

SPECIAL ISSUE

A primer on the Dark Triad traits

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Abstract

In this review, we detail three personality traits (i.e., narcissism, psychopathy, and Machiavellianism) that have gained popularity in the last decade as the ‘Dark Triad’. These traits are useful to augment research on personality, like the Big Five traits, as they capture individual differences in ‘darker’ aspects of personality more fully. We briefly review the body of work surrounding these traits, how they are measured, how they can be understood through the exploration of their nomological network, and the role each trait plays in various domains like organisational psychology and interpersonal relationships. We then detail how an evolutionary paradigm can provide a novel and powerful way of understanding these traits. Finally, we explore broad-spectrum concerns about the research and thoughts on how one might think about these issues.

Key words: Machiavellianism, measurement, narcissism, personality, psychopathy

The Dark Triad traits (Paulhus & Williams, 2002) are three partially heritable (Vernon, Villani, Vickers, & Harris, 2008) ‘darker’ aspects of personality in the form of narcissism, Machiavellianism, and psychopathy.¹ Narcissism is described by a sense of grandiosity, egotism, and self-orientation (Raskin & Hall, 1979). Machiavellianism is associated with manipulative behaviours, self-interest, exploitation of others, and a ruthless lack of morality (Christie & Geis, 1970). Psychopathy is characterised by impulsivity, antisocial behaviour, and a lack of empathy and remorse (Hare, 1983). Collectively, the traits can be viewed as dispositions to engage in self-interested and antisocial approaches to attaining an individual’s goals in their professional (Jonason & O’Connor, 2017; Palmer, Komaraju, Carter, & Karau, 2017) and interpersonal lives (Carter, Campbell, & Muncer, 2014; Jonason, Li, Webster, & Schmitt, 2009).

Australian-based scholars play a central role in understanding the nature and consequences of those high on the Dark Triad traits. Australian-based researchers have examined the role of the traits in income (Jonason, Koehn, Okan, & O’Connor, 2018), trolling on tinder (March, Grieve, Marrington, & Jonason, 2017), cyberstalking (Smoker &

March, 2017), schadenfreude (James, Kavanagh, Jonason, Chonody, & Scrutton, 2014), defense mechanisms (Richardson & Boag, 2016), approach-avoidance biases (Jonason & Jackson, 2016), deficits of moral emotions in corporate psychopaths (Walker & Jackson, 2017), and how the Dark Triad traits relate to self-reported and other-rated creativity (Jonason, Abboud, Tomé, Dummett, & Hazer, 2017). Recent work by Australian-lead teams has even documented the role of the Dark Triad traits in understanding self has even begun. Recently, Australian-led work has incorporated cross-cultural data to understand the Dark Triad traits in relation to self-concepts and future discounting (Jonason, Foster, Oshio, et al., 2017a; Jonason, Foster, Egorova, et al., 2017b).

UNDERSTANDING THE DARKNESS

There are perhaps four ways to describe the Dark Triad traits. First, one can examine the nomological network surrounding it. There is a wide body of research on this nomological network for the Dark Triad traits; we cannot hope to review it all within this article. Instead, we review how the Big Five/HEXACO traits (i.e., honesty–humility, emotionality, extraversion, agreeableness, conscientiousness, and openness to experience) allow researchers to understand each of these traits. We focus on these for two reasons. These traits are sufficiently broad that they cover much of the personality space and can be treated as the standard

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'language' of personality science that most people will be familiar with. The primary traits of importance are agreeableness and the honesty/humility domain of the HEXACO. One of the primary observations that led to the treatment of the Dark Triad traits as a collective was that each trait is associated with disagreeableness (Paulhus & Williams, 2002). Once the Dark Triad traits became established in the literature, subsequent work suggested that while disagreeableness might bind the Dark Triad traits, a tendency towards dishonesty and immodesty (as measured by the honesty–humility factor of the HEXACO) might bind them even more strongly (Book, Visser, & Volk, 2015; Jonason & McCain, 2012). However, while the traits are bound together as a constellation, they have their own unique links as well. For example, recent work (Muris, Merckelbach, Otgaar, & Meijer, 2017) suggested that narcissism was positively associated with extraversion, conscientiousness, and openness; Machiavellianism was negatively associated with extraversion; and psychopathy was negatively associated with conscientiousness. While the traits show strong associations with low honesty–humility, facet-level analysis revealed an overall lack of sincerity, Machiavellianism and psychopathy were related to a lack of fairness, and narcissism was associated with deficits in modesty and greed avoidance.

A second way to understand the nature of the darkness captured in the Dark Triad traits is to understand the intrapersonal factors associated with these traits. The Dark Triad traits all appear linked with a focus on the present moment (Birkás & Csathó, 2015), reward sensitivity (Jonason & Jackson, 2016), hedonistic values (Kajonius, Persson, & Jonason, 2015), limited empathy (Jonason & Krause, 2013), dominance-seeking (Semenyna & Honey, 2015), motivated by power (Jonason & Ferrell, 2016), and sadistic, spiteful tendencies (Marcus, Zeigler-Hill, Mercer, & Norris, 2014). As stated above, the fact that the traits share such variance does not make them fully redundant; each of the traits maintains slightly different intrapersonal factors. For example, narcissism is correlated with functional impulsivity (i.e., advantageously making fast, inaccurate, but beneficial decisions) and not associated with limited self-control, whereas psychopathy is correlated with dysfunctional impulsivity (i.e., the tendency to make fast, inaccurate, and deleterious decisions) and limited self-control (Jonason & Tost, 2010; Jones & Paulhus, 2011).

The Dark Triad traits also have links to humour styles. Individuals high on Machiavellianism and psychopathy exhibit aggressive and self-defeating humour styles, whereas those high on narcissism exhibit more affiliative humour styles (Veselka, Schermer, Martin, & Vernon, 2010). Additionally, Machiavellianism is correlated with limited trait emotional intelligence, whereas narcissism may be linked to higher rates of emotional intelligence (Petrides,

Vernon, Schermer, & Veselka, 2012). Machiavellianism and psychopathy, but not narcissism, are associated with lower cognitive empathy (Giammarco & Vernon, 2014; Jonason & Krause, 2013). Lastly, Machiavellianism and psychopathy are associated with vengefulness and a lack of forgiveness (Giammarco & Vernon, 2014). Together these biases (i.e., tendencies to act and respond to the world in systematic ways) may be, in part, responsible for our next topic—the outcomes associated with these traits.

The third way we can understand the nature of these traits is to examine the life outcomes with which they have been associated. This is the most well researched aspect because these traits have been treated as social ills in need of treatment and reduction for time immemorial. Priests, prophets, physicians, philosophers, politicians, and professors have attempted to control, curb, and cull the negative outcomes associated with these traits through moral codes (e.g., the Ten Commandments), medical treatments (e.g., castration), behavioural modification (e.g., Decompression Treatment Model; Caldwell & Rybroek, 2001), and institutionalisation (e.g., prisons). Unsurprisingly, this research does not paint a 'pretty picture' of the outcomes linked to these traits (e.g., Baron-Cohen, 2011; Kowalski, 2001). As these traits are often conflated with criminalistic tendencies (Hare, 1983) and have similar colloquial connotations in the media (Jonason, Webster, Schmitt, Li, & Crysel, 2012), research has extensively documented the socially undesirable behavioural biases associated with these traits.

One of the most pervasive themes of research using these traits is their socially undesirable interpersonal consequences in the form of aggression, broadly defined. While the Dark Triad traits are predictors of aggression (Jonason & Webster, 2010), each trait displays subtle differences in its manifestation. Machiavellianism and narcissism are associated with hostility, and psychopathy is associated with physical aggression (Jones & Neria, 2015). Ego threat is the main incitement for aggression from narcissists (Jones & Paulhus, 2010). Furthermore, bullying is closely linked to the Dark Triad traits, with psychopathy most linked to bullying followed by Machiavellianism and then narcissism (Baughman, Dearing, Giammarco, & Vernon, 2012). All three dimensions of the Dark Triad have also been associated with student reports of cyberbullying, with psychopathy being the primary predictor (Goodboy & Martin, 2015; March *et al.*, 2017; Pabian, De Backer, & Vandebosch, 2015).

These aggressive dispositions play out in various important areas of life. For example, this is demonstrated in sexual aggression, such that each trait is linked to sexual coercion (Figueredo, Gladden, Sisco, Patch, & Jones, 2015) and rape-enabling attitudes (Jonason, Girgis, & Milne-Home, 2017), although it appears narcissism might play a particularly weak role when sufficiently isolated (Jonason,

2015a). In men, the Dark Triad traits are associated with tactics of seductive persuasion for sexual access, and of the Dark Triad traits, psychopathy is the most strongly related to aggressive, forceful, and manipulative tactics for sexual access (Jones & Olderbak, 2014). All three traits are associated with the propensity to engage in repeated sexual advances also known as 'sexual harassment' (Zeigler-Hill, Besser, Morag, & Campbell, 2016) and may have played a role in some of the noteworthy, alleged cases of sexual harassment discussed in the media during 2017. The behavioural dysregulation of exploitative sexual behaviour (i.e., rape) could, therefore, possibly stem from a psychological dysfunction or overexpression of these individual differences leading to such undesirable outcomes for the victims.

Beyond problematic interpersonal features, these traits play a role in larger societal problems as well. For example, the Dark Triad traits have been associated with prejudice. This is thought to occur through, and, or in combination with, other personality factors such as social dominance and right-wing authoritarianism (Hodson & Dhont, 2015; Jonason, 2015b). The traits have been linked to endorsement of the Ku Klux Klan (an American white supremacy organisation; Jones, 2013). And last, these traits play meaningful roles in the workplace by influencing vocational interests (Jonason, Wee, Li, & Jackson, 2014), job satisfaction (Jonason, Wee, & Li, 2015), cutting corners at work (Jonason & O'Connor, 2017), yearly earnings (Jonason et al., 2018), and counterproductive workplace behaviour (Spain, Harms, & LeBreton, 2014). Overall, it is clear these traits have broad implications for social and moral transgressions (Jonason, Strosser, Kroll, Duineveld, & Baruffi, 2015; Jonason, Zeigler-Hill, & Okan, 2017).

The fourth, and final, way (we consider here) to understand the darkness is in terms of measurement, because our understanding of each trait is heavily contingent upon how it is measured. The 'gold standard' for measurement of the Dark Triad traits are the Self-Report Psychopathy Scale (Paulhus, Neumann, & Hare, 2009), the Narcissistic Personality Inventory (Raskin & Terry, 1988), and the MACH-IV (Christie & Geis, 1970). However, combining such assessments may result in participant fatigue. Shorter measures such as the Short Dark Triad (SD3; Jones & Paulhus, 2014) and the Dark Triad Dirty Dozen (DD; Jonason & Webster, 2010) have been developed to facilitate measurement. The SD3 has stronger validity than the DD (Maples, Lamkin, & Miller, 2014), although both scales may fail to capture the lower-level facets of each trait (McLarnon & Tarraf, 2017; Muris et al., 2017) given that they shrink larger pools of heterogeneous content into smaller, even homogenous (potentially bloated-specific) inventories. Despite these criticisms, the older of these—the Dirty Dozen, which was developed by an Australian-based researcher—has been validated using item response theory (Gouveia, Monteiro, Gouveia,

Athayde, & Cavalcanti, 2016; Medeiros, Monteiro, Gouveia, Nascimento, & Gouveia, 2017; Webster & Jonason, 2013), correlates with long-form measures of the Dark Triad traits (Jonason & Luévano, 2013; Jonason & Webster, 2010), predicts the same outcomes as longer measures (Jonason & Jackson, 2016), is associated with the domain general traits found in the HEXACO (Jonason & McCain, 2012), and has predictive validity in the form of associations with limited empathy in different countries (Jonason & Krause, 2013; Schimmenti et al., 2017). Australian scholars have collaborated internationally, translating the DD into to Polish (Czarna, Jonason, Dufner, & Kossowska, 2016), Japanese (Tamura, Oshio, Tanaka, Masui, & Jonason, 2015), German (Küfner, Dufner, & Back, 2015), Italian (Schimmenti et al., 2017), and Turkish (Özsoy, Rauthmann, Jonason, & Ardiç, 2017) to study the cross-cultural nature of the Dark Triad traits. As the number of translations expand, Australian scholars will be particularly well situated to engage in cross-cultural work to understand the role of these traits on a global scale. In a world where the actions of people thousands of miles away can have dire consequences for local and foreign people alike, understanding the nature of darkness worldwide could not be any more timely.

Debate over the structure of the Dark Triad traits focuses on whether the three should be conceptualised as a common core with the three distinguishable constructs, or whether these traits exist as three separate constructs. This has both conceptual and measurement implications. It has been suggested that the Dark Triad traits reflect a meaningful and evolutionary relevant latent construct (Jonason et al., 2009), and idea that has received support from overseas researchers (Bertl, Pietschnig, Tran, Stieger, & Voracek, 2017) and those parsing the shared and unique variance using structural equation modelling in relation to important outcomes like sexual assault (Figueredo et al., 2015; Jonason, Girgis, & Milne-Home, 2017). However, recent evidence has also claimed there might not even be three traits but, merely a combined Machiavellianism and psychopathy factor with narcissism standing alone for both the SD3 and the DD measures (Kajonius, Persson, Rosenberg, & Garcia, 2016; Persson, Kajonius, & Garcia, 2017). Others still suggest that the Dark Triad consists primarily of psychopathy (Glenn & Sellbom, 2015); a contention that is often verified when the outcome the Dark Triad traits are indexed on is 'dark' itself (James et al., 2014). It may be the case that the DD and the SD3 do not capture the full breadth of psychopathy—the DD only measures callous affect; both measures may not assess both primary and secondary psychopathy (Maples et al., 2014; Muris et al., 2017; but see Jonason & Luévano, 2013).

These criticisms warrant some more attention by researchers, but here we offer some things to consider about them that give us pause. The primary issue is about how

many dark traits there really are, whether it is in terms of measurement or conceptually. It is beyond debate that psychopathy and Machiavellianism are highly correlated, almost to the point of singularity in some studies. However, Machiavellianism and psychopathy (the two most highly correlated Dark Triad traits) predict different outcomes and, therefore, are dissociable. For instance, psychopathy is sensitive to provocation whereas Machiavellianism is not (Jones & Paulhus, 2010); Machiavellianism is associated with the use of 'hard' and 'soft' tactics of manipulation, whereas psychopathy is only associated with 'hard' tactics (Jonason, Slomski, & Partyka, 2012); and Machiavellianism is unrelated to relationship motives whereas psychopathy is (Jonason, Luévano, & Adams, 2012). Indeed, it is an essential task that researchers partial related variance in all three of the Dark Triad traits to ascertain what is correlated with the shared variance and what is uniquely linked to each trait (Figueredo et al., 2015; Jonason, Girgis, & Milne-Home, 2017). In addition, it is true that there is content lost for both the SD3 and the DD, as would be expected because their designers intended to make a unified and efficient measure of all three traits. The question that arises for us is whether all the content contained in the parent-measures is truly necessary to measure the traits or can the traits be measured effectively with fewer items. This is part of the on-going battle in psychometrics between precision and efficiency. Researchers need to decide between the various measures available to them that best fits their goals and budgets. As all measures have limitations, researchers must weigh them up and qualify their results with those limitations.

A GLIMMER OF LIGHT IN THE DARKNESS

Thus far, we have offered a review of the Dark Triad traits. Many of the research findings we have described may come as little surprise because they fit well with lay-theories of 'evil'. Lay theories of evil are often framed within the Standard Social Science Model (Tooby & Cosmides, 1992). This model is built on philosophical 'insights' from Rousseau who considered people to be 'noble savages' corrupted by society. The vestiges of this thinking can be seen in modern clinical and social psychology in the form of 'environmental determinism'. Environmental determinism is a philosophical position that places contextual, cultural, and (somewhat) circumstantial factors as the primary and immediate cause of behaviours and values (including antisocial ones), and attempts to dismiss or downplay the role of genetics, biology, or physiology in accounting for human (but generally not non-human animal) behaviour. Much of this work in psychology and the social sciences has been fuelled by blank slate thinking, as described by Pinker (2002). When people who adopt this framework are asked why there is 'evil' in

the world, they reply: because of conditioning (e.g., Skinner, 1976), bad childhood experiences (e.g., Harlow & Zimmermann, 1959), or modelling 'bad' behaviour (e.g., Bandura, 1971). If this were true, we would contend that the Dark Triad traits would not seem particularly interesting, beyond its use for description and intervention. However, the Dark Triad traits are central to the psychopathology of human behaviours and are also partially heritable (Vernon et al., 2008), meaning there might be a combination of genetic and environmental factors that come together to understand individual differences in these traits. This translates to the revelation that the interactionist approach found in evolutionary psychology might be particularly useful in understanding the traits.

Over the last 10 years, much of the popularity of the Dark Triad traits stems from their integration into the evolutionary framework found in Life History Theory (Wilson, 1975). This interactionist paradigm (Crawford & Anderson, 1989) asserts that organisms make tradeoffs (physically and psychologically) in the pursuit of their short-term and long-term needs regarding mating effort (e.g., pursuing mating opportunities) and survival effort (e.g., finding food). From a life history framework, the primary contention about the Dark Triad traits (e.g., Jonason, Foster, Egorova, et al., 2017b; Jonason, Koenig, & Tost, 2010) is that they represent cognitive biases (i.e., a systematic tendency to act, react, and perceive the world in a particular way) in the form of individual differences that consist of tradeoffs between mating and survival needs and, thus, may represent a *faster* life strategy. This translates into various psychosocial effects such as aggression, sexual activity, and reduced empathy. Many of these effects are considered socially undesirable, but they can be considered adaptive to the individual and may represent pseudopathologies (Crawford & Anderson, 1989). Pseudopathologies appear to be problematic features of people's psychology, but may still provide Darwinian fitness and even psychosocial benefits at the cost of others, society, or even one's present health, finances, or relationships.

The life history interpretation of these traits can link together a variety of findings collectively and provide an interpretation that is not 'all doom and gloom'. Take, for instance, the fact that men around the world appear to score higher on the Dark Triad traits relative to women (Jonason, Foster, Oshio, et al., 2017a; but see Muris et al., 2017), although the Dark Triad traits still motivate women to engage in casual sex (Carter, Montanaro, Linney, & Campbell, 2015) despite mean levels differing in each sex. However, the reproductive cost-benefit ratio for engaging in casual sex is not equal in men and women and any adaptation that facilitates the casual sex in women should come with reproductive costs. Indeed, women characterised by the Dark Triad traits have more miscarriages and

pain relating to sexual health (Jonason & Lavertu, 2017). Ancestral men will have paid fewer consequences than ancestral women for enacting behaviours that reflect the Dark Triad traits. This is not to say that men have not paid costs; indeed, psychopathy is linked to a shorter life expectancy and substance abuse (Jonason, Baughman, Carter, & Parker, 2015). However, because there is an asymmetry in the reproductive benefits for risk-taking and short-term sexual behaviour in the sexes; ancestral men will have benefitted from being high in the Dark Triad traits more than women. This means that the frequency of the genes associated with the Dark Triad traits will have remained in the population and may be selectively activated in men more than women (or suppressed in women). This functions as an adaptive advantage of the traits because in ancestral environments, more sex was more likely to result in more offspring, on average, and it is only men who can benefit meaningfully from multiple matings in terms of actual number offspring. Women's advantage for multiple matings centers around accruing more resources and mate switching, which have indirect fitness benefits to the woman.

These traits have direct, positive reproductive consequences for men (more than women) by enabling a short-term mating orientation with increased numbers of sex partners (Jonason et al., 2009; Jones & de Roos, 2017), an opportunistic and exploitive approach to relationships (Jonason, Girgis, & Milne-Home, 2017; Jonason, Luévano, & Adams, 2012), particularly low standards in their sexual partners (Jonason, Valentine, Li, & Harbeson, 2011), stealing mates from others, but not trying to retain current partners (Jonason, Li, & Buss, 2010), and a tendency to engage in infidelity (Jones & Weiser, 2014). Engaging in such behaviours over ancestral times will have provided reproductive benefits. From an evolutionary perspective, these traits—even with all their undesirable consequences and biases—might have served, and continue to serve, 'positive' ends. Modern society tends to view them as maladaptive for the individual and the group, however, the Dark Triad traits can still provide Darwinian fitness benefits to the individual (Jonason, Webster, et al., 2012).

FUTURE DIRECTIONS AND CONCLUSIONS

The study of the dark side of human nature is not without its limitations. One issue centers around the question of *sufficiency*. In line with the lower-level facet measurement criticisms is the question of whether the three traits are enough to capture the dark side of human nature. There have been some attempts made to expand the traits to include everyday sadistic tendencies (Buckels, Jones, & Paulhus, 2013) and spitefulness (Marcus & Zeigler-Hill, 2015). While interesting to consider, there is substantial overlap for sadism

and spitefulness with psychopathy, making them difficult to disentangle (Bertl et al., 2017; Jonason, Zeigler-Hill, & Okan, 2017). The most parsimonious model of the dark side of personality seems best. We suggest that researchers determine where and why (and even how) traits like sadism and spitefulness are important and useful traits to better position them in relation to the Dark Triad traits. As research on sadism and spitefulness is in a nascent state, future research will have to determine if these traits are needed, are lower-order behavioural tendencies, or even replace other members of the Dark Triad.

A second question from critics centers around the *necessity* of the Dark Triad traits. That is, are the Dark Triad traits necessary at all, considering the variance captured within them may be explained by the facets of the Big Five traits (O'Boyle Jr., Forsyth, Banks, Story, & White, 2015). Such research attempts to determine the incremental validity of the Dark Triad traits over other traits like the Big Five (Jonason, Strosser, et al., 2015) or moral values (Jonason, Zeigler-Hill, & Okan, 2017). Typically, the addition of the Dark Triad traits accounts for little variance above the Big Five. However, we would argue this is to be expected. Lower-order facets of the Big Five may operate as basic units of personality. They may operate like atomic elements, which can be assembled in a myriad of ways to create, for instance, water and alcohol. For example, the fact that water and alcohol are so similar in chemical composition does not mean the two are interchangeable. Similarly, the fact that one can assemble the 'atomic' units of personality into extraversion *and* narcissism does not make the two interchangeable either. It is the unique combination of these atoms of personality that create human variety and lead to a diversity of outcomes all of which have been the grist of the psychology mill for a century and will continue to inspire researchers for some time to come.

A third question centers around how researchers might build more advanced models and conduct more powerful tests to determine how these traits interact with various situations. For example, if traits and contexts are considered important in determining human behaviour, researchers should better explore how these traits predict different outcomes in different contexts. Life history theory may provide important tools for researchers to make predictions about those contexts that should matter. For instance, 'stressful' conditions should be particularly important in driving the so-called undesirable behaviours linked to the traits. That is, genetic and evolved biases will interact with particular ecological conditions that result in (1) differential outcomes in the sexes; and (2) potentially socially undesirable behaviours in as much as those are geared towards the immediate as opposed to long-term extraction of resources from the environment.

Lastly, there will continue to be questions about measurement and correlates of the Dark Triad traits. For instance, one might investigate their relationship with perfectionism, disgust systems, and heart rate. Such work will build up the ‘normal science’ corpus surrounding these traits. Personality psychology has been plagued by issues of distrust since its beginning, especially around self-report questionnaires. However, as personality traits require a form of measurement, we must be willing to tolerate *some* error in the measurement to conduct our work. Researchers may opt to use one scale or another and their results are simply qualified—as all results in the field—by which scale was used. Just as the Big Five traits have a 75-year history of research and we are continuing to learn more, the same could be done with the Dark Triad traits to learn substantially more about the dark side of human nature.

In conclusion, we have accomplished three goals. First, we reviewed the literature on the Dark Triad traits, focusing on how these traits can be described by their links to other personality traits, intrapersonal correlates, interpersonal effects, and measurement issues. Second, we suggested that on their own, they are not all that compelling to study as researchers have been interested in such things for years, but when coupled with evolutionary models of personality, can provide comprehensive and novel ways of understanding these traits. And third, we drew attention to concerns in the field and offered some guidance as to how researchers might think of these larger issues. As this field matures, we expect the traits to help researchers understand all manner of issues in the human condition from the intrapersonal to the societal level. Australian scholars intend to understand how the Dark Triad traits operate in respect to darker societal aspects such as terrorism and aggression, and lighter aspects such as the role the traits may play in the Internet dating. Future work is anticipated on the role of childhood conditions in the development of these traits, cyberbullying and trolling, the short-term stability of the traits, and finally, more focus on the role of these traits in women.

NOTE

1 These terms are solely used for subclinical forms of the respective personality traits, and refer to people scoring highly on these dimensions. They are not diagnostic labels and no pathology is implied.

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