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Response to *The Green Paper for Vulnerable Children*

Submitted by Brainwave Trust Aotearoa

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1 Introduction

1.1 Brainwave Trust Aotearoa is a registered charitable trust (CC40312), which disseminates information about the recent advances in understanding of brain development.

1.2 Brainwave Trust's purpose is to raise public awareness about recent multidisciplinary findings into brain development research and to educate everyone who has an impact on the early life of children about the important implications of this knowledge on our children's physical, social, intellectual and emotional development.

1.3 We make this submission to provide scientific evidence, from neuroscience as well as other biological and social sciences, to inform the discussion prompted by *The Green Paper for Vulnerable Children*, with particular reference to pregnancy and the preschool years.

1.4 Brainwave can provide a more detailed verbal presentation to further explain this material.

1.5 This submission provides background information from relevant research prior to addressing the issues raised in the four sections of *The Green Paper.*

2 Key messages

One day every child in New Zealand will get the best start in life because parents and the whole community understand the impact that early experiences have on the developing brain and ultimately on the healthy development of our society.

Brainwave Vision

2.1 Every infant needs the opportunity to develop a predictable, warm, loving, nurturing relationship with at least one adult in a parental role. To achieve this, a parent[1] needs to be physically and emotionally available to his or her infant and to provide a consistent, safe, secure environment that enables them to develop this relationship.

2.2 A parent needs to be equipped with the understanding and skills for the task of parenting. Positive parenting can be taught.

[1] The Trust recognises that not all children are raised by their parents but uses the term 'parent' throughout to refer to all those in a parental role, for example grandparents or extended family, who have the daily responsibility to raise and love a child. This is in order to differentiate from the generic term 'caregiver' which may create confusion with those who are paid to be in a child's life.

2.3 The barriers that inhibit the ability of some parents to develop this relationship need to be removed or minimised, for example poverty, family violence, drug and alcohol addiction, mental illness, and isolation.

2.4 Children who are vulnerable have brains that are wired up to deal with their negative environment (boys more frequently hyper alert, girls more frequently closing down and disconnecting perhaps to escape violence/abuse). They will often present at school ill equipped to learn or develop healthy relationships.

Background Research

3 Early Brain Development

3.1 All a baby's organs, other than the brain, are fully formed at birth. The most rapid period of brain growth occurs in the period from birth to approximately three years of age.[1] To illustrate, the brain has reached 80 – 90% of its adult volume by 2 years of age.[2]

3.2 The human genome is now understood to contain a set of possibilities which are expressed differently depending upon the experiences encountered.[3]

3.3 Brain plasticity enables the experiences a child has to influence their brain development.[4] This plasticity can be a "double edged sword that leads to both adaptation and vulnerability."[5] For example, chronic stress during these formative years can have potentially lasting impacts on memory, learning, physical and mental health.[6] This can occur when the stress is ongoing or the child lacks adult emotional support.[7]

3.4 There are several possible mechanisms through which elevated levels of stress chemicals can impact brain development including loss of neurons, delays in myelination, and abnormalities in pruning.[8]

3.5 Infant brain development and the parent-infant relationship are interlinked. Brain growth and associated behavioural change is important to the development of the relationship, likewise the parent and the environment they create for the child has an impact on how the neurodevelopment proceeds.[9] The security of a child's attachment to their parents, for example, is a strong predictor of their later school performance.[10] It is also important for the development of the child's ability to regulate their emotions and relate to others.[11]

3.6 A secure attachment and associated emotional development is the basis for other aspects of development. The increasing over-emphasis on very young children's academic skills relative to other domains may be detrimental to children's overall outcomes.[12]

4 Risk and Protective Factors

4.1 Most children are exposed to some combination of risk and protective factors.

4.2 Risk factors are conditions or events that temporally precede and increase the likelihood of a range of poor outcomes.[13] These outcomes include learning and behavioural difficulties, substance use disorders, criminal offending and imprisonment, impaired physical and mental health, poor educational outcomes, and reduced employment opportunities.[14] The notion of multifinality[15] suggests that one factor will not lead to the same outcome for every individual. Risk factors operate cumulatively[16] and it is the number of risk factors rather than the presence of a particular risk factor that increases the likelihood of poor outcomes.[17]

4.3 Examples of risk factors include maternal depression, alcohol in pregnancy, poverty, child maltreatment, emotional neglect, parental stress, and family violence.[18] None of these determine that a given child will experience poor outcomes however each additional risk factor increases the likelihood of that occurrence.

4.4 Emotional neglect has been researched less than other forms of maltreatment, however it can have a greater adverse impact on children's outcomes than physical abuse or neglect, particularly when it occurs during the first two years of life.[19] It occurs when parents are emotionally unavailable to their child and unresponsive to their emotional and attachment needs, despite perhaps adequately meeting other needs such as nutrition and medical attention. Emotional neglect can occur across the socio-economic spectrum (SES).

4.5 Protective factors lead to a higher likelihood of positive outcomes.[20] The cumulative effect of protective factors is important, as is the balance between the numbers of risk versus protective factors a child is exposed to.[21]

4.6 The key protective factor involves the child developing a secure attachment to their parent(s) during the early years.[22] The security of this attachment depends upon both the quantity and quality of a parent's interaction with their child.[23] The security of the child's attachment can affect their emotional, psychological and cognitive development, with developmental and behavioural problems often having their origins in disturbances of this relationship.[24]

4.7 Due to the interactions among risk factors, a reduction in some risks, even where other risks remain, may still make a substantial difference for children due to a reduced likelihood of synergistic effects.[25]

5 A Preventative Approach

5.1 Research indicates prevention is more effective than later treatment as difficulties may increase in severity over time.[26] Prevention is also more cost-effective than later remediation.[27]

"Investment in a child's early years produces a higher rate of return than a comparable expenditure later in life." [28]

5.2 Parenting interventions can be helpful in reducing the likelihood of parents maltreating their child.[29]

5.3 Preventative approaches include parenting interventions and could include but need not be limited to parenting interventions which have been found successful overseas, such as Triple P (Positive Parenting Program),[30], Incredible Years[31] with preliminary data on effectiveness in NZ, Parent Child Interaction Training,[32] and Watch, Wait and Wonder.[33]

5.4 Models of home visiting programmes with evidence supporting their efficacy include the Nurse Family Partnership,[34] and Early Start,[35] which was developed and is operating in Christchurch. It is noted that overall however, home visiting models have failed to produce strong support for their efficacy.[36]

5.5 The benefits of programmes such as Nurse Family Partnership were greatest for those experiencing the greatest disadvantage, and include 80% reduced rates of abuse and neglect, reduced rates of emotional and behavioural disorders, less reliance on governmental support, and higher academic functioning.[37]

5.6 Programmes that are ineffective ought to be discontinued[38] and limited resources directed to more effective interventions. However, an important distinction is to be made between programmes which are ineffective (or even potentially harmful) and programmes which have not yet demonstrated their effectiveness, perhaps because their limited resources have been focussed on service delivery rather than evaluation. In such situations, support to facilitate such evaluation is recommended, following which unsuccessful programmes can be discontinued, and those found effective implemented more widely.

5.7 Improved child outcomes are important in their own right for the individual child, but also have wider societal implications. These include reduced criminal behaviour[39] as well as reduced health and welfare costs; the maximisation of otherwise lost or wasted potential; and preventing the intergenerational transmission of poor outcomes from one child to multiple children in the next generation.[40]

5.8 Preventative interventions occur at varying levels. At the universal level the intervention is available to the entire population regardless of perceived risk whilst targeted interventions are provided for those at increased risk.[41] The most effective solution is likely to involve a range of interventions, at differing levels of intensity, sometimes referred to as a "cascading service model".[42] Parenting support must

be provided at the appropriate intensity for the risks observed, in order to be effective.[43] This increases the likely effectiveness of interventions, whilst also reducing any wasted resources from providing intensive interventions where they are not required. For some children one intervention will be sufficient to contribute to positive outcomes, others may require ongoing support to deal with the multiple risks they face, which needs to occur in a co-ordinated manner.

"If we allow ourselves to be preoccupied with the most extreme cases we will never respond to the true scope and magnitude of the task." [44]

5.9 To this end we propose two broad aspects to addressing the issues; first, a much more proactive preventative approach that is supportive of all infants and their parents, to reduce the overall level of vulnerability at a population level; and, secondly, more timely and effective identification and intervention for those children at heightened risk, and their parents, family/whanau.

6 Early Childhood Education

6.1 Much discussion regarding a positive start for infants and young children has erroneously equated this with early childhood education (ECE) for all. Therefore in this section we highlight relevant research differentiating between situations in which ECE may be beneficial, and those in which it may be harmful.

6.2 The needs of babies, toddlers and preschoolers are in some important ways significantly different from each other. This important distinction is not always made when describing the potential outcomes of access to ECE. Just because it may be good for a three or four-year-old does not mean it is beneficial for a one-year–old, and in many cases may in fact be harmful.

6.3 Effective centre-based interventions contain specific elements to address childhood disadvantage, including family support, and their results cannot be extrapolated to early childhood education in general.[45] However, the results of the American Perry Preschool study, indicating long term cognitive benefits, are frequently used to argue for ECE being extended to all children.[46]

6.4 The Perry Preschool project differs from mainstream ECE in NZ in a number of very significant ways which preclude the results being used to generalise across all age groups and durations of ECE. First, the intervention was for 3 & 4 year olds, for 2.5 hours per day, eight months of the year.[47] In other words, in terms of 'quantity' it was similar to NZ's now disappearing traditional Kindergarten model. Secondly, teachers all had child development training and Masters Degrees,[48] which cannot be equated with the training levels of the majority of ECE staff in NZ. Thirdly, the children attending were African American, from low income families and had IQ scores between 70 and 85.[49] [2] Research indicates such interventions have a greater impact on disadvantaged groups.[50]

[2] An IQ score of 100 (range 90-109) is average, 80-89 low average intelligence, and 70-79 borderline impaired or delayed (Sattler, 2008).

6.5 Starting ECE early, and attending for long hours are associated with greater anxious or antisocial behaviour, and regardless of quality, ECE in the first three years increases the likelihood of externalising behaviour problems.[51] The risks associated with current ECE usage are "significantly multiplied by their widespread prevalence," [52] and are comparable to the effects of poverty on child development.[53]

6.6 In terms of the cognitive benefits of ECE, these are greater for those beginning between two and three years of age; prior to this there are no cognitive benefits, and there are risks in terms of healthy social and emotional development, which are greater the younger the child.[54]

"There is a broad consensus that child care that is 'too early and for too long' can be damaging" [55]

6.7 Research regarding the introduction of universal state-funded childcare in the Canadian province of Quebec, which was introduced in the late 1990s, found "consistent and robust evidence of negative effects" on a variety of parent and child outcomes.[56]

6.8 In recent years NZ has seen the greatest rate of increase in under-two-year-olds, who are attending for greater hours each day and a greater part of the week.[57] Participation rates for this age increased by 36% between 2000 and 2009. [58] All day services have seen the largest growth, from 42% of enrolments in 1998 to 60% in 2005.[59]

6.9 Brainwave supports a range of policies and initiatives that enable parents to provide the loving nurturing environments children need in order to thrive in the early years, not contributing to further growth of an industry which separates infants and toddlers from those who love them and with whom they should be forming a primary relationship at a crucial time in their development. It will likely be more effective to support parents to care for infants during their first years, whilst also increasing access to quality ECE during the subsequent preschool years,[60] when children are both more likely to benefit cognitively and less likely to be disadvantaged. Positive child outcomes are associated with babies who have been primarily cared for by a 'good enough' parent during their first few years of life.

"Parents, families and whanau play the most crucial role in raising children" [61]

6.10 Greater recognition and support is needed for more developmentally appropriate ECE arrangements. These might include organisations like Playcentre and Kindergarten. Playcentre provides parents with support and education regarding child development and enables children to have the benefits of socialisation without the stress of parental separation, and has high adult to child ratios. Sessional Kindergarten provides 3 and 4 year-olds the opportunity to socialise when they are developmentally ready (i.e. around the time that peer social skills develop), for shorter periods of time, thereby reducing the stress associated with long hours of

parental separation. Unfortunately, both these options have been declining as a consequence of Government policies which encourage both parents into the paid workforce as quickly as possible.

6.11 Whilst not ideal, where infants and toddlers are in non-parental care, this should be of high quality. This concept of quality refers to trained staff, high ratios of adults to children, an understanding of the emotional needs of this age group, small numbers on site,[62] and the provision of a primary caregiver whenever possible, particularly at the infant and toddler stages. [63] Such best practice is often far removed from common practice.[64]

7 NZ Statistics

7.1 NZ is currently ranked 28 out of 30 OECD countries in terms of outcomes for children across 20 dimensions of child outcomes.[65] NZ's youth suicide rate is the second highest of 13 OECD countries, both for young males and young females.[66] The teen pregnancy rate in NZ is the second highest in the OECD.[67]

7.2 The financial cost of poor outcomes for children has been estimated at approximately 3% of GDP (approximately $6 billion)[68] including health, welfare, remedial education, crime and justice, and lower productivity costs.

7.3 In terms of maltreatment, NZ is one of the few OECD countries where the number of children dying from intentional injury has increased since the 1980s.[69] NZ's rate of non-accidental death is 4 - 6 times higher than the average of other OECD countries.[70] In the 2009/10 year, of over 55,000 notifications to CYF requiring further action, almost 20,000 involving children from birth to 5 years of age.[71]

7.4 In an OECD comparison of spending on parental leave per child as a percentage of GDP, NZ rated the lowest out of the 25 countries ranked.[72]

7.5 Internationally NZ has the 8th largest proportion of under-3-year-olds in licensed childcare, out of 24 nations.[73] If attending childcare were the solution, NZ would be expected to be performing significantly better internationally than it currently does.

7.6 In light of these statistics, it cannot be an option to do no more than we are currently doing.

Responses to Sections of the Green Paper

Based upon the research summarised in the preceding sections Brainwave advocates the following:

8 Share Responsibility

8.1 **Prevention**

8.1.1 An increased recognition of the needs and rights of all children.

8.1.2 The first step in any change process is to raise awareness. If we wish to bring about positive change, NZ could invest in greater public and professional awareness on the need for parents to reflect on and if necessary change their parenting practice. Access to parenting programmes could be provided to support this.

8.1.3 The primary responsibility of parents is to ensure that their child has the ongoing opportunity to develop a secure relationship with at least one loving adult, in addition to ensuring their physical needs for safety, nutrition and general care are met. However, it is recognised that this can be challenging particularly for those who did not themselves receive adequate parenting in their early years. We need to break the intergenerational cycle of poor parenting. Therefore improved access to scientifically sound parenting information needs to be available at a population level. Examples could include parenting interventions such as Triple P, Incredible Years, Parent Child Interaction Training, Watch, Wait and Wonder, and home visiting programmes such as Nurse Family Partnership, and Early Start.

8.1.4 Particular emphasis could be placed upon first time parents as research indicates that the positive effects of interventions are likely to be shared by subsequent children.[74]

8.1.5 Government agencies could put more resource into supporting parents to raise their children well in the early years, and less into supporting the tremendous growth of the increasingly commercial[75] childcare industry, with its associated risks for babies and toddlers. One example might be increasing the availability of midwives and Plunket nurses to provide support to mothers at greater intensity and for longer after the child's birth.

8.1.6 Given that recent NZ research indicates only 52% of women avoided alcohol throughout their pregnancy[76], greater public and professional awareness regarding the negative impact of alcohol on the developing child's brain could be a useful preventative measure.

8.1.7 More effective Government and community support at the preventative level is likely to significantly reduce the need for later Government intervention, such as CYFS involvement.

8.1.8 Increasing financial support to parents of preschool children, for instance increasing paid parental leave provisions, by implementing UNICEF's minimum proposed standard of at least one year paid parental leave at 50% of salary (with upper and lower limits).[77]

8.2 **Early Identification and intervention**

8.2.1 More effective identification of children at high risk, alongside increased availability of efficacious interventions, that have as their aim the welfare of the child. A process that includes the whole population is less likely to stigmatise those requiring help, and may be more likely to have public support.[78]

8.2.2 Stocktake of existing community organisations and evaluation of effectiveness in terms of child outcomes for those being funded.

8.2.3 When it is necessary for a child to be fostered (by kin or non-kin foster parents) it is recommended that foster parents be provided with a higher level of training, ongoing support, mentoring and supervision. A key aspect of this training and support should involve increasing understanding of how children develop, and how a child's negative early experiences may have impacted on their development. In addition, the provision of trained respite caregivers who are supported to develop a relationship with the child and foster parents before commencing respite care.

8.2.4 Resources which assist the early identification of children at risk from abuse and neglect such as the booklet produced by Child Matters "How can I tell?"[79] could be made more widely available through Citizens Advice Bureaux, libraries, schools, Marae, and other community centres.

9 Show Leadership

9.1 A mechanism be put in place to ensure all policy and legislative decisions include sufficient consideration of their potential impact on children, particularly in the first few years of life. This may be able to be achieved by appointing a Minister for Children (or a senior Minister in cabinet designated to have prime responsibility for the welfare of children) particularly with regard to areas of high risk such as alcohol licensing laws, gambling, employment law, welfare reforms, for example.

9.2 Government can demonstrate its commitment to improving children's outcomes through seeking a multi-party accord in Parliament, based on its own policy, enabling a coherent ongoing approach that will not change with successive Governments.

9.3 The Government can lead by example, by showing the rest of the country the value it places on all children, particularly during their first few years of life. One of the ways this could be demonstrated is through enabling effective solutions at the community level. It can also encourage and support the vital, irreplaceable role that almost all parents play in children's healthy development and recognise the contribution this makes not just for individual children, but the wellbeing of society as a whole.

9.4 Recognition that the needs of a young child are not always the same as the needs of their parents. A genuine commitment to working conditions which reflect the needs of children is recommended. These might include part-time, job-share, work from home, and flexible working hours.

9.5 In terms of working with Maori suggestions include a Caucus of Maori MPs and allowing Whanau Ora adequate time and support to work. The Trust very much supports Maori creating Maori initiatives and solutions, rather than having these imposed by an outside group. This is not only associated with more likely positive outcomes, but also gives effect to the Treaty of Waitangi and the principle of partnership, a fundamental need if Maori are to be empowered to create solutions.

9.6 Programmes such as the HIPPY programme may be useful in achieving positive outcomes for disadvantaged children, for both Maori and non-Maori.

10 Make Child-Centred Policy Changes

10.1 **Reviewing Government Spending**

10.1.1 We endorse the suggestion that Government "move its investment into programmes and services that have a sound evidence base"[80] whilst also recognising that some local initiatives may be equally effective, but require further resource and expertise to demonstrate this through rigorous research and evaluation. Local or community led innovation when based on a sound understanding of relevant risk and protective factors is to be encouraged.

10.1.2 It is acknowledged that there is likely to be a funding blip, and take time, before the full benefits of effective prevention and early intervention approaches become apparent. However, if effective preventative measures are well implemented and given ongoing support, future savings across many areas are probable. Examples include short and long term health (physical and mental), special education, reliance on welfare, police, CYF, courts, prison and probation.

10.1.3 A number of areas of Government expenditure can improve outcomes for children. These include free 24 hour access to medical services for children, and greater access to affordable, healthy, dry homes.[81]

10.1.4 A reconfiguration of the Working For Families scheme to ensure parents have sufficient income during the crucial early childhood period. Extra income for parents is more likely to boost children's chances of success if provided in early childhood,[82] however savings could be made in later childhood and in the higher income brackets.

10.2 **Vulnerable child-first allocation policy**

10.2.1 Priority to be given by Government and non-Government organisations (NGO) for those with young children (particularly 0-3) for services including but not restricted to Family Court cases, housing, mental health and addiction services, domestic violence and anger management services, and budgeting.

10.3 **Watching out for vulnerable children**

10.3.1 Vulnerability occurs in a variety of situations and across the range of SES groups. Whilst the lowest SES group has a greater percentage of vulnerable children than other groups, the greatest numbers of vulnerable children are actually in the middle SES groups. "Restricting programmes to vulnerable children in the low SES group therefore misses the majority of children experiencing difficulties." [83]

10.3.2 By making an initial free health and welfare assessment universal (to be carried out not later than six weeks postnatally) and at subsequent specified ages; by notification of high risk assessments to a community support co-ordinator (such as the former Domestic Violence Co-ordinators, or those with an extended role); by the community support co-ordinator nominating a contracted lead-provider to support and assist; and by the community support co-ordinator monitoring the response of the lead-provider. It is suggested that the initial assessment be a prerequisite for any child-related benefit.

10.3.3 Assessments should be universal and conducted in a supportive rather than punitive manner to avoid discrimination and children "falling though the gaps."

10.3.4 Missed assessment could result in referral to a regional support co-ordinator or to Child Youth and Family Services if there had been no prior community organisation involvement.

10.3.5 Professionals including health professionals, teachers, Court appointed lawyers, police, social workers could place an alert on a child's record in the event of significant concern, to be actioned by a regional support co-ordinator.

10.3.6 Improve identification and tracking of highly mobile families via Income support being required to provide the details of the caregiver and address of any child for whom a benefit is being paid. This should be in a database accessible to authorised groups.

10.3.7 Equip and resource the variety of professionals who come into contact with children to recognise the importance of secure attachment relationships, be able to identify situations of possible abuse and neglect, understand the potential long-term effects on the life of the child of early adversity, and have sufficient knowledge of appropriate services and supports which can be accessed in a timely manner.

10.3.8 Granted, "it is not always clear cut when the Government should intervene," [84] however, increased emphasis should be placed on the best interests of the child, rather than parental rights in making the decision whether intervention is required.

10.3.9 Enable the collection and sharing of basic information to enhance the protection of children and contribute to the identification of child maltreatment.[85] Such information sharing in the child's interests should override the perceived privacy interests of parents.

11 Make Child-Centred Practice Changes

11.1 Establish a national data base of children, utilising health record information. In addition to enabling professionals to share information about children more readily when required it may also provide population level information indicating the success or otherwise of actions taken as a result of the Green Paper.

11.2 Schedule regular collaborative meetings between heads of relevant services e.g. Police Commissioner, Children's Commissioner, representatives of paediatricians, midwives and GP associations, and Well Child providers to share information, increase understanding of the broad range of issues affecting children, and review progress.

11.3 The Prime Minister's Chief Scientific Advisor be asked to provide a report, similar to the "Improving the Transition" report, regarding the preschool years. This could include what is important during pregnancy and postnatally to promote a positive start, what hinders that, features of existing programmes both nationally and internationally that have been evaluated as positive, and what qualifications are desirable for those working with young children and their family/whānau. The request for such a report should not constitute a reason to defer existing programmes, or those arising from Green paper submissions, that are designed and instituted to help.

11.4 Generally improved information and assistance services to all parents during pregnancy and for the first year in the life of their child, with evidence-based parenting skills courses freely available at family and whānau centres, Marae, and other community venues.

11.5 Greater support for mother and baby through pregnancy, birth and the first few years. This support to include recognition of the importance of the young child's emotional/attachment needs, not only their physical health or cognitive needs.

11.6 Ensure frontline staff at Government agencies (e.g. WINZ, IRD) are proactive in ensuring parents, particularly first time parents, are made aware of and supported to access any funds or services for which they are eligible.

11.7 Continued support for research such as Growing Up in New Zealand, and the Christchurch and Dunedin longitudinal studies to provide information on our multicultural population and the trends that are becoming apparent as children grow up in 21st century New Zealand.

11.8 Increased recognition of the need for independent review of the efficacy of current and future interventions. This would require sufficient funding to enable effective and valid reviews to be undertaken. Such a process should be cognisant of the fact that effects of overseas interventions are often more fully apparent over the life course, thus unduly hasty decisions to cease promising services should be avoided.

12 Conclusion

12.1 Research from multiple disciplines indicates the importance of a positive start during pregnancy and the early years in order for children to have healthy outcomes across the life span. Central to this positive start is the need for all infants and children to have the opportunity to develop a secure attachment with their parents as a foundation for their future development. A range of Government actions are needed to truly acknowledge and support the primacy of this parent-child relationship.

12.2 Attempts to improve outcomes for NZ children require sustained effort along two parallel paths. First, greatly improved support to all infants and their parents, to improve outcomes at the population level, and secondly, prompt identification and effective interventions for those children at heightened risk and their family/whanau.

12.3 Brainwave Trust Aotearoa is fully supportive of the Government's initiative in seeking to "develop a long-term, cross-sector and evidence based plan." [86] It will indeed need to be a long-term approach, and the full benefits are unlikely to be seen for some years, however failure to do so will result in high rates of children continuing to experience a variety of preventable poor outcomes, with huge associated costs at the individual and societal level.

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