more than folktales treating the domination of the hand by the mouth can explain their functional and morphological differentiation. And just as the polarization between hand and mouth cannot be understood without relating it to the position of the body in space and its resulting techniques of interaction with the environment (Leroi-Gourhan 1964), so, too, the polarization between men and women cannot be understood without relating it to the organization of social space as a whole. Assuming that “men” and “women” already existed before social space took its asymmetric form amounts to positing anatomy as the ultimate and neutral ground of gender difference. But neither is there any “natural” reason why male and female genitalia should take the respective forms of outward contents and inward containers. The common distinction between “natural” (sex) and “cultural” (gender) differentiation has probably obscured rather than clarified the problem of why human societies consist neither of

undifferentiated anacondas, nor of infinitely differentiated nightjars, sloths, and howler monkeys. Whether it operates in anatomies or in architectures, gender polarization constitutes a process of spatial morphogenesis, the driving principles of which are independent of (geological or historical) time scale.

The intimate link between the morphology of the body (including its tools and techniques) and the form of its spatial integration is both a biological and a social fact.<sup>18</sup> In animals as in humans, domestication (i.e., integration into a space structured by “houses”) is accompanied by analogous morphological changes, such as the reduction of facial protrusions like teeth, horns, and supraorbital ridges, which has been interpreted as part of a general reduction of maleness in a domestic environment (Leach 2003; Cieri et al. 2014; Theofanopoulou et al. 2017). At least for the human case, one might equally well draw the opposite conclusion and argue that the shortening of the facial region resulted from a transfer of its functions to the manual region (Leroi-Gourhan 1964). Tusks and horns, now turned into tools and weapons, thus remain in men’s hands (Tabet 1998), which increases rather than reduces the sexual dimorphism, correlatively to the increasing polarization of the built environment (Durkheim 1893).

In fact, the history of human self-domestication has been alternatively characterized by the diminution and the augmentation of gender polarity. But whatever direction the morphological transformations take, they always simultaneously involve the bodies and the places of men and women. This unity of body and place is a constitutive mark of gender. Houses—in their broadest sense, comprising all material devices that organize human space—are the concrete means by which gender is daily produced, together with the myths and ideologies that rationalize or deconstruct it. Space is thus not just another gendered structure; on the contrary, gender is a result of structuring space. More than four decades after Bourdieu’s study of the Kabyle house and Stephen’s and Christine’s first analyses of the Barasana house paved the way toward this reversal of perspective, we are still far from fully grasping the logic that underlies the processes of gendering and de-gendering. But we have begun to ask the right questions.

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### Notes

<sup>1</sup> For recent additional evidence in support of this argument see S. Hugh-Jones 2018s.

<sup>2</sup> See Stephen’s article in this issue of *Tipiti* (Hugh-Jones 2019) for a complex development of the tube morphology.

<sup>3</sup> This purely topological development of spatial concepts has, of course, its limits. As soon as several openings are introduced, distinctions such as anterior versus posterior require that angles and directions be specified.

<sup>4</sup> I restrict my attention here to these three scales. Christine’s 1979 analyses include the scales of the longhouse setting and the cosmos.

<sup>5</sup> See Clastres’ (1966) analysis of Guayaki gender polarity as an opposition between two “styles of existence” embodied respectively in the (male) “bow” and the (female) “basket.” I am grateful to Stephen for having drawn my attention to this paper.

<sup>6</sup> “The indivisible Gimi flute is . . . an androgynous instrument. ‘Male’ and ‘female’ at best discriminate points in a process, how it is played and what is emitted . . . What differentiates men and women, then, is not the maleness or femaleness of their sexual organs but *what they do with them*. Whether a tube turns out to be a penis or a birth canal depends on how it is and has been activated. And how an organ is activated is shown in its effects, whether it works as container or contained” (Strathern 1988:128).

- <sup>7</sup> For a European example of an “androgynous” figure acting both as a condensed image of male and female sexual organs and as a separator between male and female spaces, see Michael Houseman’s (1990) analysis of the mariners’ rabbit taboo.
- <sup>8</sup> While Lévi-Strauss (1985:96, 217) explicitly distinguishes reception/avidity (entry) and expulsion/incontinence (exit) as actions of an open container, he considers retention (non-exit) as the sole action of the closed container, while rejection (non-entry) is only treated implicitly (as absence of avidity).
- <sup>9</sup> See Lévi-Strauss (1985) for references to Sloth (124); Ray (239); Howler Monkey (166); Whites (218); Nightjar (24–6, 95 ff.); Serpent (99 ff., 244); and Tapir (217–8, 222) and Lévi-Strauss (1966:367–8) for an earlier reference to Sloth.
- <sup>10</sup> The famous expression of Gilles Deleuze and Félix Guattari (1972:352) actually refers to the multiplication of container-content relations: “. . . la femme contient autant d’hommes que l’homme, et l’homme de femmes. . . . C’est cela, les machines désirantes ou le sexe non humain : non pas un ni même deux sexes, mais n. . . sexes.”
- <sup>11</sup> This distinction corresponds to what Houseman ([1984] 2015), commenting on Louis Dumont (1980), has called, respectively, the “restricted” and the “general” version of the hierarchical relation of encompassment.
- <sup>12</sup> On the female character of diffuse oblique percussion in an Amerindian hunter-gatherer context, see Veyrié 2013.
- <sup>13</sup> Interestingly, Christine’s and Stephen’s accounts describe the relation between perspective and gender in mutually opposite terms: for Christine (1979c:52), the longhouse community appears as male when focused on its internal structure as a descent group and as female when focused on its external relations to affines; for Stephen (1993s:112), the house is male when focused on its external appearance and face, female when focused on its interior womb.
- <sup>14</sup> The capacity of metamorphosis is also attributed to whites, due to their wearing of clothes (2018s:210–1).
- <sup>15</sup> Strathern (1988) distinguishes, for the Melanesian case, two forms of same-sex replication: “internal” or “unmediated” replication, which characterizes female pregnancy (227 ff.), male initiation (207 ff.), and male clan segmentation (256 ff.); and “external” or “mediated” replication, which characterizes ceremonial exchange (192 ff.) and marriage exchange (229 ff.). (Cross-sex relations such as domestic cooperation or sexual reproduction are called “unmediated substitution.”) By contrast, Amazonian ceremonial exchange is not an all-male affair, and marriage exchange is decomposed into symmetrical cross-sex exchanges (2001s:267).
- <sup>16</sup> Stephen (2017s:65) has formulated it the other way around: each content, to reproduce itself, must pass through an alien container.
- <sup>17</sup> Also see Strathern’s (1988:235 ff.) discussion of the Trobriand model of reproduction, where the separation of container and content within the maternal body is conditioned by male gift exchange as a trigger of paternal penetration. I am grateful to Olivier Allard for drawing my attention to this passage.
- <sup>18</sup> I am much obliged to Charles Stépanoff for drawing my attention to the paleontological literature and suggesting the argument summarized in this paragraph.

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