

Article

# Deflating Byrne's "Are Women Adult Human Females?"

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**Abstract:** The primary aim of this paper is to show that Alex Byrne's arguments in "Are Women Adult Human Females?" provide no reason to doubt the truth of the proposition that trans women are women. Byrne's conclusion is that women are adult human females. However, it is safe to say that much of the interest in his article is driven by the assumption that it is a short step from that conclusion to the further conclusion that trans women are not women. If Byrne is understood to be defending that further conclusion, however, then some of his arguments are dialectically ineffective. The others commit an evidential fallacy or rest on a false premise.

**Keywords:** gender; sex; trans; Alex Byrne

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My objective is to explain why Alex Byrne's arguments in "Are Women Adult Human Females?"<sup>1</sup> provide no reason to doubt the truth of the proposition that trans women are women. To be fair to Byrne, he does not claim to have shown that that proposition is false. Nevertheless, I think it is safe to say that much of the interest in his article is driven by the assumption that it is a short step from his conclusion that women are adult human females to the further conclusion that trans women are not women. Thus, I think a focus on whether his arguments actually do support that further conclusion is well-placed.

## 1. Byrne's Theses

Byrne describes himself as defending

"AHF S is a woman iff S is an adult human female",

where AHF should be understood to be "implicitly necessitated, with 'S' bound by a universal quantifier within the scope of the necessity operator".<sup>2</sup> He assumes the truth of

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<sup>1</sup> *Philosophical Studies* vol. 177 (January 2020): 3783–803. Byrne's position is clarified in "Gender Muddle: Reply to Dembroff" (in this issue of *Journal of Controversial Ideas*), and so I rely on that source as well.

<sup>2</sup> Byrne, "Are Women Adult Human Beings?", 3784.

“NF Trans women are not female”,

where NF “is also to be understood as a universal generalization”.<sup>3</sup> Together, AHF and NF entail

NW No trans woman is a woman.<sup>4</sup>

A cursory reading of Byrne’s article suggests, therefore, that Byrne might well be implicitly arguing for NW. However, he does not explicitly draw that conclusion. He does explicitly claim that not all trans women are women.<sup>5</sup> Depending on how “trans woman” is defined, I agree with him about that. Byrne defines “trans woman” to include any “male” who, due to gender dysphoria, transitions to living as a woman.<sup>6</sup> Given that definition, some trans women do not believe that they are women, and I am certainly in no position to claim that such persons are mistaken about their own gender.

For the purpose of assessing whether Byrne’s arguments provide evidential support for NW, I prefer to simply stipulate that “trans woman” means “someone who was born reproductively male<sup>7</sup> but sincerely believes that they are a woman”. (The definition is intended merely to roughly capture the *extension* of “trans woman”. I am not suggesting that anyone’s gender is reducible to a belief.) Even on this definition, I agree with Byrne that not all trans women are women because I believe that one can be mistaken about one’s own gender. Thus, I am concerned to show only that Byrne’s article provides no reason to doubt the *generic* proposition that trans women are women. Interpreted as a generic proposition as opposed to a universal generalization, “trans women are women” leaves semantic room for exceptions.

Byrne’s decision to refrain from explicitly drawing the conclusion that NW is true is not the only reason why there is room for doubt about whether Byrne intends to provide support for that conclusion. Another reason is that Byrne concedes that there may be counterexamples to AHF:

Given that true and interesting equivalencies in the style of AHF and JTB [i.e., S is knowledge iff S is justified true belief] are notoriously hard to find, one should be wary of claiming that AHF is more than a very good approximation. More carefully put, the thesis of this paper is that *woman* is a biological (and not social) category, and that AHF is close enough. But for simplicity we can defend it outright.<sup>8</sup>

Even if *woman* is a biological category, and even if *adult human female* is a close approximation of that category, and even if no trans woman is female, Byrne has left some logical room for the possibility that some, and perhaps even many, trans women fall into the biological category of *woman*. Many trans women are hormonally female, and many are, in terms of their secondary sexual characteristics and their observable phenotype, more female than male. Might Byrne believe that the possession of such biological traits by an adult human being brings them close enough to being female to count as a woman?

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<sup>3</sup> Byrne, “Are Women Adult Human Beings?”, 3799.

<sup>4</sup> The claim that AHF and NF together entail NW assumes that “S is a female” and “S is female” are logically equivalent.

<sup>5</sup> Byrne, “Are Women Adult Human Beings?”, 3800.

<sup>6</sup> Byrne, “Are Women Adult Human Beings?”, 3794, note 20.

<sup>7</sup> The expression, “reproductively male” can be spelled out in different ways. For the purposes of this definition of “trans woman”, it will suffice to stipulate that to be born reproductively male is to be born with male reproductive organs.

<sup>8</sup> Byrne, “Are Women Adult Human Beings?”, 3785.

I suspect not, for elsewhere he makes it clear that he thinks that a human being must be reproductively female in order to be a female.<sup>9</sup> It is quite possible, then, that Byrne is trying to support NW by way of supporting AHF. Be that as it may, my objective is to show that the arguments he uses to defend AHF do not provide evidential support for NW. For my purposes, then, Byrne's actual intentions do not really matter.

To be precise, I take Byrne's two central theses to be, first, that "*woman* is a biological (and not social) category" and, second, that AHF is true or at least "a very good approximation". In Section 2, I argue that the first of those theses is false, because *woman* is a social category. This conclusion does not, however, undermine AHF. In other words, Byrne can still argue that *adult human female*, understood as a social category, is at least a close approximation of the category *woman*. In Section 3, I discuss possible counterexamples to AHF, but I do not argue on the basis of those possible counterexamples that AHF is false. The heart of my argument appears in Sections 4–6, where I try to show that Byrne's six arguments in defense of AHF provide no reason to deny that trans women are women. Some of my arguments in Sections 5 and 6 rely in part on my argument in Section 2 that *woman* is a social category, and so the reader is asked to be patient if it is not immediately clear precisely how Section 2 is relevant to my main argument.

## 2. Is *Woman* a Social Category?

In a recent critique of "Are Women Adult Human Females", Robin Dembroff questions Byrne's claim that *woman* is not a social category partly on the grounds that, in the sense of 'adult' in which all women are adults, 'adult' denotes a social category.<sup>10</sup> In response to Dembroff, Byrne writes:

But I trust it is clear that 'adult' in the statement of AHF is supposed to be interpreted as in 'adult chimpanzee'; that is also the natural interpretation of 'adult' in the dictionary entry for 'woman'. Other senses of 'adult' are irrelevant.<sup>11</sup>

By itself, this remark would not solve a problem that Dembroff raises, that when "adult" is used to describe a mature nonhuman animal like Byrne's adult chimpanzee, it is naturally interpreted to mean "sexually mature", which in a female chimpanzee would mean "impregnable". Sexual maturity in cis girls is usually reached between the ages of 11 and 16. The average age is 14. Thus, many if not most girls reach adulthood in this biological sense well before they become women (at least in the targeted sense of "woman", which Byrne describes as the "standard everyday sense").<sup>12</sup>

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<sup>9</sup> "Is Sex Binary?", *Arc Digital* (November 1, 2018). Being reproductively female can be spelled out in terms of the capacity to become pregnant, or the possession of female reproductive organs, or the production of large gametes, etc. Byrne suggests that "females are the ones who have advanced some distance down the developmental pathway that results in the production of large gametes—ovarian differentiation has occurred, at least to some extent".

<sup>10</sup> Robin Dembroff, "Escaping the Natural Attitude About Gender", *Philosophical Studies* vol. 178 (March 2021), 990. If *adult* is a social category, then it follows that *adult human female* is a social category and, given AHF, that *woman* is a social category. To define "social category", Byrne borrows a definition of a socially constructed category offered by Sally Haslanger: "a category F is socially constructed (i.e., is a social category) iff 'in order for X to be F, X must exist within a social matrix that constitutes F's'" See Byrne, "Are Women Adult Human Females?", 3784, note 2. Haslanger's definition can be found in her, *Resisting Reality: Social Construction and Social Critique* (Oxford: Oxford University Press), 87, 131.

<sup>11</sup> Byrne, "Gender Muddle", 9.

<sup>12</sup> Byrne, "Gender Muddle", 3–4.

Byrne tries to solve the problem by settling on the completion of puberty as the relevant biological milestone that qualifies a female human for adulthood and hence womanhood because that is when “human females have fully matured into the adult form”.<sup>13</sup> That helps, but it still makes womanhood start too early. Most girls complete puberty between the ages of 15 and 17, and many do so earlier than that. Byrne tries to make the shoe fit by insisting that 15- and 16-year-old girls are “young women” and hence women (a questionable inference given that expressions like “young man” and “young lady” are often applied to preteens). He also points out that he does not deny that AHF only approximates the truth, and so he could, if need be, simply adopt the view that women include only those adult human females who are not in the “very early stages of adulthood”.<sup>14</sup>

The issue, however, is not whether we can find some biological property that is acquired by most girls at least roughly at the same time that girls become women. Rather, the issue is whether the possession of any such property is necessarily tied to being a woman. There is reason to think that it is not, for we do not distinguish women from girls on the basis of whether they have reached sexual maturity or full height, or on the basis of whether they have completed puberty or have completed puberty but not too recently, or even on the basis of statistical averages for when any of these biological milestones are reached. That would entail that the age at which a girl becomes a woman is variable in ways that it is not. There is a wide range of ages at which girls complete puberty, but we do not, on that basis, recognize a wide range of ages at which girls become women. Moreover, research suggests that (in the United States) African-American girls complete puberty, on average, almost a year earlier than white girls, and most girls complete puberty earlier than most boys. However, we do not infer that African-American girls become women almost a year earlier than white girls, or that boys become men later than girls become women. Nor would we take seriously the suggestion that, because historically the average age for the completion of puberty used to be much higher, people used to become men or women much later than they do now. Insofar as we are prepared to recognize variability in the age at which people become women or men, it is typically because we recognize that, cross-culturally or cross-historically, variation in social norms has resulted in variation in the age at which manhood or womanhood is reached. In certain cultures, for example, young teens who pass certain initiation tests are then recognized as men or women. At least many of us are willing to allow that, in those cultures, manhood or womanhood arrives earlier than in our own.

It seems plausible, then, to suppose that, in the sense of “adult” in which one becomes a man or a woman when one reaches adulthood, “adult” denotes a social category. In the United States, for example, we start calling someone a man or woman at the age of 18 or 21 or thereabouts, not because we believe that some biological landmark has been reached within that age range, but rather because of social factors such as the new legal rights and responsibilities that are acquired at those ages and cultural norms about the appropriate minimum age for marriage, independence from one’s parents, etc. This is not to deny that “adult” has one or more biological senses that can be applied to mature human beings no less than to mature chimpanzees, but biological adulthood is certainly not the only factor that we rely on as a basis for distinguishing women from girls. We rely on social factors as well. Thus, I am inclined to think that, in the sense relevant to

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<sup>13</sup> Byrne, “Gender Muddle”, 8.

<sup>14</sup> Byrne, “Gender Muddle”, 8.

defining the “everyday standard sense” of ‘woman’, “adult” denotes a social/legal category that is no doubt related to, but not reducible to, biological adulthood. Byrne’s thesis that “woman”, in the “standard everyday sense” of “woman” does not denote a social category is false.<sup>15</sup>

### 3. Possible Counterexamples to AHF

Of course, Byrne can concede that *woman* is a social category and still defend his thesis that AHF is true or at least a close approximation. He can also continue to insist that “human” and “female” in AHF denote biological categories. Indeed, recognizing that, in AHF, “adult” denotes a social category would actually provide support for AHF by enabling AHF to escape two potential counterexamples that Byrne is committed to regarding as actual counterexamples: precocious puberty and delayed puberty. Because he wants *adult* to be a biological category, Byrne must concede that AHF has the result that girls who complete puberty at an unusually early age are, therefore, women at an unusually early age, which is obviously false. He is also committed to saying that AHF has the result that females whose puberty comes unusually late therefore become women at an unusually late age, which is also obviously false. However, if the relevant sense of “adult” in AHF is understood to be the social (or legal) one, then the 11-year-old girl who has completed puberty is nevertheless not yet a woman, and the 25-year-old female who has not yet completed puberty is nevertheless a woman. Problem solved.

There are, however, other possible counterexamples to AHF to consider. As Byrne points out, some of them concern the boundaries of the category *human*. Depending on how “human” is defined for the purpose of making AHF more precise, one might have to worry about whether women of the species *Homo erectus* once roamed the Earth,<sup>16</sup> or whether some of the remarkable instances of intergalactic convergent evolution in *Star Trek* are women. Moreover, the possibility of cyborg or robotic men or women (perhaps Data from *Star Trek* is one), if it is a possibility, could be the basis for thinking that even “human” in AHF should not be understood to denote a biological category. Indeed, perhaps “adult human female” in AHF should be replaced by “adult female person”, where “person” denotes a psychological category. (Some dictionaries define “woman” as “adult female person” instead of “adult female human”.)

We can, however, safely set these kinds of cases aside. Some of them might threaten the claim that AHF is a necessary truth or even true, but they do not threaten Byrne’s more refined thesis that the category *woman* is at least closely approximated by *adult human female*. Byrne rightly focuses on two other possible counterexamples: “intersex individuals” and “trans women”. (To be an “intersex individual”, as I understand Byrne’s

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<sup>15</sup> One might object that, in the sense relevant to distinguishing girls from women, “adult” can denote a biological or a social category, depending on the context. In referring to a human being raised by wolves, for example, one might be tempted to identify them as a woman or man at the age of sexual maturity even if that age in the particular case is 11, because using the social/legal sense of “adult” as the relevant criterion really does not make much sense in that context. My own linguistic intuition, for what it is worth, is that, while it does make sense to describe them as an adult male or adult female, it does not really make sense to describe them as a man or woman. Others might have different intuitions here, and so perhaps a case can be made that I should meet Byrne halfway and recognize that the relevant sense of “adult” denotes a nonsocial or social category, depending on the context. “Halfway” would be a bit of an exaggeration, though, because, in almost every case, the relevant category would be the social one.

<sup>16</sup> Byrne discusses this sort of case in “Gender Muddle”, 8, note 42.

use of the expression, is to be an individual who is neither reproductively female nor reproductively male.)<sup>17</sup>

Both intersex individuals and trans women could pose a threat even to Byrne's refined thesis. I say "could" and not "do", however, because whether intersex and trans persons pose a threat to that thesis depends partly on the scope of "female" in AHF. If being a female in the sense of "female" that is relevant to AHF requires being reproductively female, then no intersex individuals and no trans women will be women under AHF. On the other hand, if "female" in AHF is understood in a way that is consistent with the proposition that some intersex individuals and trans women are female, then neither the existence of intersex individuals nor the existence of trans women needs to threaten AHF.<sup>18</sup> It is important, then, to distinguish AHF from any particular interpretation of AHF. As I have already indicated, I am unsympathetic to Byrne's interpretation of AHF, which appears to be

BRB S is a woman iff S is a biologically adult, reproductively female, member of the biological group: humans.<sup>19</sup>

Setting aside trans women as the more contested case, it surprises me that Byrne does not regard many intersex individuals as providing compelling counterexamples to BRB and to the crucial corollary of BRB that being reproductively female is a logically necessary condition for being a woman. I find it obvious that many intersex individuals who regard themselves as women are women even though they are not reproductively female, and I suspect (although this is only a guess) that most reasonable people would, on reflection, agree with me on this point. After all, intersex individuals include some people who not only regard themselves as women but are regarded by those who know them as women, and who were, in virtue of their observable anatomy, assigned female at birth, and who may not even be aware that they are not reproductively female. I will not, however, press this point here. In this paper, I do not attempt to reach the conclusion that some intersex persons (or trans women) are women, nor do any of my arguments rely on the truth of that conclusion.

Byrne suggests that the inclination to reject AHF on the basis of the existence of intersex individuals "might be driven by failing to make the distinction between being (rightly) treated as a woman and actually being one" or by "a well-documented tendency to give too much weight to stereotypical or representative features".<sup>20</sup> I can only assure Byrne that, in rejecting BRB partly on the basis of the existence of certain intersex individuals, I am not confused in either of these ways. Of course, he is free to be skeptical about my assurances. Dialectically, this could be a dead end.

Unlike Byrne, then, I would secure AHF against the objection that some intersex individuals are women by abandoning BRB and incorporating a non-reproductive sense of "female" into AHF that is inclusive with respect to both intersex and trans women. As

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<sup>17</sup> Byrne, "Are Women Adult Human Beings?", 3793.

<sup>18</sup> The suggestion that an intersex individual can be female might appear to be self-contradictory, for "intersex" is often defined in terms of being neither female nor male. However, I trust that the reader can see that such a problem is solved if being intersex is defined in terms of being *reproductively* neither male nor female. Just as a trans woman can be female in a non-reproductive sense without being reproductively female, an intersex woman can be female in a non-reproductive sense without being reproductively female.

<sup>19</sup> BRB itself is open to a variety of interpretations, depending on how "biologically adult", "reproductively female", and "humans" are made precise.

<sup>20</sup> Byrne, "Are Women Adult Human Beings?", 3794.

discussed in Section 2, I would also be inclined to replace Byrne's biological notion of an adult with a social/legal notion and his biological notion of human with something broader and perhaps not even essentially biological. Some might respond to my use of a non-reproductive sense of "female" by accusing me of "humpty-dumptyism"—using words to mean whatever I want them to mean—but I think that such an accusation would involve a failure to recognize just how variable and sensitive to context (and, in some contexts, also widely contested) the meaning of "female" is when applied to humans as opposed to other animals. There is no doubt that, in many contexts, including but certainly not limited to certain scientific and medical ones, "female" can be used correctly to mean "reproductively female". It seems clear to me, however, that, in other contexts, "female" can be used correctly in ways that include trans and intersex women and girls as female (and exclude trans men, trans boys, and some nonbinary persons from being female). Nor am I referring only to the way "female" might be used within certain trans communities. Such usage can also be found on the pages of generalist newspapers and magazines, in the distinction many cis and trans people make between being assigned female at birth and actually being female, in the fact that the law often recognizes that someone who is not reproductively female is nevertheless female, and so on. The suggestion that "female" has only a single, reproductive meaning, invariant across all contexts, seems to me to be unduly narrow.

Correct or not, the prevalence of such usage should come as no surprise because, in many contexts, to describe someone as a female is simply to describe them as a woman or girl, rendering the question of whether trans women (and intersex individuals who regard themselves as women) are female no different than the question of whether they are women—or so I would be inclined to argue. Sorting all of this out would, of course, require another, more extensive, discussion.<sup>21</sup> My point here is merely that it is one thing to defend AHF, where AHF is understood in a merely formal way, and quite another to defend BRB or any other interpretation of AHF. This point is crucial to the discussion below, because the threat to the proposition that trans women are women posed by BRB and other interpretations of AHF in which "female" is understood to refer only to those who are reproductively female is potentially much greater than that posed by AHF, understood in a merely formal way (i.e., in a way that is consistent with any interpretation of AHF, including interpretations in which "female" is understood in a way that includes trans women as "female").

#### **4. Arguments That Support AHF but Not NW**

Byrne offers six non-demonstrative arguments in defense of AHF. He asserts that, together, those six arguments constitute a "strong cumulative case" for AHF.<sup>22</sup> In his reply to Dembroff, he also suggests that this cumulative case makes AHF the "default hypothesis".<sup>23</sup> I am not entirely sure what he means by "default hypothesis", but a likely possibility is that he thinks that, together, his six arguments justify the conclusion that AHF is presumptively true (or, perhaps more accurately, presumptively approximately true),

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<sup>21</sup> I am inclined towards the view that "female" is polysemous, but contextualist accounts of the semantics of "female" would also need to be given serious consideration in any thorough exploration of the semantics of "female", as would Dembroff's interesting suggestion that, in some contexts, certain gender terms might be floating signifiers. See Dembroff, "Escaping the Natural Attitude About Gender", 11–12.

<sup>22</sup> Byrne, "Are Women Adult Human Beings?", 3790.

<sup>23</sup> Byrne, "Gender Muddle", 4.

which is to say that, barring evidence or reasons to believe that AHF is false, we ought to believe that AHF is true. If that is what he is claiming, then Byrne owes us an explanation of how it is that his evidence is supposed to establish such a bold conclusion. From the mere fact that a known truth E is evidence for a hypothesis H, one cannot justifiably infer that, barring evidence against H, H is probably true. That sort of reasoning is fallacious even when H entails E. One reason (among others) why such an inference is fallacious, relevant to the discussion below, is that, if H is one among a number of competing hypotheses, E might be evidence for H but also evidence for at least one competing hypothesis.

Setting this evidential fallacy aside, let us turn to the question of whether the six arguments that Byrne advances in defense of AHF provide any evidence for NW (or against the generic claim that trans women are women). I argue in this section that three of the six arguments may provide genuine support for AHF, but nevertheless do not support NW. Then, in Sections 5 and 6, I argue that the other three arguments fail to provide support even for AHF.

*Argument 1.* One of Byrne's six arguments is simply the suggestion that the fact that "woman/girl" and "female" are stylistic variants of each other even in hyperintensional contexts can be explained in terms of, and so is evidence for, AHF.<sup>24</sup> If this argument were developed in a way that addressed alternative explanations of the evidence, evidential support for AHF might be demonstrated. However, if "female" can mean "woman or girl", and "female" in such a use does not need to be interpreted as "reproductively female", then this argument is a nonstarter if it is also intended to support NW. Byrne's own example illustrates this. Byrne quotes a passage from a book by Julia Serano in which she describes her childhood self as someone who wanted to be a girl and wanted to be female. Serano seems to draw no distinction between the two desires. Thus, it appears that Serano appropriately uses "female" and "girl" as stylistic variants in a hyperintensional context. However, even though that fact about Serano may be evidentially relevant to AHF, understood formally, it does not support BRB let alone the proposition that no trans women are women. It seems safe to say that Serano was not suggesting that, when, as a child, she wanted to be a girl and wanted to be female, she wanted to be reproductively female. Some trans women very much wish that they were capable of pregnancy, but others have no such wish, and a young girl, trans or cis, is even less likely to want to possess ovaries or to be capable of pregnancy or to be otherwise reproductively female.

*Argument 2.* In a second argument, Byrne's central premise is that "AHF explains how we sometimes know that an individual is a woman, despite knowing nothing else relevant about her other than the fact that she is an adult human female."<sup>25</sup> Byrne's explanation, naturally enough, is that we know this by deduction from AHF. Byrne uses a specific example to make his point:

Mitochondrial Eve lived more than 100,000 years ago, in Africa. She is the most recent common matrilineal ancestor of all humans alive today. We know nothing about her life or opinions, except that she is human and had children. Nonetheless, as the *New York Times* (correctly) puts it, she is "a woman from whom all living humans inherited their mitochondrial DNA"<sup>26</sup>

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<sup>24</sup> Byrne, "Are Women Adult Human Beings?", 3789–90.

<sup>25</sup> Byrne, "Are Women Adult Human Beings?", 3788.

<sup>26</sup> Byrne, "Are Women Adult Human Beings?", 3788.

Can we know that Eve was a woman despite knowing nothing else relevant about her other than the fact that she was a biologically adult, reproductively female, human being? Byrne says yes, but that assertion strikes me as highly contestable. Setting aside issues concerning whether we know that Eve was an adult in the relevant sense, I would object that, in order to know that Eve was a woman, we would have to know that she was not trans. For if we knew instead that Eve was, say, a trans man, we would have good grounds for thinking that Eve was a man. Of course, this might easily be overlooked. The writer for the Times, for example, probably never even considered the question of whether Eve might have been a trans man, or, even if they did, they might have assumed that someone who existed at that time could not possibly have been trans.<sup>27</sup> But that does not negate the fact that one cannot really know that Eve was a woman unless one knows that Eve was not a trans man.

Of course, Byrne might respond to my objection by insisting that, because all trans men are women, we do not need to know that Eve was not trans in order to know that she was a woman. However, absent some independent argument in defense of the assertion that all trans men are women, such a response would expose a methodological flaw in Byrne's reasoning. If one is to reason from data to explanatory hypothesis, as Byrne purports to be doing, it is preferable to use as data facts that cannot reasonably be disputed. Many reasonable people would reject or at least suspend judgment about the "data" in Byrne's argument because they believe that, or at least take seriously the possibility that, trans men are men.

More importantly for our purposes, if intended to support not just AHF but also the further conclusion that NW is true (again, I am not saying that this *is* Byrne's intention), then the argument is dialectically ineffective. I assume that an argument from the assumption that no trans man is a man to the conclusion that no trans woman is a woman would be tantamount to begging the question.<sup>28</sup> It would certainly not be a serious argument. Consider, for example, the following argument:

No trans man is a man  
If no trans man is a man, then no trans woman is a woman.  
Thus, no trans woman is a woman.

The argument is valid, and I am confident that its second assumption is true, but no one would mistake it for serious contribution to a debate over whether trans women are women. In such a debate, it would be dialectically pointless. If Byrne's argument for AHF is intended to support NW, and it does rest on the assumption that no trans man is a man, then it is dialectically pointless for precisely the same reason. Strictly speaking, it is not question-begging because it does not rely on NW as an assumption, but there is not much light between the assumption that no trans woman is a woman (NW) and the assumption that no trans man is a man.

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<sup>27</sup> Perhaps we can know that Eve was not trans. Even today, trans men represent a small percentage of the population, and one could argue that someone who existed in Eve's day would have lacked the conceptual tools that being a trans man would require. I take no stand on whether Eve could have been trans. What being trans actually involves is itself a difficult question that I am avoiding here by merely stipulating that a trans woman/man is someone who sincerely believes that they are a woman/man in spite of being born reproductively male/female.

<sup>28</sup> I am assuming that something like John Martin Fischer and Garrett Pendergraft's account of begging the question is accurate. See "Does the Consequence Argument Beg the Question?", *Philosophical Studies* 166, no. 3 (2013): 575–95.

It is possible, however, that Byrne would deny that his argument contains the implicit assumption that no trans man is a man. It is difficult to know, because Byrne does not tell us how it is that we are supposed to know that his key premise—that “we” know that Eve was a woman “despite knowing nothing else about her except the fact that she was an adult human female”—is true. If Byrne believes that it is simply self-evident or obvious that this premise is true, then, strictly speaking, *his* argument does not rest on the assumption that no trans man is a man, but he should be concerned that many of his epistemic peers will not share his judgment that the premise is so clearly true that it requires no defense. Indeed, it is difficult to imagine how this premise could seem obviously true to someone who is aware that it is true only if no trans man is a man unless that person were already convinced that no trans man is a man. Additionally, an argument that no trans woman is a woman that cannot convince anyone who is not already convinced that no trans man is a man is dialectically ineffective.

Nevertheless, I concede that, if we do know that Eve was not trans, then the case of Mitochondrial Eve may provide evidence for

ACHF     S is a woman if S is an adult human female who is not trans.

ACHF is entailed by AHF, but perhaps it is worth defending in its own right; for, unlike AHF, it is not threatened by the standard (albeit contested) counterexamples to AHF: trans women, trans men, nonbinary adults assigned female at birth, and intersex women. My interest here, however, is in what evidence there might be for the truth of NW, and, although the truth of ACHF is evidence for AHF, I see no reason to suppose that it is evidence for NW.

*Argument 3.* Another one of Byrne’s six arguments is almost the same as the one we have just examined, and it leads to the same sort of dialectical stalemate if it is intended to support NW, but this time the argument focuses on the category *girl* rather than *woman*. Here, Byrne begins with the reasonable assumption that AHF stands or falls with

JHF     S is a girl iff S is a juvenile human female.<sup>29</sup>

He then proceeds to defend JHF (and thereby indirectly defend AHF) by appeal to the alleged fact that, when a reproductively female human is born, “it is almost invariably known by inspection that the baby is female” and “a girl—no speculations about the baby’s society, upbringing or psychology are needed”.<sup>30</sup> Can evidence for NW can be gleaned from this argument? I do not see how. On the assumption that we know that there are no newborn trans children, Byrne’s example provides evidential support for JHF only in virtue of providing support for

JCHF     S is a girl if S is a juvenile, reproductively female, human who is not trans.

However, just as the truth of ACHF is not evidence for NW, the truth of JCHF is not evidence for NW.

I suspect, however, that Byrne is basing his argument on the assumption that we can know that a (reproductively) female baby is a girl despite knowing *nothing* else relevant about her other than the fact that she is a juvenile human female. However, then the argument will lead to precisely the same dialectical stalemate that we reached in our

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<sup>29</sup> Byrne, “Are Women Adult Human Beings?”, 3788.

<sup>30</sup> Byrne, “Are Women Adult Human Beings?”, 3788–9.

discussion of the parallel argument concerning women rather than girls. Some of us will resist the argument on the grounds that knowing that the newborn female is a girl would require knowing that they are not trans. Byrne will disagree. If he does so on the grounds that trans boys are girls, then the argument is dialectically pointless if intended to support NW. The only way forward is to find independent support for or against the proposition that trans boys are boys.<sup>31</sup>

## 5. An Evidential Fallacy

*Argument 4.* A fourth among Byrne's six arguments rests on the claim that AHF "predicts the correct verdict in cases of gender role reversal".<sup>32</sup> Byrne provides two examples of such cases. One of these is a fictional world in which all reproductive males occupy what is, in the actual world (or at least in France), the female gender role, and all reproductive females occupy what is in the actual world the male gender role. The other is the historical case of Nora Vincent, who disguised herself as a man to explore what it is like to be a man. In both cases, AHF correctly predicts that changing gender roles does not result in changing gender. Vincent, for example, remained a woman even though she looked like, was treated like, and behaved like, a man. Byrne concludes that, because the result is predicted by AHF, it is evidence for AHF.

This argument commits a common evidential fallacy. For there are serious views on the truth conditions for "S is a woman" that are incompatible with AHF (or at least with interpretations of AHF in which "female" is understood to mean "reproductively female") that also correctly predict that gender role change does not change gender.<sup>33</sup> Indeed, any internalist account of gender "predicts the correct verdict in cases of gender role reversal". Hence, the mere fact that gender role change does not change gender is not evidence that favors AHF over any of these competitors, and, therefore, that fact does not, by itself, generate any presumption that AHF is true. AHF would gain an advantage only over views like, "S is a woman iff S is an adult human who occupies what is in fact a female gender role". To my knowledge, however, the relevant literature contains no defense of such a crude and implausible view.

It is also worth pointing out that, if it is intended to support NW, Byrne's argument concerning the hypothetical world in which all reproductive females occupy what is, in the actual world, the female gender role appears to be question-begging. For Byrne claims that his premise in that argument is that "the males who occupy female gender roles are men". (GM 8). However, those reproductive males who occupy female gender roles would presumably include trans women, and so it appears that Byrne is simply assuming that NW is true.

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<sup>31</sup> Byrne suggests that it is possible to support the premise that we can almost invariably know by inspection that a (reproductively) female baby is a girl. He says that one can find such support in "the knowledge norm of assertion ... in typical cases, there is nothing wrong with asserting that the mewling baby is a girl, or that she is female". (See "Gender Muddle", 7) I find this remark confusing, and so I am not sure what to say in response. However, I do agree that, if a reproductively female newborn cannot possibly be trans, then there is nothing wrong with asserting that it is a girl. If a newborn can be trans, then those of us who are not already convinced that trans boys are girls will think there is something risky if not wrong about asserting that the relevant newborn is a girl. The dialectical stalemate reappears at another level.

<sup>32</sup> Byrne, "Are Women Adult Human Beings?", 3789.

<sup>33</sup> See, for example, Esa Díaz-León, "Woman as a Politically Significant Idea: A Solution to the Puzzle", *Hypatia* 31, no. 2 (Spring 2016): 245–58.

*Argument 5.* In a fifth argument, Byrne appeals to the dictionary definition of “woman” as “adult female human” to support AHF. Byrne is not so naïve as to suggest that this dictionary definition proves that AHF is true. Nevertheless, he claims that it provides some evidence that counts in favor of AHF and so contributes to his cumulative case for AHF. His only support for that claim in his original paper, however, is his dubious suggestion that the dictionary definition is “hard to reconcile with the alternative view that *woman* is a social category”.<sup>34</sup> If the conclusion of Section 2 is correct, however, *woman* is a social category because “adult”, in the sense in which a girl becomes a woman when she becomes an adult, denotes a social category. Thus, there is no need to “reconcile” the dictionary definition with the view that *woman* is a social category, for there is no conflict between them to reconcile. Byrne simply assumes that, in the dictionary entry for “woman”, “adult female human” does not denote a social category, and then he uses that assumption as a basis for claiming that the dictionary definition is hard to reconcile with the view that “woman” does denote a social category.

If Byrne is trying to support NW on the grounds of AHF, another problem arises, for the dictionary definition does not reproduce BRB or any other particular interpretation of AHF—with minor revision,<sup>35</sup> it reproduces AHF. Byrne assumes that, in the dictionary definition of “woman” as “adult female human”, “female” is to be understood to mean “reproductively female”. The dictionary definition itself, however, is consistent with other understandings of “female”. Thus, that definition can be explained just as well by an interpretation of AHF that is consistent with trans women being women. Nor would such an interpretation come into conflict with the dictionary definition of “female”. Webster’s, for example, contains this entry for the noun “female”:

1a: a female person: a woman or a girl. b: an individual of the sex that is typically capable of bearing young or producing eggs. 2: a pistillate plant.<sup>36</sup>

Nothing in 1a demands that “female” must be understood in a narrow, reproductive sense. Indeed, even 1b is consistent with the suggestion that trans women are female. Moreover, Webster’s also defines the adjective “female” in a way that allows for trans-woman-inclusive interpretations of the more common dictionary definition of “woman” as “adult female human” (as opposed to “adult human female”):

1a(1): of, relating to, or being the sex that typically has the capacity to bear young or produce eggs...

b: having a gender identity that is the opposite of male.

In his reply to Dembroff, Byrne suggests that, “[u]nless dictionaries are completely useless as guides to the meanings of words, it must be admitted that [the dictionary definition] provides some support for AHF”. He adds that “this is by no means decisive, but it is a consideration nonetheless”.<sup>37</sup> However, here Byrne commits the same evidential fallacy that he commits in his appeal to gender role change. Again, the mere fact that a hypothesis explains or predicts some datum does not *by itself* show that the

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<sup>34</sup> Byrne, “Are Women Adult Human Beings?”, 3787.

<sup>35</sup> Most English dictionaries define “woman” as “adult female human” (or “adult female person”) rather than “adult human female”.

<sup>36</sup> <https://www.merriam-webster.com/dictionary/female>.

<sup>37</sup> Byrne, “Gender Muddle”, 6.

datum supports that hypothesis over any and all competing hypotheses and certainly does not establish that the hypothesis in question is presumptively true. Byrne should consider alternative hypotheses to see how well they do in terms of explaining or at least accommodating the dictionary definition of “woman” before concluding that that definition supports AHF. Indeed, Byrne appears to have done just that in his original paper, where he concedes that “perhaps the ‘dictionary definition’ ... merely reflects the fact that almost any woman is an adult human female”.<sup>38</sup> There is no more reason to think that the dictionary definition reflects the alleged truth that, necessarily, women are adult female humans than there is to think that it merely reflects the undisputed fact that at least most women are adult human females. Any alternative to AHF that can explain the latter fact can do just as well as AHF in terms of explaining the dictionary definition of “woman”.

More importantly for the purposes of this paper, the dictionary definition quite clearly has no evidential bearing on the truth value of NW. Dictionary definitions are usually imperfect partly because they so often generalize from the more typical or central or undisputed cases in ways that do not do justice to the less typical or borderline or disputed ones. That is one reason why it is generally a really bad idea to use a dictionary definition as evidence that a term applies or does not apply to a borderline or contested case. Thus, trying to find evidence in the dictionary definition of “woman” for the conclusion that trans women are not women strikes me as an unpromising project.

## 6. Byrne’s “Most Compelling” Evidence

*Argument 6.* Five of Byrne’s arguments have now been found to provide no evidence for NW or for the denial of the proposition that trans women are women. Let us turn, then, to Byrne’s sixth argument. Partly because Byrne regards this argument as the “most compelling” of the six, I quote the passage that contains the argument in its entirety:

Anyone in the business of hunting or farming needs to take a keen interest in the difference between male and female animals, and it is not surprising that long lists of gendered animal words are found in numerous languages. For instance, in English there are many (mostly monolexic, often ambiguous) expressions for adult females belonging to non-human kinds: ‘doe’, ‘sow’, ‘hen’, ‘goose’, ‘mare’, ‘peahen’, ‘queen’, and so on. Given the utility of a similar word in the human case, it would be astounding if English made an exception here. Moreover, since the best candidates in other languages for such a word are translations of ‘woman’, if English makes an exception then near-enough all other languages do too.

The semantics of words like “doe” are not remotely controversial—they are standardly taken to pick out biological categories like *adult female deer*. It is no coincidence that Williamson, seeking a paradigm case of an “analytic” truth, chose “Vixens are female foxes”.

Of the six considerations, this is perhaps the most compelling. Someone who wants to deny AHF needs to explain why this pattern of gendered animal words leaves us out. Could the explanation be that when it comes to classifying their allies and rivals, as opposed to animals that are tasty or dangerous, ordinary people are interested in *socially significant* categories, not biological ones? That line of thought confuses a

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<sup>38</sup> Byrne, “Are Women Adult Human Beings?”, 3786.

*social* category with a socially significant one: we *are* interested in socially significant categories, but a category can be both socially significant *and* biological. *Female* and *male* are clear examples. Peacocks have an important role in Hindu mythology—the social/religious significance of the category *peacock* is not a good reason for denying that it is biological.<sup>39</sup>

The pattern to which Byrne appeals is real, of course, but it is important to recognize, as Byrne himself does, that it is not perfectly uniform. “Doe” can be used to refer to a juvenile female deer as well as an adult female deer, for example, whereas “mare” is not used to refer to juveniles. For most but not all nonhuman species, there is only a gender-neutral term for juvenile members of the species. Moreover, some of the gendered terms have multiple uses and others do not. The word “sow”, for example, in the context of the (despicable) pig farming industry, is used to pick out only those female pigs who have had a litter. Notice, too, that the latter meaning of “sow” is likely to have been shaped by social interests related to pig farming.

What would we expect of the English language, then, in terms of its gendered words for human beings? I agree with Byrne that we would naturally expect the existence of one or more words that are *similar* to words like “doe” and “sow” and “vixen”. However, in light of the enormous gulf between the social significance to humans of other humans and the social significance to humans of nonhuman animals, and in light of the fact that the pattern in question already lacks uniformity due, in part, to the influence of social factors, one might reasonably expect gendered words for human beings to differ from gendered words for other animals in ways that reflect the social gulf between them. At the very least, one would not be surprised to find such a lack of uniformity. Nor does this suggestion confuse “a *social* category with a socially significant one”. It simply recognizes that social norms and practices and interests shape language.

Furthermore, a lack of uniformity is exactly what we find in gendered terms that apply to human beings. The term “sow” requires for its correct application adulthood only in the sense of sexual maturity, but the term “woman” at least typically requires, for its correct application, adulthood in a different, social/legal sense, as discussed in Section 2 above. A lack of uniformity is also what we see in the use of gendered words like “mother” and “father”. Those very same words are more likely to pick out biological categories when applied to nonhuman animals. Applied to humans, on the other hand, there are both social and biological senses of these terms. Thus, an adoptive mother is a mother despite her lack of biological credentials, and not just metaphorically or figuratively. It seems likely that the term “mother”, as applied to human beings, has been shaped by the social role associated with being a biological mother, and so can correctly be used to pick out properties that are not exclusively biological.<sup>40</sup> It appears, then, that Byrne is simply incorrect to assume that the existence of gendered animal words that denote purely biological categories, such as *adult porcine female* or *female deer*, should make us expect the existence of words in English used exclusively to describe humans as belonging to precisely parallel categories.

Nor is there really a need for a term in English to pick out the female members of our species, for the word “female”, used as a noun, fulfills that function. Perhaps because

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<sup>39</sup> Byrne, “Are Women Adult Human Beings?”, 3787.

<sup>40</sup> Sophie Grace Chappell usefully explores the analogy between being a trans woman or man and being an adoptive parent in “Trans Women/Man and Adoptive Parents: An Analogy”, <https://blog.apaonline.org/2018/07/20/trans-women-men-and-adoptive-parents-an-analogy/>.

humans are more interested in themselves than in other species, in most contexts the word “female” by itself, unaccompanied by the modifier “human”, is everywhere used correctly and unambiguously to talk about female humans specifically. Moreover, in many contexts, “female” can even be used unambiguously to talk about reproductively female humans specifically. Thus, there is no need for the word “woman” to fulfill the function of words like “doe”, words that denote the reproductively female members of the species.

## 7. Conclusions

Byrne’s “most compelling” evidence for AHF, therefore, turns out to be no evidence at all. As we have seen, some of his other five arguments commit an evidential fallacy, and the remainder, although they may provide evidence for AHF, nevertheless provide no evidence for NW or against the proposition that trans women are women. My conclusion, then, is that Byrne’s arguments provide no reason to deny that trans women are women. This is not to say that my own conviction that trans women are women is correct. I have provided no justification for that conclusion here. My comments have been entirely negative.

Stepping back briefly to look at the larger picture, I would need to be convinced that Byrne’s article, or my discussion of his article here, has much *theoretical* significance. Indeed, insofar as the question is whether AHF is true, the corresponding debate strikes me as a mere verbal dispute. Byrne makes heavy weather out of the fact that his thesis is about women and not about the word “woman”,<sup>41</sup> but it appears that the truth value of AHF depends *entirely* on what the word “woman” means. After all, AHF is supposed to be understood to be “implicitly necessitated”. However, it seems to me that, if AHF is a necessary truth, this is precisely *because* “woman” means “adult human female”. What alternative is there? AHF is not a candidate for joining the ranks of propositions like “Water is H<sub>2</sub>O”, which, if Kripke is right, is an a posteriori necessary truth. For we have not discovered through empirical investigation that women are adult human females. Nor is AHF a candidate for being a logical or mathematical or moral truth. It looks much more like a candidate to join the ranks of truths like

AUM     S is a bachelor iff S is an adult unmarried human male,

which derives its claim to necessity from the respective meanings of the relevant expressions. Imagine someone’s defending the thesis that AUM is a necessary truth and then insisting that their thesis is about bachelors and not about the word “bachelor”. One might wonder whether they were insisting on a distinction without a difference.

Furthermore, Byrne himself concedes that we should expect that AHF only approximates the truth. Are we to nevertheless imagine that there is some undiscovered proposition about women, closely approximated by AHF, that actually *is* a necessary truth? I would need to be convinced that the search for such a proposition is not entirely quixotic. Furthermore, that means that my suspicion is that the search for a category *woman* that answers to the “everyday standard sense” of “woman” is also quixotic.

In my opinion, for what it is worth, progress in the philosophy of gender is more likely to be achieved by generating one or more theoretical concepts of womanhood that one can expect to depart from common usage and even meaning (which is tied to, though not entirely determined by, common usage) in *theoretically or normatively*

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<sup>41</sup> Byrne, “Are Women Adult Human Beings?”, 3784–5, and “Gender Muddle”, 6–7.

useful ways. To propose an analogy from epistemology, a notion of evidence is used in Bayesian confirmation theory that is intended to be more useful for understanding evidential reasoning than the ordinary, messy, and confused everyday notion or notions expressed by the word “evidence”. Bayesians understandably roll their eyes when some naïve philosopher says, “You misunderstand the nature of evidence, as proven by the following counterexample ...”, and then proceeds to describe a case where something that would count as evidence under the Bayesian definition of evidence would not count as evidence given the everyday standard sense of “evidence”. If philosophy (and linguistics and even hermeneutics) has taught us anything, it is that natural language is a chaotic mess that is often ill-suited to scientific or philosophical investigation. Indeed, as Byrne himself appears to recognize, it is such a mess that we should not expect to be able to provide logically necessary and sufficient conditions for the correct application of most ordinary predicates, including the predicate “is a woman”. Moreover, the history of oppression has taught us that language has often been an obstacle to moral progress. Developing a set of precise, theoretically or normatively useful, gender concepts could help us to overcome the current theoretical or normative limitations of some of the gender terms that natural languages like English have to offer.

Trying instead to simply develop a formula to capture the everyday standard sense of “woman” is especially problematic because, at this very moment, the target may be moving as more people are beginning to use “woman” and even “female” in a way that includes trans women in the extension of these terms. To insist that people avoid such usage on the grounds that it is, at least for now, deviant or incorrect is to insist that people follow rules that have absolutely no authority. Indeed, even if the dominant current meaning of “woman” is captured by BRB, that might simply reflect the fact that the dominant culture is oppressive to trans people. The bottom line, in my view, is that people should use words as they like so long as they are guided in their usage by a proper concern for justice and for the wellbeing of others. The passengers on the Clapham Omnibus and the analytic philosophers in the seminar room may not like the way I use the term “woman”—one of them might even angrily shake their copy of the Oxford English Dictionary at me as if it were holy writ—but why should I care?

This is not to say that philosophers should stop doing work on the meaning of gender terms or the metaphysics of gender. Serious and promising work of that sort has already been done by philosophers, including, among several others, Elizabeth Barnes,<sup>42</sup> Talia Mae Bettcher,<sup>43</sup> Robin Dembroff,<sup>44</sup> Esa Díaz León,<sup>45</sup> and Sally Haslanger.<sup>46</sup> I have chosen those five theorists as my examples partly because their work focuses on substantive issues. Efforts to identify a reliable formula for identifying who counts as a woman in “the everyday standard sense” of “woman” are, I suspect, less likely to yield interesting or useful results. Worse still, such efforts might provide rhetorical cover for oppression. They should be pursued with caution.

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<sup>42</sup> “Gender and Gender Terms”, *Nous* 53, no. 3 (2020): 704–30.

<sup>43</sup> “Trans Identities and First-Person Authority”, in *You’ve Changed: Sex Reassignment and Personal Identity*, ed. Laurie Shrage (Oxford: Oxford University Press, 2016); and “Trans Women and the Meaning of ‘Woman.’”, in *The Philosophy of Sex*, ed. Nicholas Power, Raja Halwani and Alan Soble (Lanham, MD: Rowman and Littlefield, 2013).

<sup>44</sup> “Real Talk on the Metaphysics of Gender”, *Philosophical Topics* (forthcoming).

<sup>45</sup> “Woman as a Politically Significant Idea: A Solution to the Puzzle”.

<sup>46</sup> “The Sex/Gender Distinction and the Social Construction of Reality”, in *The Routledge Companion to Feminist Philosophy*, eds. A. Garry, S. J. Khader and A. Stone (New York: Routledge, 2017).