

## Evolutionarily Informed Parenting: A Ripe Area for Scholarship in Evolutionary Studies

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### ABSTRACT

With the expansion of the Evolutionary Studies (EvoS) Consortium across a broad array of academic areas, evolutionary principles are now being applied to all sort of human issues – including religion (Wilson, 2002), human health (Platak, Geher, Heywood, Stapell, Porter, & Walters, 2011), clinical psychology (Wakefield, 1992), and more. The current paper discusses how evolutionary principles can shed light on issues of parenting. As an academic initiative in higher education that has potential to shape the direction of scholarship across multiple disciplines, EvoS has enormous potential to integrate scholarship on parenting from an evolutionary perspective. An evolutionary approach can help us understand the balance between fostering independence in children while concurrently teaching about the adherence to rules and social norms. Similarly, an evolutionary approach can help inform parents regarding the ultimate origins of selfish behavior with an eye toward helping shape a child's behavioral tendencies to be biased for the good of the group. In making the case for the high utility of evolutionary principles in helping elucidate parenting, this article addresses (a) the nature of ancestral human social structures, (b) cheater-detection as a significant human adaptation, (c) the evolution of human emotional reactions and expressions of moral outrage, (d) an evolutionary approach to understanding the importance of reputation in social groups, and (e) the evolution of reparative altruism. The article ends with a discussion of future work in the area of evolutionarily informed parenting and how EvoS can help move this area along a positive and socially fruitful trajectory.

### KEYWORDS

Evolution, Parenting, Evolutionary Psychology, Reparative Altruism, Dunbar's Number

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Look around you. Like it or not, evolution has arrived – and it keeps coming. Evolutionary principles are being applied in domains across the landscape of academia – and our understanding of the world is improving as a welcome consequence. And our understanding of what it means to be human is, as a result,

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on a steep upward trajectory (see Chang, Geher, Waldo, & Wilson, 2011). The international Evolutionary Studies (EvoS) Consortium is, before our eyes, fulfilling the promise of “completing the evolutionary synthesis in higher education” (Wilson, Geher, & Waldo, 2009).

Applications of evolution to help us better understand significant problems of humanity are starting to emerge in all sorts of corners, such as education (see Gray & Chanoff, 1994), clinical psychology (see Wakefield, 1992), health (see Platek, Geher, Heywood, Stapell, Porter, & Walters, 2011), and the planning of neighborhoods to make cities better functioning (see Wilson, 2011). And a lot more (see Wilson, 2007). The tide has turned – and modern academia is working full-throttle toward realizing the evolutionary synthesis in higher education that the EvoS Consortium promises to deliver.

Here, I’m particularly interested in applications of evolution to the domain of parenting. If you’re a parent, then you probably know how central parenting is to pretty much everything you do. Humans are a species characterized by high levels of required parental investment (Trivers, 1972). Offspring are nature’s vehicles for gene replication across generations. From an evolutionary perspective, nothing matters more than ensuring the success of offspring. This is probably why child death, which is an extremely prevalent outcome in pre-Western societies – and has been a very real and likely outcome for an extremely high proportion of our human ancestors – leads to unparalleled negative emotional reactions in our species (Volk & Atkinson, 2008).

One’s role as a parent is uniquely important from an evolutionary perspective. Human ancestors who were failures in the domain of parenting were less likely to become human ancestors than their “good parent” counterparts.

### **AN EVOLUTIONARILY INFORMED APPROACH TO PARENTING IS NEEDED IN ACADEMIA**

To this point, evolutionary scholarship related to parenting has taken a back seat to scholarship related to other behavioral domains, such as mating (e.g., Geher & Miller, 2008). At any of the major conferences related to the interface of human behavior and evolution (e.g., the NorthEastern Evolutionary Psychology Society; NEEPS), the number of presentations related to mating dwarfs the number related to parenting. However, ultimate reproductive success of any individual is just as contingent on parenting (e.g., raising a child in a healthy environment) as it is on issues of mating (e.g., attracting a high-quality mate).

This paper, then, is not designed to be a review of existing research on the interface of human parenting and evolution. Several significant scholars have conducted research on parenting that integrates evolutionary thinking (e.g., Chang & Thompson, 2010) – and clearly a review paper on evolutionary applications to parenting would be a wonderful addition to the extant literature. This paper, however, has a different set of goals. The primary point of this paper is to raise awareness of the general topic of parenting from an evolutionary perspective, with an eye toward helping shape future scholarship in the area of evolutionary studies. The EvoS Consortium has extraordinary potential to shape productive scholarship across disciplines and institutions. This paper asserts that scholars with interests in

EvoS would do a great service to the academic community and to humanity at large by using evolution as a tool to shed light on issues of parenting.

Toward this end, this paper discusses several aspects of parenting that can be elucidated from evolutionary thinking. This approach is designed to be provocative and is designed to get people to see the benefits of applying evolution to parenting in an accessible manner.

### **PARENTING AS A MILD DICTATORSHIP**

Parenting philosophies vary wildly across and within cultures. In all human societies, roles are specialized (see Wilson, 2007). And the roles that comprise the fabric of a society are crucial in shaping appropriate and productive behavior. Following the norms of a culture and behaving in a way that defers to local leadership may sound like a recipe for blind conformity, but it's actually a recipe for group living in any human society – even the most alternative of societies. That's because humans are a particularly “groupish” (Wilson, 2007) species – and behaving in line with group norms has been central to survival and reproduction of our ancestors for eons. This is not to say that there's no room for creativity or independent thinking in humans. Rather, this is to say that there are species-defined parameters that constrain creativity and independence.

Part of the job of a parent is to help a child learn these parameters. Independence is crucial for life success, but independence always develops in light of particular cultural norms (Erikson, 1994).

As a practical example, consider an 18-month old who does not want a diaper change. He is exerting his will. He is exerting his independence. He is a person who is expressing a viewpoint and, like all people, he deserves to have his voice heard. And he may well demonstrate surprisingly creative ways to pursue his goal of not getting a diaper change. Fair enough. But as a parent, your responsibilities are always bifurcate – on one hand, one may see it as your job is to help your child develop a strong sense of self-worth and to feel heard – and loved ... on the other hand, it may be considered your job to make sure that the poopy diaper is changed (to put it simply!). And this example works as a metaphorical model for parenting challenges that emerge across the lifespan.

As your child grows up, his or her success will hinge crucially on his or her ability to effectively demonstrate independence and creativity within socially circumscribed parameters. Make no mistake about it – humans are groupish by nature – and deferring to authority to some extent (under appropriate conditions) is, like it or not, something that must be learned during development. As such, parenting is necessarily a mild form of dictatorship. And it has to be. A kid just can't sleep in a dirty diaper!

### **PREPARING A CHILD FOR SMALL-GROUP LIVING**

Dunbar's (1992) cognitive analysis of humans tells about the importance of small-group living. For generations, humans lived in small groups consisting of kin and “family friends” that went back generations. For the lion's share of human

evolution, human groups were comprised of approximately 150 individuals. And strangers were rarely encountered.

On the other hand, these days, a typical person lives in a large city of several hundred thousand people – and people travel from major city to major city many times over. The nature of human social structures has changed. One great insight from human evolutionary psychology is that the human mind has not caught up with this recent change in social structure. Human social structures did not take on their modern form until well after the advent of agriculture, approximately 10,000 years ago (see Buss, 2005).

In small groups, selfish behavior has little place. And the anonymity afforded by large-scale modern societies is non-existent. Because evolutionary changes of organic material typically take much longer than 10,000 years, the human social emotions (see Trivers, 1985) pre-date agriculture. They were shaped to help humans function in pre-Westernized contexts, in which social groups were comprised largely of kin and tended to cap out at 150 individuals.

Children these days, therefore, run into a major paradox – they live in contexts in which anti-social behavior can be carried out often – and they run into many strangers that they will likely see only a few times in a lifetime. In short, they can do bad things and not pay the kinds of social consequences that would emerge under ancestral conditions. There is a mismatch. And as parents, it is our duty to understand the nature of this mismatch – and to help guide our children accordingly. We need to teach our children about the moral emotions that exist across all cultures (see Haidt, 2007).

Interestingly, from an evolutionary perspective, we need to teach our children not how to behave in modern societies, but, rather, how to behave in ancestral societies because the psychology of everyone they will ever meet is designed to match ancestral - not modern – social contexts! In modern contexts, a kid might throw a stick at another kid in a playground in a big city – and get away with it. But we would look at that behavior with disdain – because that kind of behavior would be fully disruptive of the goals of a group that both kids belonged to under ancestral conditions. And not only would both kids belong to the same group, but their familial ties would go way back – and the best expectation would be that these kids would grow up together – and grow old together. And that's what the human mind is shaped to anticipate. Kids these days consistently experience social contexts that do not include the same small-group nuances that typified most of the environment of evolutionary adaptedness (Bowlby, 1969) for humans. But as parents, to do best by our kids – not to mention the broader society – we need to raise them with a small-group mind-set. And the evolutionary perspective provides us a clear sense of why this is.

As an important sidenote: Human religions seem to be premised on exactly this reasoning – typically being comprised of rules that foster prosocial interactions within the small group that one belongs to (and, often, beyond). Religion, then, may actually serve as a natural (and often successful) method for encouraging parenting behaviors that assume small-group living (see Wilson, 2002, for a detailed treatment of this thesis).

## TEACHING ABOUT CHEATER-DETECTION

I remember when my son Andrew first learned how to play Candyland. He was two years old. My daughter Megan (then five) and I explained to him that his goal was to get to the end before everyone else did. Andrew was excited! He took his piece, started at the bottom, and, before either Megan or I drew a card, moved his little red Candyland guy – past Gloppy, past Gramma Nut, past Queen Frostine – and all the way to that rainbow-lined final space. “I win!!! I win!!! Yeah, baby!!!” Andrew shouted. “Uh, Andrew, you kind of cheated,” offered Megan. Some level of disagreement ensued. (Importantly, Andrew’s developed quite a moral code and understanding of rules since he was two!)

People do not like others who cheat. The evolutionary perspective tells us why! Think back to small-group contexts. Imagine that there’s just us 150 – and that’s it – for the next 60 years. Now imagine that one of us is always cheating. Let’s say it’s “Chuck the Cheater.” Chuck always cheats when we play games. He always takes more than his share of food. He always takes more than his share of drink. He is always trying to court the mates of others. He never cleans up after dinner.

What do we think of Chuck?

Ironically, because of the large-scale nature of modern societies, Chuck may actually have a chance these days – and this reasoning may actually account for why there is a higher proportion of psychopaths in large cities than in small villages (see Figueredo, Brumbach, Jones, Sefcek, Vásquez, & Jacobs, 2008). If Chuck lives in a city of several million people, he may irritate someone new every day, but there may be such a large pool of others for Chuck to interact with, that he may well be able to utilize his cheating strategy to exploit all kinds of people for a long time.

But that was not true under ancestral conditions – and modern evolutionary psychology makes this point abundantly clear. In a series of highly cited studies, Cosmides and Tooby (1992) provided strong evidence for the existence of a specialized cheater-detection module in humans. In short, while humans have several cognitive shortcomings, we seem to be experts at detecting cheaters in social contexts. And, evolutionists will argue, this is because ancestral human ecological contexts were comprised of small groups that remained together for long periods of time. Under such conditions, it would be extremely adaptive to be able to detect cheaters – and, on the flip side, it would be very costly to be unable to detect cheaters (as individuals without this ability would suffer adverse consequences by being consistently exploited by those who use an exploitive / cheating strategy).

So of course we teach our children not to cheat. But the evolutionary perspective sheds exceptional light on *why* we teach our children not to cheat. Human evolved psychology is very sensitive to cheating detection – and there’s almost nothing worse for one’s local reputation than being labeled as a cheater.

## THE IMPORTANCE OF OUTRAGE

Much of what I allude to in this article pertains to the evolved human emotion system. And make no mistake about it, the human emotion system has been

strongly shaped by biological evolutionary forces – and many of the basic elements of human emotion are shared with the emotion systems of many other vertebrate species (Ekman & Friesen, 1986). The human emotion system is evolutionarily old.

Recent work by Jonathan Haidt (2007) has shown that a basic part of human emotions, tied to social contexts, is the tendency to express moral outrage. Think of the phrase “Can you believe what Chuck did!?” People, in fact, use phrases like this all the time.

Can you believe that Chuck didn't join the worker's union?  
Can you believe that Chuck voted for George W. Bush?  
Can you believe that Chuck only gives multiple-choice exams?  
Can you believe that Chuck never took minutes at a department meeting?

In my world, these are the kinds of expressions of moral outrage that are typical. In your world, these may not be typical (hopefully!) – but you probably can see parallels. The story is the same. Moral outrage expressions are exactly that – expressions – outward, observable expressions of anger toward an individual or individuals. Expressions of moral outrage show something about both the target of the expression as well as the person making the statement. These statements are often emotionally charged – and they have an obvious function with a small group. They serve to devalue the status of the target of the statement while, concurrently, elevating the status of the person who is expressing the moral outrage (as the implication often is “I would *never* do that!”).

In small social groups, people talk. People are constantly evaluating and re-evaluating the status of themselves and of others in the group. As is true in many “groupish” species, holding high status is adaptive for humans – and our tendency to express moral outrage seems to be part of this game, even if it often leads to hypocrisy (see Kurzban, 2010).

Moral outrage and hypocrisy are not necessarily the most wonderful features of humans. But they are part of human nature. And they relate importantly to cheater detection. Cheating may have short-term benefits, but the long-term benefits of cheating are clearly costly in our species – particularly given the “we live in small stable groups” mentality that characterizes our evolved psychology. And educating our children about these issues should go a long way in effective parenting and toward helping children who come to naturally work to contribute toward the greater good. Understanding moral outrage may reduce both the likelihood (a) that one is a target of moral outrage and (b) that one uses moral outrage as a self-promotional tool in social settings.

### WHY REPUTATION ULTIMATELY MATTERS

Just as children need to be raised by parents in a mild form of dictatorship, the evolutionary perspective has clear implications regarding the importance of reputation in raising children. Children can benefit from learning that reputation matters. Clearly, we don't want to raise our children as mindless automatons who are only worried about their reputation. As mentioned earlier, helping develop a

sense of independent thinking is clearly a basic part of parenting. But this sense of independence must be shaped within socially circumscribed parameters. While no one wants his or her child to be overly conscious about what others think (for good reasons), the evolutionary perspective on childrearing suggests that children should develop an understanding of factors that affect one's reputation in a localized social group.

Human social psychological processes have been shaped by evolution across thousands of generations of humans – who mostly lived in small, stable groups. Trespassing on another person – be it in terms of that person's property, person, or family – has dramatically negative consequences for someone in a small, stable group. Being tagged as a cheater or as someone who inflicts costs on others had consistent adverse consequences for humans under ancestral conditions. Carrying the label of cheater led to expressions of moral outrage directed to a person - expressions that were shared with others in the group. Carrying the label of cheater led one to fail to secure help and sharing from others. Who wants to feed a cheater? Who wants to defend a cheater? Who wants to help a cheater? Carrying the label of cheater likely often led to ostracism and, in extreme cases, death.

Humans are a groupish species – and people consistently have choices between behaviors that are (a) self-promotional (often at a cost to others) or (b) behaviors that help the broader group (and often exert a cost to oneself). The human mind is very sensitive to these issues – and evolutionists have made clear that people tend to label others in terms of these classes of behavior. In a small social group, being tagged with a reputation as a helper has dramatic long-term benefits to the individual compared with being tagged with a reputation as a cheater. Reputation matters – and evolutionists have unlocked the secrets regarding *why*. And this information can be extremely beneficial in childrearing.

### TEACHING KIDS ABOUT THE MANY JOYS OF REPARATIVE ALTRUISM

One thing that parents are often forced to teach their children – often by example – is that no one's perfect! Parents (often unwittingly!), trespass on others, inflict costs on others, fail to engage in helpful behavior, fail to put the needs of others ahead of their own needs, etc. From an evolutionary perspective, this should not be a surprise – as evolution does not create perfect organisms. Rather, evolutionary forces select organismal designs that are better able to survive and reproduce compared with alternative designs. Modern organisms that have survived the test of natural selection are not perfect – they are just, on average, more likely to have features that led to reproduction compared with other features that have not come to typify their species. Even parents are imperfect!

But the evolutionary psychology of human emotions anticipates such organismal imperfection (see Trivers, 1985). Humans seem to have a host of emotional and behavioral tendencies that are well-framed as reparative altruism – expressions that signal an acknowledgment that one has engaged in behaviors that have inflicted costs on others – and that, further, express both apology and a willingness to repair any damaged relationships. Reparative altruism is pretty much saying “I'm sorry – what can I do to make it right?”

Given the imperfectness entrenched in each and every one of us, reparative altruism is a powerful tool for navigating social relationships.

During socialization, children seem to need to be taught about the effective and appropriate use of reparative altruism. Humans tend to be defensive and often fail to acknowledge responsibility. Engaging in reparative altruism seems to be less natural. Perhaps acknowledging responsibility for inflicting costs on others and taking compensatory measures is a higher-level (more developed) way of dealing with such outcomes in social situations. Clearly, this is an empirical question. In any event, it is clearly a parent's job to help his or her children develop this skill. If a higher proportion of adults would acknowledge their role in adverse outcomes and would willingly take compensatory measures (rather than get defensive), this world would be a better place!

### **EXISTING SCHOLARSHIP ON EVOLUTIONARILY INFORMED APPROACHES TO PARENTING**

This paper is designed to catch the eyes of researchers who study human behavior from an evolutionary perspective. Sure, mating is important from an evolutionary perspective, but so is parenting. And parenting has simply been understudied by evolutionists relative to mating. This fact is particularly concerning if we consider Volk and Atkinson's (2008) work suggesting that parenting psychology is an essential part of human psychology – and it always has been in our species.

The applications described here do not focus on many important aspects of evolutionarily informed parenting that have been described by others (e.g., Bjorklund & Pellegrini, 2000). Several intellectual pugilists in this area have made significant headway in helping us understand the importance of parenting from an evolutionary perspective. Hrdy (2009), for instance, explicates how parenting is a communal effort in pre-Western societies (and in many other primate species) – with mothers often forming female coalitions to help raise offspring in a communal manner. And David Geary (2007) has addressed the evolutionary origins of fatherhood in detail – a significant body of work given the relatively small amount of parental investment required by males in successful reproduction. And Jay Belsky (2010) has famously used evolutionary reasoning to shed light on the importance of stable versus unstable familial contexts.

One of the goals of the EvoS Consortium is to help use evolutionary scholarship to create novel and effective solutions to important problems of humanity. Given the momentum of EvoS within the current world of academia, the time seems ripe for large-scale basic and applied research that focuses on the many points of contact between evolutionary scholarship and the parenting domain. A main purpose of the current paper is to help work toward this goal by underscoring selected elements of parenting that can clearly benefit from evolutionary applications.

## THE FUTURE OF EVOLUTIONARILY INFORMED PARENTING

To this point, some great scholarship addressing how evolutionary approaches can inform parenting has been published. Gray and Chanoff (1986) bring evolution into our educational systems, Geary (2007) directly takes on issues of parenting from an evolutionary perspective, and Chang and Thompson (2010) use an evolutionary lens to explore the specific behavioral responses that exist in interactions between children and caregivers.

This all said, extant scholarship has not directly addressed issues of how all the information on evolutionarily informed parenting can help parents optimize their work to best foster positive development in childrearing. This paper is designed as a first step in this direction – which is, ultimately, a slice of applied evolutionary psychology.

Consistent with the spirit of EvoS, modern scholars are starting to apply evolutionary principles to the many important social and personal issues that humans across the globe face. This paper is an attempt to bring such an application to the significant life domain of parenting. With a focus on how the human mind was shaped to anticipate small-group living, this paper focuses on how we can use this idea to help raise children who look out for the welfare of others, who maintain reputations as helpers within social groups, and who come to naturally engage in reparative altruistic acts (when appropriate) to help mend damaged social fabric.

Using an evolutionary framework, this paper also addresses the double-edged sword of facilitating independent thought while, concurrently, facilitating adherence to existing social structures. This is a hard one for any parent to navigate!

The basic premise here is that parenting is not easy – but it can be made more manageable with a solid understanding of evolutionary principles. The evolutionist approach helps shed light on many of the big questions that underlie lessons that we try to teach our children. Nearly any parent knows to teach his or her children to not cheat. What the evolutionary perspective offers to parents in addition is a clear and biologically defensible explanation regarding *why* someone should not cheat – as well as *why* people express moral outrage, *why* one's reputation matters in a social group, and *why* saying “My bad! Totally my fault!” occasionally can have huge benefits for both oneself and one's group.

Parenting is not easy. But as the evolutionary perspective can help us better understand any and all domains related to the nature of life, an understanding of evolution can shed enormous light on the monumental task of parenting.

One of the core reasons for the development and expansion of the EvoS Consortium pertains to the fact that applications of evolution have traditionally been limited to the biological sciences (see Chang et al., 2011). Applications of evolutionary principles in the humanities and social sciences have been met with great skepticism and resistance (see Geher, 2006). And while some significant advances have been made in the area of applying evolution-esque approaches to large-scale issues of family and parenting (Prinz, 2009), recent research suggests that the resistance to applications of evolution has been particularly palpable in the area of family studies (see King & Cabeza de Baca, 2011) – the area of academia that most explicitly relates to issue of parenting.

With the expansion of the EvoS consortium, evolutionary thinking, now more than ever, can be unleashed to better help us understand human issues. Future scholarship on parenting from an evolutionary perspective has extraordinary potential to help us with our most important investments: our children.

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