Studies in History and Philosophy of Science 91 (2022) 77–85

Contents lists available at ScienceDirect

Studies in History and Philosophy of Science

journal homepage: www.elsevier.com/locate/shpsa

Kinmaking, progeneration, and ethnography☆

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ARTICLE INFO

Keywords:
Kinship and kinmaking
Performativism about kinship
Biology and kinship
Constructivism about kinship
Philosophy of anthropology
Extensionism and kin terminologies

ABSTRACT

Philosophers of biology and biologists themselves for the most part assume that the concept of kin is progenerative: what makes two individuals kin is a direct or indirect function of reproduction. Derivatively, kinship might likewise be presumed to be progenerative in nature. Yet a prominent view of kinship in contemporary cultural anthropology is a kind of constructivism or performativism that rejects such progenerativist views. This paper critically examines an influential line of thinking used to critique progenerativism and support performativism that cites cross-cultural diversity in what I will call kinmaking. I challenge several key assumptions made in moving from this appeal to ethnography to conclusions about kinship and progeneration, arguing that closer scrutiny of both the ethnographic record and inferences that draw on it in fact support progenerative views of kinmaking.

1. Kinship and kinmaking across the biological and social sciences

Contemporary cultural anthropology represents a relatively nascent domain for philosophical reflection on the social sciences, as manifest in recent work on ethnoscience and the relationship between traditional and indigenous knowledge (Ludwig, 2018; Ludwig & Poliseli, 2018). Here ethnobiology constitutes a central domain of knowledge that provides a rich site for culturally-situated, philosophical reflection on the biological and social sciences (Ludwig & El-Hani, 2020; Ludwig & Weiskopf, 2019). Another philosophically rich thicket of issues in this general domain that shares this potential for historians and philosophers of science concerns what kinship is, what I will call *kinmaking*.[1]

Philosophers of biology, along with biologists and biologically-oriented social scientists, for the most part assume that the concept of kin is reproductive. For example, discussions of altruism, cooperation, and the mechanisms that mediate evolutionary transitions conceptualize *kin* as progeneratively related to one another: what makes two or more individuals intra- or inter-generational kin is some kind of direct or indirect reproductive relationship between them.

This progenerative assumption often plays an important role in structuring entire problem spaces in the biological sciences concerned in the first instance with nonhuman life forms. For example, important to the classic problem of altruism is articulating a view of help to or self-sacrifice for biological kin (Voorzanger, 2006; Woodcock & Heath, 2002). In kin selection theory, kin are defined in terms of percentages (of fractions) of genetic relatedness. Focusing on altruism towards biological kin can be viewed either as sharpening our sense of what real altruism amounts to, and thus what it is about the phenomenon that requires explaining, or as identifying one key to understanding mechanisms for evolutionary altruism (e.g., kin selection).

Such reproductive conceptions of kin also ground progenerative views of *kinship*, the system of relationships specified by particular ways in which (mostly) human agents conceive of kin. On a progenerative view of kinship, kinmaking is the cultural elaboration of reproductive relations, with progeneration providing a focal perspective from which to study such elaborations. Many contemporary cultural anthropologists, however, explicitly reject such progenerative views of kinship. For many studying kinship in cultural anthropology, kinmaking's robust cultural nature usurps the reproductive focus provided by progenerativism. For

☆ I dedicate this paper to the late Marshall Sahlins, whose visiting lectures on history and anthropology at the University of Illinois, Urbana-Champaign more than 20 years ago manifested the richness of the trading zone between philosophy and anthropology. Many thanks also to Remco Heesen, David Ludwig, Ron Planer, John Sutton, and several anonymous reviewers for constructive feedback on earlier versions, and Nick Evans, Warren Shapiro, and Marilyn Strathern for general encouragement in pursing the larger project to which this paper contributes. This research is funded by the Australian Research Council (ARC-DP 210102954, Keeping Kinship in Mind).

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[1] *Kinmaking* is a pithy truncation (thanks, Nick Evans) of "kinship making", which I have used in recent years. The expression "making kin" derives from the work of Donna Haraway (2016) on inter- and multi-species relations; the recent truncation fortuitously invites discussion of potential Strathernian cross-overs here.

https://doi.org/10.1016/j.shpsa.2021.10.002
Received 7 April 2021; Received in revised form 5 October 2021;
Available online 6 December 2021

example, Marshall Sahlins has recently defended the view "that kinship is a thoroughly symbolic-*cum*-cultural phenomenon", arguing against "all such 'biological' understandings of kinship" (Sahlins, 2013, pp. 65–66). As Sandra Bamford says in her introduction to the *Cambridge Handbook of Kinship*, kinship is "human-made" *rather than* "given in the 'natural order' of things" (Bamford, 2019a, p. 15).

My primary aim is to explore an influential cluster of arguments against progenerativism about kinship that appeal to cross-cultural diversity. I shall argue that scrutiny of the ethnographic evidence typically cited against progenerative views, together with a critical assessment of key argumentative inferences from that evidence, actually support progenerativism (sections 4–7). In concluding, I shall make some comments about what such views portend for more integrated discussions of kinship across the biological and social sciences, such as those about primate kinship (sections 8, 9). I begin with the sorts of ethnographic evidence about kinmaking adduced against progenerativism and by articulating specific claims I shall challenge (section 2).

2. What the ethnographic record shows

Identifying a tradition in anthropology that holds that "kinship begins with genealogy", Dwight Read (2007:330) provides a formidable-sounding, partial list of ethnographic research that putatively shows the paucity of this tradition for understanding kinship:

> kin relations are established through feeding and nourishment among the Wari' in Amazonia (Vilaça 2002), through residence among the Korofeigu of New Guinea (Langness 1964), via nursing in the Arabian area (Altorki 1980), in Iran (Khatib-Chahidi 1992), among the Hindu Kush in Pakistan (Biddulph 1880) and in the Balkans (Hammel 1968) […] through godparenthood (e.g., Paul 1942 for Middle America, Fine 1994, Héritier-Augé and Copet-Rougier 1995 for Catholic Europe), through fosterage (e.g., Smith 1903 [1885] for Arab societies, among others), through a name giver-name receiver relation (e.g., Bamberger 1974 for the Kayapó, Marshall 1976 for the !Kung san, Lave et al., 1977 for the Krikati), and through blood kinship (e.g., Vernier 2006 and references therein for Turkey).

Read says that proponents "of the genealogical position have assumed kinship distinctions relate to properties of a genealogical space—lineality/colineality, ancestor/descendant, male/female, and so on—even though ethnographic evidence shows otherwise" (p.330). This "genealogical space" generates what Rivers (1968, pp. 97–112 [1910]) originally called a pedigree. Read's claim is that the ethnographic record shows the misleading nature of this pedigree-based framework for understanding kinmaking.

Contemporary progenerativists recognize that "genealogy" is neither necessary nor sufficient for kinship. I thus focus on the claim that progenerativism's emphasis on reproductive relations misrepresents kinship or limits its study: to view kinship as the cultural elaboration of reproductive relations, as progenerativists do, is to employ a distorting paradigm. In this sense, progenerativism is taken by its critics to constitute a pragmatic failure in the study of kinship, with this failure revealed by ethnography.[2]

Arguments like Read's against progenerativism that begin with claims about what ethnography reveals to draw conclusions about the nature of human kinship are enthymematic, requiring one or more additional premises for prima facie inferential validity Fig. 1:

Each of the following three related claims about kinmaking have been defended by anthropologists appealing to ethnography and might be thought to serve as a missing premise to complete the argument represented in Fig. 1:

(3a) *Progenerative Innocence:* Since progenerative facts play a restricted epistemic role in kinship in some cultures due to nescience or their unimportance to the practice of kinship, they cannot provide even a partial basis for kinmaking in those cultures.

(3b) *Cultural Priority*: The ubiquitous cultural dimension to kinmaking is conceptually prior to progenerative facts about kinship, not (as progeneralivists presume) vice-versa.

(3c) *Biological Transcendence*: Kinmaking transcends reproductive relations and so progeneration is not at the core of kinship.

1.) Progenerativism about kinship is the view that kinmaking is the cultural elaboration of reproductive relations.

2.) The ethnographic record indicates that kinmaking involves various non-reproductive relations.

… [missing premises]

C.) Progenerativism misrepresents kinship and constitutes a pragmatic failure in the study of kinship.

Fig. 1. The ethnographic argument.

I remain neutral regarding whether these claims need to be combined either together or with further premises to complete the enthymeme depicted in Fig. 1. If each is false, as I shall argue, any such derivative completions of The Ethnographic Argument will be unsound.

The rejection of progenerativism has gone hand-in-hand with the development of contrasting *constructivist* views of kinship. Historians and philosophers of science are familiar with general discussions of human kinds as social constructions (Mallon, 2016), along with feminist critiques of appeals to the 'naturalness' of biological categories (Fausto-Sterling, 2000). The specific form that constructivism takes for cultural anthropologists studying kinship is sometimes called *performativism*, emphasising (as the quotation from Read does) the variable performance of kinship across cultures. In the next section, I say more about performativism and the contrast between performative and progenerative views of kinship within anthropology, focusing on performativism as a *distinctive* form of constructivism, to provide at least a useful caricature of the embrace of performativity in the recent study of kinship.

3. The embrace of performativity in the study of kinship

Performativism is anchored in Schneider's (1972, 1984) critique of progenerativism as an ethnocentric, bioessentialist projection of "Western" notions of kinship onto cultures that conceptualize kinship otherwise (Wilson, 2016a); for performativists, progenerativism is a relic of anthropology's problematic past (Franklin & McKinnon, 2001; Levine, 2008). The rebirth of kinship studies in anthropology during the 1990s—often referred to as the *new kinship studies* and playfully dubbed kinship "after Schneider" by Carsten (2004)—provided performativist pathways for the study of kinship (Peletz 1995, 2001). Although the eclipse of progenerativism has not been as complete as proponents of performativist views have sometimes claimed, as Godelier (2011) and others have shown, I shall not further explore that historical or sociological issue here. Defences of progenerative conceptions of kinship certainly persist in the contemporary study of kinship in cultural anthropology (Shapiro, 2018a; Trautmann, Feeley-Harnik, and Mitani; 2011).[3]

[2] I thank an anonymous referee for comments that have helped to clarify this characterization of the nature of the purported failure of progenerativism.

[3] Any sustained discussion of the rise of performativism would need to grapple with two larger issues: (a) the role of Schneider's critique of kinship itself, where some take Schneider to have definitively shown the bankruptcy of progenerativism (Levine, 2008; Bamford, 2019a; Leaf and Read, 2020, p. 15), while others view Schneider's own history of kinship studies as flawed (Godelier, 2011:ch.1; Kuper, 1999: ch.4; Shapiro, 2020); (b) the relationship between performativism and shifts in views of gender within anthropology (Collier and Yanagisako, 1987; Franklin, 2019; Hamberger, 2018; Strathern, 1992). See also my concluding comments.

Table 1
Five paired features of the performativist paradigm in kinship studies.

An embrace of the cultural performativity of kinship. Kinmaking is performative in that particular cultural symbols and activities give kinship its meaning and significance. (Carsten, 2004, ch. 2; Levine, 2008; Sahlins, 2013, pp. 2–11)[4]	*The rejection of progenerativism about kinship*. Viewing kinmaking as the cultural elaboration of reproductive relations misrepresents kinship and constitutes a pragmatic failure in its study.
A highlighting of the lived experiences of kinship. Because the meaning of kinship is generated performatively, it should be studied as a kind of lived experience, rather than as result of a static structure or system. (Carsten, 2004, p. 9; Grøn, 2020)	*A reduced interest in structuralist and functionalist approaches to kinship*. A focus on kinship systems is misplaced, and structuralism and functionalism do not hold the keys to understanding kinship.
The exploration of kinship in novel domestic spaces and practices. Focusing on kinship "at home" in response to technological and broader social changes provides a productive reorientation for its study. (Rapp & Ginsburg, 2001; Bamford, 2019a, pp. 1–5)	*A shift from the linguistically focused comparative, treatment of the culturally exotic*. Kinship is neither uniquely nor especially important in non-Western societies, and the past focus on culturally exotic kinship terminologies is misplaced.
An emphasis on understanding particular meanings of relatedness and kinship. Whether studying relatedness in novel domestic places or cross-culturally, the particular meanings of kinship in those contexts lies at the heart of kinship. (Peletz, 1995, pp. 346–349; Strathern, 1992)	*Skepticism of universal and totalizing claims about kinship*. The detachment of kinship from progeneration undermines the search for claims about kinship that generalize about societies and their relationships to one another vis-à-vis kinship.
A welcoming of interdisciplinary approaches to kinship. The study of kinship is inherently interdisciplinary, informed by multidisciplinary fields, such as cultural studies, gay and lesbian studies, science studies, family studies, and religious studies. (Franklin & McKinnon, 2001; Weston, 2001, pp. 147–154)	*The displacement of kinship as distinctively anthropological*. Despite having been a mainstay of anthropological study throughout much of the discipline's history, there is nothing special about kinship that justifies its anthropologically distinctive status or that ascribes anthropologists a privileged role in its study.

Table 1 offers a summary of five paired features of research within the (now not so) new kinship studies. Each feature that positively identifies characteristics of this work corresponds to a negative feature that indicates the break that performativism makes from progenerativism. Collectively these paired features express what is distinctive of contemporary performativist work on kinship, encapsulating something of the sea-change that occurred in the study of kinship between roughly 1970 and 1990 (see also Wilson, 2016a; Bamford, 2019a, 2019b).

My focus here is the initial pair of features: the cultural performativity of kinship and the rejection of progenerativism. These features often occupy center-stage in big-picture, philosophical characterizations of the study of kinship "after Schneider" and play a prominent part in a standard narrative about kinship that accords a central place to Schneider's critique (Franklin & McKinnon, 2001; Levine, 2008; Sahlins, 2013). Together they imply that progenerative relations, such as *consanguinity* and *pedigree*, do not play a special role in kinship and so should not direct or structure the study of kinship.

With that little said, let me return to The Ethnographic Argument against progenerativism and its completion by (3a), (3b), and (3c).

4. Progeneratively innocent cultural knowledge

(3a) says that progenerative facts play a restricted epistemic role in kinship in some cultures and so cannot provide even a partial basis in an account of kinmaking. In its strongest form, this is to claim that some cultures are *progeneratively innocent*, ignorant not just of the intricate details of biological science as developed in Western societies but of basic facts linking reproduction to kinship. The most notorious case of such putative progenerative innocence in the history of anthropology stems from Malinowski's (1929) report of the "ignorance of physical paternity" in the Trobriand Islands, a report influenced by Spencer and Gillen's (1899) earlier reports of such nescience amongst Australian Aboriginal peoples.

The claim is that both Trobrianders and Australian Aboriginal peoples have (or had) no knowledge of the male procreative role in producing children. Thus, such knowledge could not form a partial basis for kinmaking amongst them. This claim of Malinowski's has been repeated by many anthropologists in the last fifty years (e.g., Goodenough, 2001, p. 208; Ottenheimer, 2001, p. 127), including by leading advocates of performativism (e.g., Sahlins, 1976, pp. 37–39; Schneider, 1984, p. 134; Franklin, 1997, p. 22; Carsten, 2000, p. 8; Carsten, 2004, p. 164).[5] Sensitivity to ethnocentrism by performativists about kinship and the more general rise of the "decolonizing generation" within cultural anthropology (Allen and Jobson, 2016) make uncritical repetition of this nescience claim striking, especially given widespread recognition of much else that is racially charged, dated, and objectionable in Malinowski's work.[6]

Hiatt's *Arguments about Aborigines* (Hiatt, 1996, ch.6) provides an extended discussion of the Australian history here, noting that "the empirical difficulties in arriving at the 'facts of life' were of no mean order" (p.140) and concluding judiciously that the debate remains unresolved. Hiatt's judgment, however, is premised on a more demanding view of the relevant 'facts of life' than is required as part of a suitable progenerative view of kinship, a demandingness signalled by Hiatt's reference to the role of the development of the microscope in generating knowledge of those facts (1996, p.140). Yet the relevant progenerative facts are of a different order from those requiring such technological mediation, concerning matters whose epistemic graspability varies across the nonhuman Primate order but is universal within our own species (see also Wilson, in press). To deny the relevant knowledge here is to deny *any* conception of biological paternity at all. For this reason, it is very difficult to fully detach the nescience falsely ascribed to Aboriginal Australians from its origins in discredited primitivist views of such peoples advocated by Spencer and Frazer (Hiatt 1996, p.120–124).

Shapiro (2014, 2017, 2018a) has, in any case, more recently provided an extended critique of this claim about the ignorance of physical paternity and its history; his discussion draws directly on Malinowski's popular publications and his original research report, together with the more recent scholarship on the Trobriands (Lepani, 2012; Mosko, 2009; Senft, 1998, 2009).[7] Shapiro concurs with Leach's (1958) conclusion about what became known as the virgin birth controversy: that Malinowski had mistaken a public denial by male elders of a male sexual role in reproduction that forms part of religious belief in reincarnation amongst the Trobrianders for a lack of knowledge or ignorance of paternity.

So the uncritical repetition and retention of this claim in contemporary studies of kinship is a mistake. Far from reflecting the ethnographic

[4] For those interested in further exploration, I include references here to recent work advocating each of these positive views of kinship; thanks to David Ludwig for suggesting this addition to Table 1.

[5] In the first half of his *A Critique of the Study of Kinship*, Schneider provided a progeneratively-innocent reinterpretation of his own earlier ethnography of Yapese culture, claiming that key notions in the Yapese kinship system were not progenerative. A full discussion of this reinterpretation requires separate treatment; for critiques, see Helmig, (1997), Kuper (1999: ch.4), and Shapiro, (2020).

[6] I appeal to Malinowski's classic work to criticize both his claims about ignorance of physical paternity and their uncritical repetition by anthropologists in support of *Progenerative Innocence*. As the surrounding text suggests, I am indebted here to the work of Warren Shapiro.

[7] Although Shapiro does not appear to have responded directly to Hiatt's assessment, some may find of interest the contrasting treatments of Tonkinson reports from the Western Desert by Shapiro, (2014, pp. 30–32) and Hiatt (1996:136–139).

record, it shows a disregard for that record, properly viewed. Trobrianders simply do not have, and likely never had, the form of progenerative innocence that Malinowski ascribed to them.[8] As Shapiro brusquely concludes in his broader comparative discussion that ranges across the Mae Enga in the New Guinea highlands, the Trobrianders, and Australian Aboriginal cultures, "In none of these instances is there anything even barely resembling a lack of knowledge of paternity. The whole subject, really, is nothing more than a product of Victorian fantasy" (Shapiro, 2014, p. 33).

In keeping with identifying a pragmatic failure facing progenerativism, one might nonetheless seek to defend the kind of skepticism expressed by *Progenerative Innocence* and manifest in the ignorance of paternity claim by turning to kinmaking practices that involve alloparenting, such as nurturance, nursing, and adoption (Modell, 1994; Carsten, 2004, pp. 138–140). Since parenting roles can be filled by non-(biological) kin, knowledge of reproductive relations may seem peripheral to the performance of kinship. If so, then progenerativism may still suffer a pragmatic failure in light of its emphasis on the importance of reproductive relations to kinship.

Practices of alloparenting are, however, far from progeneratively innocent. First, consider nurturance and nursing, both of which can be undertaken by non-(biological) kin and either of which can be kinmaking. Yet they do so predominantly (if not always) against cultural backgrounds in which biological parents, and particularly mothers, typically engage in these forms of provisioning. When practices emerge in which other individuals come to play those roles dominantly across a culture, they are primarily filled by individuals who are themselves first-degree biological relatives of the parents of the dependent child provided for and are recognized as such. The fact that, in some or even many circumstances, either nurturance or nursing can create kinship in the absence of genealogical or reproductive relationships in particular cases no more supports the ascription of progenerative innocence than does the fact that there are contexts in which Trobrianders and Australian Indigenous people (particularly men) who deny certain aspects of biological paternity or are silent about it.

Likewise, adoption is a widespread, recognized cultural practice that brings a pair of people into a parent-child relationship that might appear to be progeneratively innocent. For example, in Hawaii, the high rate of adoption has led some (e.g., Sahlins, 1976, pp. 48–49; McKinnon, 2005, pp. 112–113) to suggest that progeneration is unimportant to family life there. Yet adoption practices are always deployed against a cultural background in which parent-child relationships are also recognized as being progenerative in nature (Berman, 2014; Shapiro, 2016, pp. 221–228). Rather than the ethnographic record evidencing the "unimportance of genealogy in Hawaiian life … adopters are usually close procreative kin of the natal family" (Shapiro, 2015, pp. 8–9) and are known to be such kin. This is also the case amongst the Yup'ik Inuit people of northwest Alaska and Marshall Islanders amongst whom adoption and other practices of child circulation operate against the background of both biological and social interactional constraints on kinship (Berman, 2014). The performance of kinship by Hawaiians, by the Yup'ik Inuit, and by Marshall Islanders that appears in the ethnographic record is progeneratively grounded, rather than progeneratively innocent. Alloparenting's distinctive forms of kinmaking rely in practice on the cultural recognition of progenerative parentage.

[8] Senft, (1998, p. 135, note 6) characterizes the ignorance of physical paternity ascribed to Trobrianders as "one of the few mistakes of Malinowksi's". Senft tellingly notes only in passing the widespread conveyance of the mistake within anthropology and its popularizations, and how readily it can be shown to be a mistake. Larger issues of historiography arise for any broader discussion of Malinowski's work and its implications for race and ethnicity; for a recent example focused on Malinowski's published diaries, see Weston and Djohari (2020: ch.3).

5. The conceptual priority of culture

Consider now (3b), the claim that the ubiquitous cultural dimension to kinship is conceptually prior to progenerative facts about kinship and so the latter are actually dependent on the former, contrary to progenerativism. Marshall Sahlins (2013) has eloquently articulated this claim as part of his sustained defence of a performativist view of kinship. Sahlins's basic idea here is that kinmaking can't be the cultural elaboration of reproduction because the relevant, constituent biological notions—of birth, reproduction, blood—are themselves culturally constructed.[9] Converting this thought into the kind of premise needed to complete The Ethnographic Argument depicted in Fig. 1, however, is problematic.

To show this, I shall focus on several key inferential moves in Sahlins's discussion, italicized in the passages below. Talking of birth and brotherhood, Sahlins says

> brothers by compact may be 'closer' and more solidary than brothers by birth. But then, *kinship is not given by birth as such, since human birth is not a pre-discursive fact.* A whole series of persons may be bodily instantiated in the newborn child, including lineage and clan ancestors, while even the woman who gave birth is excluded (Sahlins, 2013, p. 3, emphasis added).

Sahlins returns to develop these claims about the relationship between constructed or performative forms of kinship and reproductive relations, saying that if

> children are conceived, say, from the 'blood' of the mother and the 'sperm' of the father, *these are not mere physiological substances of reproduction but meaningful social endowments of ancestral and affinal identities and potencies*. For they link the child to others with whom the parents are known to share such substances. It follows that *what is reproduced in the birth is a system of kinship relations and categories in which the child is given a specific position and positional value. It likewise follows that kinship is a thoroughly symbolic-cum-cultural phenomenon*… (Sahlins, 2013, pp. 65–66, emphases added; see also 74–75).

The inferential moves italicized above fail because they either equivocate or are circular: they either shift, mid-argument, the meaning of critical terms, such as "birth" or "sperm", or they presuppose precisely what they set out to show.[10]

Consider first the claim that *kinship is not given by birth as such, since human birth is not a pre-discursive fact.* The only sense in which the latter part of this claim is true is if *human birth* means something like "the significance or meaning of human birth", i.e., birth as culturally constructed. But that same sense makes the first part of the claim, *kinship is not given by birth as such*, false; indeed, Sahlins himself devotes much attention to showing how the various meanings that birth has constitute an important part of kinship across cultures. If we interpret *birth* consistently across this argument in this way, Sahlins would be saying

[9] This sort of dependency claim parallels one familiar in feminist critiques of biological work on sex and gender (Hankinson Nelson, 2021), reminding us of the potential fruitfulness of treating kinship and gender together. I thank an anonymous reviewer for drawing attention to this.

[10] Reactions that I have had to what follows include (i) incredulity that Sahlins could be committing "first-year mistakes in reasoning" and (ii) the claim that the argument works by pointing to the constructed or performative nature of notions like birth as grounds for rejecting progenerativism. My response is that (i*) equivocation and circularity are easier fallacies to commit than one might think, and (ii*) this suggested alternative interpretation of how the argument works fails because it is circular. Consider the claim that kinship is performative *and so not progenerative* because reproduction itself is socially constructed as a missing premise in an argument from the ethnographic record to *the rejection of progenerativism*. This premise explicitly contains precisely what one is attempting to show: the two italicized phrases above effectively say the same thing, and so one cannot be a premise in an argument for the other.

that because the meaning of human birth is not a pre-discursive fact (true), kinship is not given by the meaning of birth (false). Apart from this conditional itself being false, it also says nothing at all about progenerativism and draws a conclusion that a performativist would reject, rather than accept.

Might we instead take the expression *birth as such* as signaling a progenerative referent for the term *birth* in Sahlins's conclusion that kinship is not given by birth? If so, then either *human birth* in his premise has this same referent or it doesn't. If it does, then the premise—human birth is not a pre-discursive fact—is false. If it doesn't, then the argument equivocates on the term *birth*. In effect, this makes the argument question-begging, since (3b) is meant to provide an independent reason for viewing progenerativism as a pragmatic failure, based on the ethnographic facts. All that Sahlins would have asserted is that because culturally constructed birth is not a pre-discursive fact—something that progenerativists and performativists alike agree on—kinship is not given progeneratively—precisely what is in dispute. At best, this is an argumentative stalemate.

Similar problems face the claims in the second passage from Sahlins. The claim that 'blood' and 'sperm' *are not mere physiological substances of reproduction but meaningful social endowments of ancestral and affinal identities and potencies* is true only of the *symbolic meaning* of blood and sperm, not blood and sperm themselves. While there is nothing wrong in pointing this out about the relevant symbolic meanings, such claims cannot be used as premises in an argument for birth itself reproducing *a system of kinship relations and categories* (first conclusion) or that *kinship is a thoroughly symbolic-cum-cultural phenomenon* (second conclusion), since the latter conclusion is already presupposed in these claims.

Pervading Sahlins's broader discussion is a shift between relationally characterized events (such as birth), processes (such as reproduction), and people (such as mothers), and our representations of such events, processes and people. In his general conclusion to *What Kinship Is—And Is Not*, after providing a reprise of "cultural discourses of procreation" (2013, p.86), Sahlins poses a rhetorical question that he then answers: "Should all this cultural variability be laid to a physiological constant? Clearly human birth is a semiotic function of a kinship order, rather than kinship a biological sequitur of birth" (2013, p.87). Here *human birth* must mean something like our *representation or idea of human birth* in the first part of Sahlins's answer, while *birth* can't mean this in the second part of that answer.[11]

To track this critique via an explicit representation of the completion of the enthymematic Ethnographic Argument with which we began, consider (3)–(6) as missing premisses provided by Sahlins' critique:

1. Progenerativism about kinship is the view that kinmaking is the cultural elaboration of reproductive relations.
2. The ethnographic record indicates that kinmaking involves various non-reproductive relations. But
3. Kinship is not given by birth because birth is not a pre-discursive fact.
4. Blood and sperm are not mere physiological substances of reproduction but meaningful social endowments. Therefore,
5. What is reproduced in birth is a system of kinship relations, and
6. Kinship is a thoroughly symbolic-cum-cultural phenomenon. So,

C. Progenerativism misrepresents kinship and constitutes a pragmatic failure in the study of kinship.

My argument in this section has been that (3), (4), and (5) all involve equivocations or circularity, in effect assuming (6). Thus, they do not provide a sound completion of The Ethnographic Argument.

[11] This kind of unmarked transition between talk of *relations* and talk of *our ideas of relations* is familiar to historians of modern philosophy, especially scholars of Locke (Bennett, 1996). It has been argued that in other work on historiography and anthropology that explicitly discusses Locke on relations, Sahlins makes precisely this transition (Wilson, 2016b; see also; Strathern, 2016).

6. The transcendence of biological relations and progeneration

Consider now (3c), *Biological Transcendence*, the view that kinmaking transcends reproductive relations and so progeneration is not at the core of kinship. Just as Read has provided a clear overview of the ethnographic diversity to the practice of kinship, in wider ranging work he likewise succinctly expresses the basis for a progeneratively-transcendent view of kinship:

> Kinship in human societies … provides conceptual ways for individuals to identify the kin relationship they have to one another. We can usefully distinguish between kinship in this conceptual sense and biological kinship arising from reproduction by referring to the former as cultural kinship. Although cultural kinship is still ultimately based on the biological facts of reproduction, it transcends its biological roots through forming conceptually expressed systems of kinship relations that need not parallel biological kinship relations (Read, 2012:14).

The distinction between biological and cultural kinship, sometimes glossed as that between "biological processes" and "social facts" [e.g., Trautmann, Feeley-Harnik, and Mitani (2011:179)] is ubiquitous in the literature. As section 1 implies, however, rather than a dichotomy there is actually a trichotomy in play here, with cultural kinship transcending both *biologically-defined concepts of kin*, such as that used in the theory of kin selection, and *biologically-conceived or progenerative kinship*, the object of the performativist critique of the study of kinship.

Although performativists tend to be more sceptical of the claim that cultural kinship is "based on the biological facts of reproduction" than is Read,[12] the idea of cultural kinship transcending biological kinship in ways incompatible with progenerativism features in the most widely accepted inferential pathway linking ethnographic diversity to the rejection of progenerativism. As Sahlins says about kinmaking, "the current orthodoxy in kinship studies can be summed up in the proposition that any relationship constituted in terms of procreation, filiation, or descent can also be made postnatally or performatively by culturally appropriate action. Whatever is construed genealogically may also be constructed socially" (2013, p.2). For performativists, culturally constructed kinship supercedes or replaces, rather than expands upon, progenerative kinship.

Evidence about the internal structure to kinship terminologies, however, shows why (3c) draws the wrong conclusion about kinmaking and progeneration. I begin here with a reminder about a point that Ernest Gellner first made over sixty years ago in a short series of exchanges with Rodney Needham (Gellner, 1957, 1960; Needham, 1960). Gellner's general point was that there was an inconsistency in Needham's claim that "[b]iology is one thing, descent is quite another, of a different order" (Needham, 1960, p. 97), since the very phenomena that Needham appealed to in support of this claim—adoption, leviratic marriage, ghost marriage—logically presupposed the identification of kinship *as progenerative*. For example, consider leviratic marriage in which "a man marries a deceased brother's widow and raises descendants in his brother's name" (Gellner, 1960, p. 188). Here *brother* and *descendant* are both in fact understood in progenerative terms within cultures practicing leviratic marriage. As Gellner says, the "anthropologist's kinship term 'leviratic' is only applicable when certain real kinship relations obtain" (Gellner, 1960, p. 188; see also; Gellner, 1957). The performance of leviratic kinship, much like the alloparental practices of adoption discussed in section 4, is anchored in progenerative activity.

This strengthens the more general point about the performativity of kinship that involves alloparenting made there. In key cases that performativists themselves cite of cultural elaborations of kinship drawn

[12] Schneider's critique of kinship included an explicit attack on the idea that kinship has a "base in nature" or is "rooted in" or "based on" biological facts (Schneider, 1984, p. 138; see also; Franklin & McKinnon, 2001, pp. 2–6, and; Wilson 2016a).

from the ethnographic record, moving beyond a superficial understanding of what that record shows about the performance of kinship reveals ways in which progenerative dimensions to kinship remain important. The cultural elaborations central to kinmaking are built around and on progenerative relations.

The logical presupposition identified by Gellner with respect to leviratic kinship parallels a claim that Shapiro has made in a brief response to Sahlins that keeps ethnography in focus. Shapiro notes that "the ethnographic record reveals a wide variety of acts other than procreation by which ties of kinship are established. … But we are entitled to ask a question not raised by Sahlins and only rarely approached by other new kinship scholars: are these non-procreative acts *modeled on* native appreciations of procreation?" (Shapiro, 2012, p. 191; see also Shapiro, 2014, p. 19). Central to Shapiro's development of his positive answer to this question is the phenomenon of focality and its relationship to *extensionism* about kinship terminologies (Shapiro, 2018a; Shapiro & Read, 2018).

Extensionism traces back deep into the history of the study of kinship, based on a motivating idea found in Morgan's original (and problematic) introduction of the distinction between descriptive and classificatory kinship systems (Morgan, 1868, 1871). The motivating general idea, inconsonant with (3c), is that not all referents of kinship terms are created equally, for some—those that are progenerative—are more fundamental than others. Extensionism itself makes a more specific claim about the meaning of kinship terms. It is often associated with Malinowski's developmentally-expressed view that the "individual meanings [of kin terms] … start with a main or primary reference; which then through successive extensions engenders a series of derived meanings" (Malinowski, 1929, p. 138).[13] Extensionism received its most elaborate and precise articulation in the work of Harold Scheffler and Floyd Lounsbury in the 1960s and 1970s (Lounsbury, 1965; Scheffler, 1972; Scheffler & Lounsbury, 1971) and has been most recently re-explored by a range of essays in a *Festschrift* volume focused on Scheffler's work (Shapiro, 2018b).

The core claims made by extensionism are expressible as follows. In every language, there is a core set of kinship terms and these are progenerative in nature. Kinship terms such as 'mother', 'father', 'brother', and 'sister', have a primary meaning or *focus*, where "focal membership is supplied mostly by nuclear family relationships, from which relationships it is *extended* to people—even to things—outside the nuclear family" (Shapiro & Read, 2018, p. 3). This core set of terms is primary, or have primary reference or meaning, in at least three senses.

First, despite all the cultural variation to kinship, their equivalents are found in every culture (cf. Wierzbicka, 2016). Second, other kinship terms—what Lounsbury (1965, p. 149) calls *genealogical extensions*—can be defined, characterized, or glossed in terms of them. Third, broader and more metaphorical uses of kinship terminology—what (Lounsbury, 1965, p. 149) calls *extragenealogical extensions*—are to be understood by reference back to these primary terms. Given the relations of extension between the primary kinship terms and both other kinship terms and other uses of both primary and these other kinship terms, the primary kinship terms are *focal* terms and serve as a *model* for the idiom of kinship more generally.

Extensionism, particularly in the form articulated in terms of Chomskyan-like rewrite rules by Lounsbury and Scheffler, has been rejected by many anthropologists as being itself an ethnocentric projection of Western views of kinship. Shapiro (2014, 2015, 2016) has made a convincing case, however, that the identification of the phenomenon of focality invoked by extensionists is itself part of the "native's point of view". Far from being some kind of "etic" imposition from "the West", some kind of progenerative understanding is part of how kinship itself is conceptualized across a variety of distinct ethnographic contexts.

The recent Australian-based ethnographic work of Victoria Burbank and Patrick McConvell that attends to extensionism more explicitly further supports Shapiro's view. Burbank concurs that extensionism captures the lived experience of kinship and that Scheffler's extensionist "interpretation of Aboriginal kin classification, his ideas about polysemy, the focality of some kin, like fathers and mothers, and the extension of labels for them to less focal others makes perfect sense, at least in Aboriginal Australia" (Burbank, 2018, p. 205). McConvell argues for "the strong hypothesis that all diachronic changes in kin-term meanings in Australia can be explained as addition of, or loss of, reduction rules as formulated by Scheffler, or minor variations or sequential combinations of them" (McConvell, 2018, p. 238), identifying Kronenfeld's work on contextual variation in extension patterns as a contributing resource beyond Scheffler's own work here (see also Strathern & Stewart, 2018, pp. 126–127).[14]

7. Does extensionism really support a progenerative view of kinship?

In the previous section, I argued that if extensionism captures the structure to usages of kinship terminology, then progeneration infuses kinship in a way that undermines *Biological Transcendence*. Read (2018) has, in effect, recently challenged this claim by distinguishing two parts to extensionism: that there is a core set of kinship terms *and* that these are progenerative in nature. Read argues that the phenomena of focality and modelling support only the first of these claims. For Read, extensionism captures the structure to kinship terminologies but the computational logic governing that structure generates kinship knowledge independently of any commitment to progenerativism. As Read puts it:

> If two persons know their respective kin-term relationship to a third person, then they may compute the kinship relation they have to each other through their cultural knowledge regarding how the kin terms making up their kinship terminology are interrelated. *They do the computations without reference to the genealogical relations subsumed under the kin terms* (Read, 2018, p. 75, my emphasis).

While the knowledge generated by systems of kin terminologies plays important roles in the performance of kinship, as Read has emphasised, Read's final claim here is mistaken.

Read draws on his long-term development of a formal theory of kinship terminology (e.g., Read, 1984, Read, 2001, 2007; Leaf and Read 2020: ch.11), one organised around the idea that kinship terminologies built from a small set of primary kin terms that specify family relations generate "computational systems enabling culture bearers to determine kinship relations" (Read, 2018, p. 72). These computational systems feature derivative *kin term products*[15] that, together with primary kin terms, define a structure that plays a central role in capturing and expressing substantial cultural knowledge of kinship. That formal theory contributes much to our understanding of how kinship terminologies are structured and used within any given culture, as well as to how those structures and uses vary across cultures.

[13] In contrast with my rejection of Malinowski's claims about ignorance of paternity, here I take Malinowski to have had an insight into the semantics of kinship terms that stands the test of time. One irony is that Malinowski is generally valued for his ethnographic methodology rather than his theoretical depth. Yet the former shows itself as compromised in the ignorance of paternity claim, the latter being responsible for the more promising idea of extensionism.

[14] Cronk et al. (2019) have recently pointed out that the focality central to extensionism only partly solves the misalignment between genetic relatedness and kin terms and argue that the adjustment needed is to introduce the generalised notion of *fitness interdependence* in models of trait spread and stability. Their view of kin terminologies as culturally constructed but biologically constrained comports with the view I defend here.

[15] Read defines *kin term product* as follows: "Suppose that K and L are kin terms, then the *kin term product* of the kin terms K and L, is a kin term M that speaker would (properly) use (if any) for alter 2 when alter 1 (properly) refers to alter 2 by the kin term K and speaker (properly) refers to alter 1 by the kin term L." (Read, 2018, p. 75, quoting his own 1984:422).

To see why Read is mistaken in the further inferences that he draws about progenerativism, however, consider the following pair of schemata:

Schema 1: X is the father of Y; Y is the sister of Z; therefore, X is the father of Z.

The inference expressed in this schema generates the kind of knowledge that speakers have access to simply in virtue of knowing the relevant kin terms. We can know that X is the father of Z simply by knowing that X is the father of Y and Y is the sister of Z. Consider now Schema 2:

Schema 2: A is the stepfather of B; B is the adopted sister of C; therefore, A is the (step)father of C.

The inference in Schema 2 is neither valid nor one that speakers reliably make, whether the conclusion contains *father* or *stepfather*. A stepfather is a cultural construction of father, and an adopted sister is a cultural construction of sister, each referring to kin relations that lack a progenerative dimension. The inferential breakdown in moving from Schema 1 to Schema 2 suggests that the computational logic of the system of kinship terms in English is progenerative, for that is precisely what is present in Schema 1 but absent in Schema 2. By using kinship terms that are explicitly non-progenerative in Schema 2, we can see more clearly the progenerative presupposition of Schema 1. Thus, the impression that Schema 1 can be employed or activated by a speaker free of any reference to genealogy or progeneration is misleading.

The same is true of the computational systems featuring kin-term products that Read identifies as important sources of cultural knowledge about kinship. Consider Fig. 2 below, which Read uses (2018, p.76) in illustrating the fact that "cousin" is a kin-term product of "aunt" and "daughter":

Fig. 2 expresses both the truth that the daughter of one's aunt is one's cousin and—what Read emphasises—that knowing that your aunt refers to someone as her daughter allows you to infer that person is your cousin. But both the truth and the corresponding knowledge hold only if *aunt* and *daughter* are defined progeneratively: the respective inferences fail once one drops this constraint and allows the inference to relate anyone called an aunt or a daughter in an appropriate cultural context.

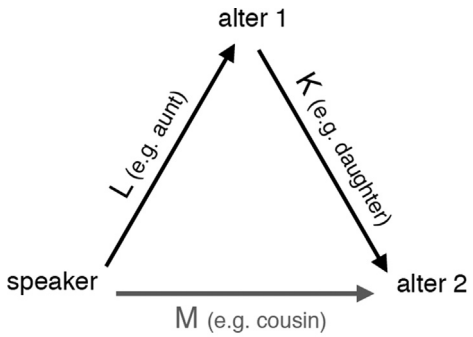
For example, when I was growing up, we referred to our neighbour as Aunty Jean; Aunty Jean also provided sponsorship for a child in Africa whom she referred to as her daughter. That child neither *was* my cousin nor did anyone in my family (or in Aunt Jean's) think that she was. Perhaps such a case would be precluded by Read because neither the reference kin terms *aunt* and *daughter* nor the derivative kin-term product *cousin* are being "properly used" by the Speaker and Alter 1. But this surely just pushes the problem back one further step, since then it seems clear that "proper uses" of these terms are progenerative.

In short, while we can distinguish cultural from biological kinship, the former expands on the latter and so inherits its progenerative nature. We can likewise, following Read, distinguish between two parts to extensionism, a structural part governed by a computational logic and the substantive assumption of progenerativism. Yet the logic requires the substantive assumption. Proponents of extensionism rightly take their view of kinship terminologies to support progenerativism about kinship. That being so, *Biological Transcendence* is false.

8. Progenerative kinship and nonhuman primates

Progenerative conceptions of kinmaking, shared across the biological and social sciences, have the potential to more closely align work on kin and kinship across those sciences. Recent work on kinship in nonhuman primates within evolutionary anthropology illustrates what shape that alignment might take (Evans, Levinson, & Sterelny, 2021).

Despite nonhuman primates lacking the linguistic and cultural systems necessary for *kinship systems*, "kinship has deep phylogenetic roots as an organizing force within nonhuman primate societies, shaping patterns of residence, behavior, mating preferences, and cognition." (Silk, 2020, p. 127; see also; Silk, 2001). Since all primates recognise at least some kin, this shaping is cognitively-mediated within primate populations. It is not simply that primatologists impose a biologically-defined concept of kin to understand those patterns. Nonhuman primates themselves recognize biological kin.



Kin-term product of L (aunt) and K (daughter) is M (cousin)

Labelled (black) arrows show the reference kin term (properly) used by speaker and alter 1 and by alter 1 for alter 2. The grey arrow shows the term known from cultural knowledge to be (properly) used by speaker for alter 2.

Source: Constructed by © Dwight Read.

Fig. 2. Read on Kin-term products.

How far such recognitional capacities take us down the path to *kinship* remains controversial. As Ronald Planer has recently put it, echoing Dennett, perhaps nonhuman primates merely deploy a "competence without comprehension" (Planer, 2020, p. 4) that requires no concept of kin, rather than recognising kin *as kin*, which does require some such concept. If nonhuman primates do possess this latter conceptual capacity for kin recognition, do they also possess a maternally-focused form of *primeval kinship*, as Bernard Chapais has argued in a series of publications over the past fifteen years (Chapais 2008, 2014, 2016)? On Chapais's view, the expansion of uterine kinship to siblings and eventually (and only partially amongst nonhuman primates) to fathers and their offspring led to human kinship systems: fundamental kinship structures exist as part of our primate heritage and are not unique to the *Homo* lineage.

Distinctively human kinship clearly draws on cognitive capacities for kin recognition and the recognition of kin relationships, capacities that are at least partially shared with our closest primate relatives. Without presuming just how far nonhuman primates have travelled down the cognitive path from competence without comprehension to primeval kinship, the question to ask is what form of kinship likely emerges once the shift from mere competence with recognition of kin and kin relationships to comprehension of kin as kin was made.

If something like Chapais's view is correct, then the earliest forms of human kinship were likely progenerative, since the perceptual and conceptual tracking capacities at the heart of his view of primeval kinship are directed at progenerative facts. If kinship emerged only within the *Homo* lineage (say, because it requires language), by contrast, the same general question arises. Notwithstanding the importance of the human capacity to articulate and elaborate on kinship relationships through language and in culturally specific ways, linguistically-mediated kinship itself still evolved against a backdrop of cognitive capacities allowing our ancestors to recognise biological kin. If the original form of human kinship was non-progenerative, we still require an account of how it arose, given these antecedent cognitive capacities. Even if early human kinship was not progenerative, primeval nonhuman primate kinmaking almost certainly was (see also Wilson, in press).

9. Conclusion

I have argued that, contrary to recently popular views within cultural anthropology, performativism about kinship is not in fact supported by an appeal to ethnography. Kinmaking neither (a) is progeneratively

innocent, nor (b) gives conceptual priority to culture, nor (c) is a biologically transcendent phenomenon, with progenerative facts being either ignored or left behind with the development of the concept of kinship. Despite performativists' correspondingly critical view of progenerativism, a progenerative conception of kinship, one shared across the biological and social sciences, has the potential to unify (or at least more closely align) work on kin and kinship across those sciences, such as that on primate kinship.

As the framing of the paper perhaps suggests, the work to be done in realizing this unificational optimism about the concept of kinship is partly historiographical. As with emerging work within the philosophy of anthropology on ethnoscience and its study acknowledged at the outset of the paper, philosophical and historiographical scrutiny are entwined. In the case of the study of kinship, reconsidering the place of progeneration in the concept of kinship against a contemporary disciplinary backdrop that often considers the study of kinship to have moved beyond such "bioessentialism" invites a corresponding revisiting of the received narrative about kinship in anthropology's past (Shapiro, 2020; Wilson, 2016a). The rejection of Progenerative Innocence, Cultural Priority, and Biological Transcendence comes with a requisite historiographical re-evaluation of taken-for-granted disciplinary narratives.

That re-evaluation will involve addressing larger issues in the discipline, such as the roles of biology and psychology in the explanation of cultural phenomena, the resistance to reductive tendencies that has motivated support for cultural relativism within anthropology, and the nature of the relationships between kinship and gender. Here the analytic and conceptual tools deployed by philosophers of science can provide the basis for some ground-shifting. Philosophers of science prepared to direct their energy to such issues to the philosophy of anthropology have much to contribute here, as they have already shown with respect to ethnobiology and ethnoscience.

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