

H M CORONER'S COURT for the COUNTY of CUMBRIA

In the Matter of :

Poppi Iris Worthington Deceased

Inquest 27 November - 14 December 2017 at Kendal

REVIEW OF EVIDENCE, FINDINGS AND CONCLUSION

**DAVID LI. ROBERTS – H.M. SENIOR CORONER
for the COUNTY of CUMBRIA**

15th January 2018

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Introduction

1. This is the second inquest into the death of Poppi Iris Worthington (“Poppi”). I opened this inquest on the 18th March 2016 after having applied to the High Court under section 13 of the Coroners Act 1988, as amended, for an Order quashing the first inquest into Poppi’s death and requiring a fresh investigation and inquest to take place.

2. The Interested Persons are :
 - Poppi’s Mother - represented by Gillian Irving QC and Kate Stone.
 - Paul Worthington - represented by Leslie Thomas QC and Paul Clark.
 - Poppi’s Siblings - who chose not to be represented at the inquest.
 - Cumbria County Council - represented by Neil Smart.
 - The Chief Constable of Cumbria - represented by Caroline Jones.

3. The purpose of this inquest is laid out in section 5 (1) of the Coroners and Justice Act 2009 which provides that a coroner must ascertain who the Deceased person was and how, when and where she came by her death. I should add that by reason of section 5 (2) of the 2009 Act, the scope of an inquest must be broadened to include the wider circumstances in which the death occurred if it is necessary to do so in order to avoid a breach of any of the rights arising from the European Convention on Human Rights. I considered this matter at the pre-inquest stage with the benefit of submissions from Interested Persons and, for the reasons I have given previously, I decided that this is not an inquest in which Article 2 is “engaged”. It has, therefore, not been necessary for me to widen the scope of the inquest to encompass any broader circumstances. There was no evidence to suggest that there had been, or may have been, a failure

on the part of any state agency to protect Poppi's life, whether on the basis of a systemic duty or (applying the *Osman* test) an operational duty.

4. It is a matter of public knowledge that after Poppi's death there were proceedings in the Family Division of the High Court. Peter Jackson J., as he then was, conducted two fact-finding hearings in March 2014 and November 2015 respectively. The judgments following those hearings have both been made public, albeit subject to a Reporting Restrictions Order. I take this opportunity to remind everyone that the High Court Reporting Restrictions Order remains in place. The Order does not restrict the use or reporting of Poppi's name, and it does not restrict the use or reporting of the name of her father, Paul Worthington. The Order does forbid the use or reporting of the names of Poppi's mother and siblings and of certain other information relevant to their identities. At the inquest, Poppi's mother was at all times referred to as "Mother" and Poppi's siblings were referred to as "the Siblings" and, individually, as S1 through to S6. The same identifications will be used by me in this decision.
5. At the pre-inquest stage I considered whether it would be appropriate for the High Court judgments to be admitted into evidence at the inquest and for the Judge's conclusions, in effect, to be adopted as findings for the purposes of the inquest. Having received and taken account of the submissions of Interested Persons, none of whom supported that approach, I decided that I should not do so. I have already given full reasons for this decision and, for the purposes of this decision, will repeat only that the nature, purpose and role of the inquest is different to that of the High Court proceedings. The Family

Court proceedings were concerned with what could be established on an application by the Local Authority, after applying a burden and a single standard of proof, whereas an inquest is an inquiry in which there is no relevant burden of proof and two different standards of proof are potentially relevant. There are no parties to an inquest but simply Interested Persons. No-one is presenting a case or has to prove anything. The inquest is an inquiry to establish the medical cause of Poppi's death and how it came about, and to reach a conclusion as to the death; it was not necessary for the Judge in the Family Court proceedings to ascertain those matters and he did not do so. In the circumstances, I am not bound by the findings of Peter Jackson J. and I have considered matters entirely afresh on the basis of the evidence adduced at the inquest.

The Evidence

6. The inquest has been held at the County Offices, Buser Walk, Kendal and all the evidence I have adduced, and taken into account in reaching my findings, was heard there between the 27th November and the 14th December 2017. Paul Worthington attended in person on two days and arrangements were put in place to ensure his safety when he did appear at court. I agreed to his solicitors having a live link to him from the court room for the remainder of the hearing to facilitate his engagement and enable his representatives to take instructions. Both Mother and Paul Worthington gave their evidence to the court from behind a screen. The press were able to see them; the public not. In fact, very few members of the public attended the inquest and on many days there were none.

7. After hearing all the evidence and the legal submissions, I adjourned to consider the evidence. I have had the benefit of a full transcript of the evidence given at the inquest, which I have read. In reaching my findings and conclusion I have considered and taken full account of all the evidence. Set out below is my review of the evidence. It is included to help me explain my findings and conclusion. Although it is relatively lengthy, it is not intended to be a comprehensive account of all the evidence. If a piece of evidence is not expressly mentioned, it does not mean that I have not considered and taken full account of it.

8. I received and admitted oral or written evidence from Poppi's parents and aunt, from ambulance and hospital staff, from Cumbria Police and from various medical experts. I shall now review that evidence.

The Factual Evidence

Mother's Evidence

9. Mother confirmed that Poppi's full name was Poppi Iris Worthington and that she was born on the 20th October 2011 at the Furness General Hospital. Paul Worthington was Poppi's father. She said her relationship with Paul Worthington started in about 2009 at which time she had three daughters living with her. She and Paul Worthington had a son together in 2010, and then twins, a son and Poppi, in October 2011. This brought the number of children in the household to six. A few weeks after the birth of the twins the family moved to a three-bedroomed house ("the house") which they rented from Tracy

Worthington, Paul's sister. The family were living in the house at the time of Poppi's death. Mother's relationship with Paul Worthington was "on and off". Sometimes he was living in the house, sometimes he was not, although Mother told me that in December 2012 there was a plan for the family, including Paul Worthington, to move to live in another area, in order to make a fresh start.

10. The house consisted of a living room and kitchen downstairs and three bedrooms and a bathroom upstairs. There was a bedroom with a double bed which Mother shared with Paul Worthington although, she said, she often slept on a sofa downstairs. There were two cots in that room in which the two boys slept. Poppi slept in a cot in another bedroom and sometimes one of her sisters slept in that room also. Otherwise, the other girls all slept in the third bedroom. Mother explained that the house was always busy, not only with the six children, but also with a regular stream of visiting family and friends.

11. Mother described Poppi as alert and very sociable. "Very alive, bubbly, funny" were her words. Poppi had had an uncomplicated birth, was developmentally normal and had taken her first steps shortly before her death. She was generally in good health. Her health was more robust than that of her twin brother. Mother had needed to seek medical attention for Poppi on only a few occasions. In February 2012, when she was about three months old, she had an overnight admission to hospital because of acute bronchiolitis; a little later there was a diagnosis of conjunctivitis and, subsequently, Poppi suffered

vomiting and diarrhoea and developed a rash, and chicken pox was suspected.

12. Mother said that Poppi was usually a good sleeper. Her routine included a couple of naps in the course of the day and then bed-time at about 7.30 pm. She would have a bottle in her cot with her, usually juice but sometimes a bottle of milk also. She slept with a pink elephant pillow, which was her comforter. Poppi would "... lie over it, on her chest, with her bum in the air ...". She normally slept through the night. Mother said that Poppi was the family's alarm clock, usually waking "between half five and six o'clock", and that once awake she was "ready to go". Ordinarily, when Poppi woke she did not cry out. Rather, she would rattle her bottle against her cot and shout, "mum".

13. Mother told me that Poppi liked her food but could be a bit picky. Poppi was still in nappies. Her bowel movements were often either too loose or too hard and she suffered both diarrhoea and constipation. Mother mentioned this to the Health Visitor who advised her to see the doctor if the problem lasted for more than three days, but this never proved to be necessary. When asked whether she had ever seen blood in Poppi's nappy Mother did say that in the summer of 2012, when Paul Worthington returned Poppi to her care, Poppi had a hard stool and a small amount of blood was seen.

14. Mother told me that over the days prior to the 11th December 2012, members of the family had been suffering from cold-like

symptoms and some sort of viral bug. On the 11th December 2012 itself, Poppi was also under the weather. She had a runny nose and slept for longer than usual when she had her nap. She had to be woken, which was unusual, and she had a slight temperature, and Mother had asked Paul Worthington to give Poppi some Calpol. The witness said that Poppi nevertheless ate some lunch and, later, a bit of tea. She said that at some point that afternoon Poppi :

“threw herself back in her highchair and just screamed out. It seemed like a belly ache, sort of, it looked like she needed the toilet or something. I picked her up and sort of rubbed her belly, put her over my shoulder and that’s when she produced that horrendous nappy.”

Mother changed her nappy. She said the faeces were very runny, and a “brick” sort of colour, and there was a very bad smell, but she did not see any blood. She said that afterwards Poppi was all right and she was playing and socialising.

15. Mother said she later returned home from collecting another child and she prepared Poppi for bed. She said Paul Worthington may have put Poppi in a clean nappy but it was she who placed Poppi in her clean pyjamas, probably with a vest underneath. When shown the photographs of the pink vest with poppers which fasten between the legs and the Peppa Pig pyjama top which were retrieved at the hospital, she said she thought they were the items Poppi was wearing when she went to bed (although she recalled a bear design on the pyjama top),

together with pyjama bottoms. Mother believes she put Poppi in to her cot at about 7.30 pm, with a bottle of milk and, possibly, a bottle of juice as well. She was not certain of the latter. Also in the cot were two blankets and Poppi's pink elephant pillow, which lived in her cot. Poppi was alone in the room and she went to sleep quite quickly.

16. The other children all went to bed after Poppi. At some point Paul Worthington went upstairs to attend to one of the boys and he did not come back down. Later, Mother also went up to bed. She told me that she could not now remember whether Paul Worthington was awake, but she did not think he was. She found that one of the boys had woken and was snuffly so, instead of getting into bed, she took him downstairs to sleep in his push chair. She checked on Poppi who was all right, sleeping with her bottom in the air. She had her pink elephant pillow with her in the cot. Mother then went downstairs and used the laptop for a time before settling down to sleep on a sofa.

17. Mother said that later, at a time she could not specify, she was awoken by a short, loud scream from Poppi. She then heard movement on the loose floorboards in the double bedroom. At the time she thought Paul Worthington was getting up to go to Poppi but she said she would not, in fact, have been able to tell from the noise in what direction he was moving. Mother said she did not hear any further noise from Poppi and so she went back to sleep. She was next awoken by Paul Worthington coming downstairs. She said that Paul Worthington mentioned a

nappy and that “she still seemed tired or unwell”. Mother told me that she again went back to sleep and was next awoken by Paul Worthington coming downstairs, with Poppi, saying that she was not breathing. Poppi was wearing a nappy and the two tops but not her pyjama bottoms. Mother thought that the poppers of the vest were undone. She then ran upstairs for the telephone to call for an ambulance. The recording of her call was played.

18. Mother said she saw Paul Worthington place Poppi initially on the sofa by the fireguard and then, at the call handler’s instruction, on to the floor. She saw him remove Poppi’s nappy. Its contents were like the bad nappy from the previous afternoon; lots of brick coloured, lumpy, very smelly and diarrhoea-like faeces. The nappy was placed on the sofa beside the fireguard. She saw no blood on Poppi’s bottom but, she said, “...it was so fast; things happened so quickly.” She passed the operator’s instructions to Paul Worthington who was performing Cardiopulmonary Resuscitation (“CPR”) on Poppi whilst they were waiting for the ambulance’s arrival.

19. Mother provided a first account to the police on the day Poppi died. The account was read to her and she did not want to alter it. Her account of the latter part of the evening included the following :

“... S5 woke up about 9 pm, so Paul went up and stayed up there with him playing on the computer until S5 went to sleep. I stayed downstairs with S6 and S4. S6 was chesty and I took him to bed to

the cot in my room and he settled at first but later when I went to bed S6 awoke. So I brought him downstairs and placed him in his buggy as this seems to help clear his chest so he could sleep. I sat on the settee and gave S6 some saline drops for his nose and I was on my laptop. I think it was around 2 am and I remember shutting the laptop and dropping off to sleep. Not long after I'd gone to sleep, Paul came down and I can recall him mentioning a nappy and Poppi poo-ing and was still dead tired and he was going to lie her next to him. I then went back to sleep. I have no idea how much time had passed. The next thing I can recall is Paul shouting my name and saying 'She's not breathing, call an ambulance'. Poppi was in his arms with her arms dangling, she was still warm and I touched her. I got the phone and rang the ambulance. ... Paul put Poppi on the settee and began blowing breaths into her mouth. I relayed everything to him that the woman on the phone was saying, chest compressions, et cetera. I watched Poppi until the ambulance came. While Paul was working on Poppi he took her nappy off to loosen it around her stomach to get his breath in and allow the stomach to rise. He cleaned it with the end of the nappy as she had poo-ed and swiped the nappy from under her and placed it on the floor. I picked it up and put it either in the bin or on the fireguard. I saw the poo. The ambulance then came and took Poppi straight into the ambulance with Paul. I stayed consoling S4 who had come downstairs, and then the police turned up. I have no idea nor explanation as to what happened to Poppi. The last time I saw Poppi was at about two or 2.30 am when I went to check on her. She was lying on her belly arched under her pillow, bum in the air, head to the side. I could hear her breathing quite heavy but she was starting with a cold, so I thought it was just that. The next I saw of Poppi she was on the settee and Paul was giving her CPR. Poppi looked asleep. I had not seen any blood at any time on Poppi or on any clothing or nappies."

20. Mother was asked about what can be seen in the photographs taken of the house on the 12th December 2012 by the police. On photograph 41, which shows the double bed, she confirmed that Poppi's pink

elephant pillow can be seen on the bed and she told me that the partially unfurled roll of kitchen paper, which can also be seen on the bed, was not normally kept in the bedroom. Mother said that the laptop she and Paul Worthington had been using on the 11th and 12th December is visible in photograph 5, sitting on the fireguard in the living room. Mother also confirmed that Poppi's pyjama bottoms are not visible on any of the photographs and that, despite looking hard for them, she has never found them. She had searched because they would have been of sentimental value.

21. Mother said that prior to the 11th/12th December 2012 Poppi had never been taken into her parents' double bed before. She said she would not do that because Poppi was too small and there would be a risk of suffocation. She agreed that if Poppi had been left alone on the double bed and had woken, she would have been sufficiently mobile to get off the bed and move around.

Paul Worthington's Evidence

22. When giving his evidence to me Paul Worthington answered only a handful of the questions put to him. He confirmed that his three children with Mother were unplanned, that in 2012 he underwent a vasectomy, and that he had a sporadic sexual relationship with Mother. He said that his living arrangements after Poppi's birth varied but by the time of her death he was living at the house. He said Poppi was usually in good health and "as fit as a fiddle". She was a good sleeper and she would usually wake "just before 6". He usually slept in the double bed, in the room next to Poppi's, and he

agreed that as a matter of routine he would hear her waking. At the end of his evidence he answered questions from me about the photographs taken on the 12th December 2012 of the double bed where he slept. He said he did not know how Poppi's pink elephant pillow came to be on the bed. In relation to the photograph showing a baby's bottle containing milk lying on a damp patch on the bed sheet, he said he could not help me with how the bottle got there, but he confirmed that that was the general area in which he had placed Poppi.

23. Otherwise, Mr Worthington responded to questions by saying, "I refer to my previous statements. I rely on the right not to answer that question under Rule 22". He had made a number of previous statements, including to the medical staff (particularly Dr Braima, in the presence of PC Blakeborough, on 12th December 2012), to the police (by way of a first account to PC Chadwick on 12th December 2012 and later when formally interviewed), and in written and oral evidence provided to the High Court. A number of extracts from those previous statements were put to him for comment or further explanation. Noteworthy extracts from Paul Worthington's previous statements included the following :

(i) From paragraph 10 of his written statement dated 2nd December 2013 :

"I would hear Poppi from the adjacent bedroom where she slept alone and I would get up with her so that she didn't wake the rest of the household. I do not recall exactly but I would likely have got up with her and taken her downstairs, changed her nappy downstairs, given her breakfast whilst the

others were all still asleep while Mother usually slept in the lounge but not always.”

- (ii) From his initial account to the police on 12th December 2012 :

“On Tuesday 11th December 2012 I got up when I heard Poppi crying. This would have been 6.30 to seven am. Mother sleeps downstairs most nights and she had slept downstairs on Monday into Tuesday morning with S4. I got Poppi out of her cot, took her downstairs and sat her on the lounge floor. Mother woke up at this time. Poppi seemed herself. There was nothing that was unusual. All the other children got up around this time and it would be about 7.15 am by the time all the children all were down except for S6 ...”

- (iii) From his written statement dated 2nd December 2013, after stating that Poppi had slept for longer than usual when taking her nap on 11th December 2012 :

“Mother brought Poppi downstairs still a bit sleepy, but I can’t say that I noticed anything out of the ordinary, save that she was just sleepier than normal. I think that afternoon the maternal grandparents also visited the home and there was quite a few people in with Mother and her friend. The maternal grandparents and the children were all playing. I remember that Poppi appeared fine, playing with the other children, and at around 2.30 Mother and her friend left to collect their respective children from school and the maternal grandparents left around the same time to collect children they cared for at that time from school and I stayed with the younger children. Again, I don’t recall anything out of the ordinary. I recall that the children were playing and I was watching television.”

- (iv) In his initial account to the police on 12th December 2012, in relation to preparing Poppi for bed :

“I then started changing Poppi's nappy - which was bone dry. I put a new nappy on her and S2 came in. Mother got Poppi's night clothes and I

dressed her. There was nothing unusual or untoward. We got the children to bed. Mother put Poppi in her cot.”

- (v) From his written statement dated 2nd December 2013, at paragraph 17 :

“I recall getting the children ready for bed. I gave them baby wipe washes, changed their nappies. I remember getting Poppi ready for bed and I changed her nappy in the living room. I would have put a towel or something down beneath her and dressed her in a babygro, an all-in-one, and put bedclothes on and night clothes. I think that I might have taken her up to bed just after 7pm because she normally started to gurn a little when it is time for her to go to bed. S5 and S6 would still have been downstairs until 7.30ish. I put Poppi in a cot with a bottle...”.

- (vi) From his first account made to the police on 12th December 2012 :

“At around 8.45 in the evening I went upstairs because S5 woke up. After this I stayed in bed playing on the computer. I left Mother and S4 downstairs. Mother brought S6 up to bed before I went to sleep. S6 got put in his cot and S5 and S6 and I went to sleep. At about 2.15 am Mother woke me because she was taking the laptop and wanted the charger. S6 was bunged up with his cold so Mother also took S6 downstairs and I got back off to sleep.”

- (vii) From his statement of December 2013, at paragraphs 18 and 19 :

“I recall I went to bed around 9.30 pm with the laptop. I always go at that time so I can check the full time whistles of football as I usually have a coupon on and I like to check the final results as they come in. S5 and S6 both sleep in the master bedroom in travel cots. Mother tells me that she came up to the room around 2.30 am and took the laptop and returned downstairs. I was semi-conscious and therefore I can't remember her doing that or taking S6 downstairs although she tells me she did.”

- (viii) From the transcript of the High Court hearing, the following questions and answers:

Question : "What were you looking at or doing on the laptop then?" Answer : "Football results, all the final scores for a football coupon I have put on, I put on. Then once the football results are in, roundabout quarter to ten, ten to ten, I would sit and scroll Facebook for anything that's going on and then I would sit and look at X-rated adult stuff for ten minutes before I go to sleep."

- (ix) From his first account to the police on 12th December 2012 :

"I woke up to the sound of Poppi screaming. I got out of bed and went into Poppi's room. I went straight into her room. She was sat up in her cot sat on her knees. She was still in her pyjamas. She was screaming as though she was having a bad dream. It was loud. I picked her up and cuddled her and took her into my bedroom. I sat down on the edge of the bed and tried to calm her down. I'd picked up her dummy and bottle when I got her from the cot. When I had picked her up from the cot her body was solid, stiff and uptight. Once in my room I had her on my knee and I tried to console her by giving her the dummy. I tried to put the dummy in Poppi's mouth, but her teeth were clenched and she wouldn't open her mouth. I saw that Poppi was pushing down when she was on my knee. I thought she was wanting a poo. It was my opinion by this time that she was suffering from some sort of constipation and at this point I undid some press studs on her Babygro and ran my fingers around the elastic of the legs of the nappy Poppi was wearing to check if she had poed. I could tell from the smell she had. At this point I lay Poppi on the bed. I then left Poppi on the bed. She had had a poo. She seemed relaxed. She had stopped screaming. I must add that I didn't turn the bedroom light on because I didn't want to wake the other children up. I left Poppi on the bed and went downstairs to get a fresh nappy. She was lying on her back with her head on a pillow and a pillow on one side of her and a quilt on the other to ensure she didn't fall out. I went back upstairs with the nappy and I told Mother that Poppi had been screaming. I was downstairs and back up within 90 seconds. As Poppi had settled and was

due to get up shortly, it was 5.45 am, I put the nappy to one side. Poppi was lying on her back which is the position I had left her in. She was due up in 15 minutes. S5 had woken and I settled him down and I went back to bed for a short time. The light was still off. I decided to check Poppi. I had only been back in bed a very short time. I was lying as normal in bed. Poppi was at right angles to me with her feet near my head. I put her in this position as it is less likely she would fall off the bed in this position. I got up and leaned over to Poppi and checked her arms. They were limp. She wasn't doing anything. I tapped her face, there was no response. I got up out of bed and picked Poppi up. I ran downstairs with her in my arms and I told mother to phone the ambulance ... I wish to add that when I undid the nappy I saw dark-brown runny poo, there was a lot of it but it wasn't unusual, and I didn't see blood in the nappy."

- (x) From his December 2013 statement at paragraphs 20 to 22 :

"On the morning of 12th December 2012 Poppi, as usual, woke me up. Unusually she woke S2 up too. S2 shares a room with S3 and S4 and all the bedroom doors are kept ajar or sometimes fully open all night. I got up and I recall S2 saying that Poppi had woken her up. I told her to go back to sleep. I went through and took Poppi out of her cot. I picked her up straight away and she was rigid like she was having a nightmare. Her teeth were clenched and I was trying to give her the dummy and trying to comfort her and calm her. I held her in the crook of my arms and she did calm. I smelt her and I could smell poo. Therefore I took Poppi through onto the double bed in the master bedroom and laid her crossways with her head at the edge so she couldn't roll off. I went downstairs to get a fresh nappy for her. Mother was semi-conscious and I told her that Poppi had pooped. I came straight back upstairs. It would have taken me less than a minute to go downstairs, locate the nappy, briefly speak to ... and go back upstairs. As I did so, I noticed that the clock said it was only 5.45 am. Poppi had woken nearly an hour early. When I got back into the bedroom Poppi was very quiet. I thought she had nodded off. I got back into my usual side of the bed and I thought I would just let Poppi sleep a little longer. I didn't want to put her back in her own room as she would soon be waking up in her normal manner anyway at the normal time. Furthermore, I did not want to

disturb the rest of the household again as everybody seemed to be quiet. This was unusual as I have never put Poppi in bed with me before, probably because Poppi just used to wake up between 6 a.m. and 6.30 a.m. and there was never any time for an additional nap. This time I only did so because of the early hour and the fact that she had gone back to sleep so quickly. I didn't change her nappy 'cause I didn't wish to disturb her. I think I dozed off for a few minutes and then for some reason I reached out to touch her. I don't know what made me reach out to touch her, but when I did her arm was limp. I immediately knew something was wrong. I remember saying, 'Come on, Poppi, come on Poppi.' I was gently shaking her arm and I was touching her face by patting her gently. It seemed like an age. It wasn't; all this happened in seconds. I picked her up and ran down the stairs in a panic. I remember shouting at Mother and her shouting at me in the panic about what we should do. I had already popped the buttons on Poppi's Babygro earlier when comforting her prior to her doze as I wished to relieve any pressure on her tummy in case the nappy or the clothing was too tight."

- (xi) From the High Court transcript, Paul Worthington was asked how Poppi had been left on the bed and the following was said :

Answer : "To the bottom left, her head was placed on there and then her feet, the quilt would have been propped up sideways, so that Poppi was secure between ..."

Question : "The quilt would have been?"

Answer : "At the side of her so Poppi had been like in a little channel, that's the best way to describe it, so she had the pillows on one side and the quilt folded over her at the other with her head on the pillow, her feet facing towards me so she is secure. When I went down to get the nappy she couldn't fall out of bed."

Question : "I don't quite understand whether her feet and body were over or under the quilt."

Answer : "No, they had just been left on top."

Question : "How was the quilt organised to prevent her falling out as you describe?"

Answer : "If I could just fold the --- there's a quilt, just fold it over so it's doubled over and then the pillows are at the side and then I've laid her in the middle."

Question : "So what is actually under her body?"

Answer : "Just the mattress and the bedsheet."

- (xii) Also from the High Court transcript, Paul Worthington was asked :

“When is the first time you say that you saw blood?” Answer: “In the ambulance. There was like a little smear on the sheet.”

24. Paul Worthington was asked a number of questions at the inquest arising from his previous accounts. He was asked about aspects of his previous accounts which are inconsistent, such as whether Poppi had defecated before or after he had taken her into his bedroom. He was also asked further questions arising from his accounts, matters which I considered required further explanation. For example, if Poppi had woken at 5.45 am, only 15 minutes before her usual time, why did he not take her downstairs in accordance with the usual routine? If she had defecated, why did he not take her downstairs to change her, rather than leave her alone on the double bed where she could have injured herself or woken the other children? Why did he not place her back in her cot? Why had he removed her pyjama bottoms and what did he do with them?

25. As I have said, Paul Worthington declined to answer these and other questions in reliance on Rule 22 of the Coroners (Inquests) Rules 2013 which provides,

“(1) No witness at an inquest is obliged to answer any question tending to incriminate him or her.

(2) Where it appears to the coroner that a witness has been asked such a question, the coroner must inform the witness that he or she may refuse to answer it.”

I must emphasise that the entitlement to refuse to answer questions at an inquest if there is a risk of self-incrimination is an important one. Mr Worthington was quite entitled to decline to

answer the questions he did and I emphasise that I draw no adverse inference against him for his decision to do so. In consequence, however, the fact is that Paul Worthington's evidence to this inquest amounts to little more than the previous accounts and evidence he had already given elsewhere.

Tracy Worthington's Evidence

26. Tracy Worthington, who is Paul Worthington's sister, attended and gave evidence to me. She said she was telephoned by Mother and attended the house very shortly after Poppi and Paul Worthington had left in the ambulance. She thought that two police officers, a male and female, were already present. Mother was collected and taken to the hospital by her mother and step-father. They had brought three children with them and Tracy Worthington stayed in the house to look after the eight children. Apart from one child going upstairs with the female officer to use the lavatory, no-one went upstairs.

27. Ms Worthington said that when she sat down on the sofa next to the fireguard she was aware of a rancid smell and saw a nappy on the sofa, near to where she was sitting. She said, "It was very full of very dark brown diarrhoea, really full. ... It was starting to seep out of the sides." When asked whether she could see any blood or blood streaks, she said, "I didn't look that deep into it, to be honest with you, I just wanted to fold it and sort of, like, get rid of it." She said that she folded it over, placed it in a carrier bag and, with the permission of both the police officers who were present, put it in the wheelie bin at the side of the house. She said that she did not see a

further used nappy on the living room floor, if she had, she would have picked it up, and she did not see a pink blanket on the floor. She said she then helped the children into their jackets and coats, which were placed over their night clothes, and they all left the house.

The Ambulance and Hospital Staff Evidence

28. **Nicola Julie Lynn**, a paramedic with North West Ambulance Service, said that Mother's call was made at 05.56 hours and she arrived at the house at 06.06 hours in an ambulance with a colleague. She entered the house and found Paul Worthington conducting CPR on Poppi on the floor. When she saw Poppi "she was very pale, waxy looking, she obviously wasn't breathing and I just picked her up and rushed out the door with her because I could see that she was in cardiac arrest." She said Poppi was wearing a top, but no bottoms or nappy. She said she had asked what had happened and :

"...Dad had said she had screamed out, she'd looked like she needed to have, his words, needed to have a poo. It seemed like she was straining. He'd gone down for a nappy, then he'd come back upstairs and she was quiet, so if I remember rightly, he just said that he just left her at that point and then about ten minutes later he – he touched her or something and she wasn't responding, so he'd investigated a bit further and found that she was unresponsive."

29. The witness said that when she picked Poppi up she was floppy. Ms Lynn carried her in a horizontal position. Her bottom was very slimy and when she reached the ambulance she saw that there were faeces all over her clinical glove. Paul Worthington came into the ambulance,

which left at 06.08 hours and went to Furness General Hospital (“the Hospital”). Ms Lynn said that Poppi was asystolic and looked dead, and was cool peripherally, but ventilation (via a mask on the face) and CPR were given. Paul Worthington assisted with the chest compressions. They arrived at the Hospital three minutes later. A nurse immediately entered the ambulance and took Poppi, and the witness then saw streaks of bright red frank blood on the white linen sheet on which she had been lying. Ms Lynn entered the resuscitation room and told the staff what she had seen. Ms Lynn saw Poppi lying with her legs open and it was “obvious to see then that she had faeces and blood on her bottom”. She did not recall seeing any blood on Poppi’s face. Ms Lynn said she then went to see Paul Worthington in the Relatives’ Room. She said he was shell shocked and he said Poppi had not been right for a couple of days, she had been constipated and had been passing light-coloured rabbit dropping type stools for two days. She informed the resuscitation team and, shortly after the incident, wrote this down on the Patient Report Form.

30. The evidence of Ms Lynn’s colleague, **Donna Michelle Briars**, was that she removed, and “bundled” up, the linen sheet on which Poppi had been lying in the ambulance, and took it to the sluice room in the Hospital for laundering. Although she had originally described the sheet as having “nothing on it”, in a later statement she added that she could not confidently say definitely whether blood was or was not there.

31. I heard evidence from **Sarah McQuistan**, a Staff Nurse in the Emergency Department at the Hospital. She told me that she went in to the ambulance scooped Poppi up in her arms and ran with her to

the resuscitation room. Poppi was wearing just a vest and a pyjama top, no nappy and no pyjama bottoms. Poppi was floppy, cold and blue. The witness carried Poppi horizontally. When she put her down on the white sheet of the resuscitation bed in the emergency room she noticed that Poppi had some blood coming from her anus area. She said there was blood “dribbling down the legs”. She said she saw both blood-stained paste or faeces, as well as blood itself. The blood was bright red and, the witness said, “There was some dripping but there was some staining on her skin as well”.

32. She was aware of Poppi being intubated and an endotracheal tube being inserted. She said that a naso-gastric tube was also inserted, through Poppi’s mouth, in an effort to aspirate and deflate her distended stomach. The naso-gastric tube had been taken from the fridge, where the tubes were stored so that they were stiffer for the purposes of insertion. It was not clear where in Poppi’s body the tube was placed because efforts to aspirate and deflate the abdomen were unsuccessful and were abandoned. Ms McQuistan also described other aspects of the resuscitation, including intra osseous access being gained for medication to be administered and a blood sample being taken from the right femoral vein in the groin. She said,

“From what I can recall I think they tried in both femoral veins. One was taken out because they didn’t think it was in the right place. When that was taken out, there was a little bit of blood, so I wiped that blood away from the thigh and put a little bit of pressure on it to stop it bleeding.”

Ms McQuistan said, when shown a photograph of the groin area, that the right femoral vein was probably cannulated for this purpose. She

said also that, subsequently, the left femoral vein was cannulated so that further drugs could be administered.

33. She said that after Poppi's death was pronounced, both parents were distraught and crying. She then assisted with removing Poppi's tops so that a full body examination could be conducted by Dr Braima, the Paediatric Consultant. The examination included lifting Poppi's legs and, she said,

"...the doctor asked me if I had a pen torch to shine on the area just to get a better look. What I saw was that the anus area, I couldn't see the whole anus area at that point because it was -- there was just blood all around the opening. ... I couldn't see the opening of the anus as such because there was just -- just blood in the whole sort of leading up to the anus as well."

She said that the blood was bright red, fresh blood which was dripping onto the groin area and the back buttock area.

34. Ms McQuistan told me that after the cannula in the left femoral vein was removed she wiped that area clean but she did not wipe the anus area. When shown a photograph of Poppi, which had been taken later in the mortuary at the Hospital, she accepted that there was still a cannula in the left groin, and that it was likely that she had mixed up the left and the right. The witness said that another nurse later swaddled Poppi in a blanket and carried her "like a new-born" to the Children's Ward. Ms McQuistan said that, inside the blanket, Poppi was naked and without a nappy at that time and she was not aware of Poppi subsequently being placed in a nappy and dressed in a Babygro (in which she can be seen in photographs taken later that day).

35. This witness was also asked about evidence she gave in the High Court when she recalled, for the first time, that in a brief handover from the paramedic she was told that :

“...dad said that there was some blood in her nappy. At that point I asked where the nappy was and dad replied it wasn't --- he didn't have the nappy with him.”

Ms McQuistan agreed that she had not made a note of this exchange in the very full written report she wrote the next morning, but she was sure the conversation had taken place. When the police arrived she told them that Poppi had arrived at the Hospital without a nappy.

36. **Dr Osama Braima** was the Locum Consultant Paediatrician who took the lead in treating Poppi when she arrived at the Hospital. His evidence was read at the inquest because he is now working abroad. He said that on arrival Poppi had no heart rate, was blue and cold, and was not breathing. Her pupils were fixed and dilated. Poppi was laid on a resuscitation bed and around ten different professionals undertook the standard resuscitation procedures for 57 minutes. Dr Braima stated that the anaesthetist tried to intubate unsuccessfully and then he took over and intubated with a size 4.5mm endotracheal tube. Drugs were given through a venous access and blood samples were taken. He said that Poppi did not produce a detectable heart rate at any stage and, basically, she was dead before she arrived at the Hospital. After 57 minutes of effort, and speaking to the parents, resuscitation was discontinued at 07.07 hours and Poppi was pronounced dead.

37. In his original, almost contemporaneous, note Dr Braima wrote that when Poppi first arrived at the Hospital he had seen blood pouring from her anus. He subsequently clarified his use of the word “pouring”, saying,

“What I meant is there is blood coming. I don’t know. It may be more precise to say dribbling more than pouring. I probably didn’t use the right word because it’s not my language but it is dribbling from the anus.”

The witness said that after resuscitation efforts ceased, and whilst Poppi was still in the Emergency Department, he conducted a physical examination of her body. He saw fresh blood coming from her anus and that the anus was wide open and irregular in shape. He was concerned and he informed various bodies, including the police and safeguarding services. He then described a subsequent examination of Poppi’s body, when he was asked to show those investigating the death what he had seen. He said,

“At 11 am the same day, some five hours after Poppi first came to the hospital, I spoke to somebody from children’s services on the children’s ward. By this time, Poppi had been transferred to the children’s ward. I showed the children’s services workers Poppi and they had asked to see physically what I had told them about her anus. When I showed them Poppi there was still fresh blood coming out of her anus. It was a surprise to see this because it is unusual to see bleeding continuing for this length of time.”

[The reference to “children’s services” is, I believe, a reference to officers from the Police’s Public Protection Unit.]

Dr Braima said that when he saw Poppi at this time she was :

“ ... in a cot lying on her back, dressed, fully dressed like new clothes and I did undress her. She was wearing a nappy which I took off. There was blood in the nappy but more importantly, again I lifted the legs up and I showed them the anus and there was again fresh blood. At this time there was not any stool. I can say that there is blood still coming, kind of dribbling from the anus but there was blood in the nappy which it was difficult to quantify. The anus looked similar to five hours earlier.”

38. Dr Braima also said that he saw Poppi’s parents, separately, each with a police officer, in order to gain their accounts. The notes of these interviews state,

“Father’s account: ... Poppi according to Dad was well yesterday apart from being slightly off foods. Went up to bed at 1900 hours. He went to see her at 5.45 as he usually does. Found her awake. Took her to their bedroom. Felt she needed a nappy change. Went down to his partner downstairs in the living room to collect a nappy, then back upstairs and found her not breathing. Took her into his arms and ran down to his partner. Started CPR and called ambulance.”

and

“According to Mum”. “Poppi had a temperature and flu-like symptoms like the other sibs” -- siblings -- “slightly off foods. Had a temperature and constipation, but generally well. Checked her at around 3 a.m. then went down with twin brother to living room. Partner came initially looking for nappy but came later carrying her in his arms not breathing. They started CPR and called ambulance.”

39. **Dr Ibrionke Ajai** was then an Associate Specialist Anaesthetist who assisted Dr Braima. Her evidence was also read at the inquest. She confirmed that she had used a laryngoscope (which is a piece of equipment with a light to assist in looking down the throat to locate

the airway) to attempt to intubate Poppi, but was not successful the first time. Poppi's abdomen was distended and so, once she was intubated, Dr Ajai passed a further thin, flexible plastic tube through the mouth and in to the abdomen area in an attempt to deflate it. She said that the other resuscitation steps being taken during that time made it more difficult to intubate. Dr Ajai did not consider that these processes, which are routine, would cause trauma, although she also said that :

“there might be a bit of bruising, but it is not something that is going to cause massive trauma”.

In answer to specific questions she said that the laryngoscope goes just behind the tongue and would touch the pharynx and that there may be incidental bruising around the pharynx. When asked about the “flame-shaped haemorrhages” found at post mortem, she said that because you push the laryngoscope to the left, it was unlikely that the intervention caused the haemorrhages on the right of the posterior pharyngeal wall, but it could have caused the one on the left.

40. **Kelly Viceroy-Grieve**, a clinical support worker, told me that it was her role to care for the parents whilst they were at the Hospital. She met the ambulance and saw that Paul Worthington was wearing only a T-shirt and jeans. He had his socks and shoes with him and put these on in the Relatives' Room. At a later stage, when Mother and a police officer were also present in the Relatives' Room, the parents spoke to her about what had happened. The next morning she recorded in her notes that,

“Mum started telling me that all the kids had been poorly,” and then the dad said that she had “woken up in her cot crying, so he put her in bed with him, he tried to give Poppi her dummy but she wouldn’t have it.”

When asked to clarify whether Paul Worthington had said “in bed” or “on the bed” she said, “Next to him, so she’s in the bed with him. He’s on the bed with Poppi” and that you could, therefore, use either expression. The witness’ recorded account of what Paul Worthington said continued,

“Poppi was making a face like she needed a poo, so he put fingers each side of her nappy to try and get the nappy from her bottom so she can try and push out with ease. .. Then he said he went downstairs to get a nappy because he said it smelled like she had done it. He also said she was still crying when he was going down. ... Father told Mother that Poppi was up and finding it hard to poo. Paul said he went back upstairs to see Poppi and he said she was asleep, so he got back into bed with Poppi. Paul said, ‘I do not know why, but I looked over to Poppi and touched her arm and it was lifeless’, so he ran downstairs with her shouting ‘Poppi Poppi’”.

Cumbria Police Evidence

41. **PC Patsy Blakeborough** told me that she attended the Hospital and sat with the parents in the Relatives’ Room. She said that in view of Poppi’s condition they expressed a concern for her twin, who they described as the poorer one, and asked if they could bring him to the Hospital to be checked. This was subsequently arranged. She later went with Paul Worthington when Dr Braima spoke to him to gain his account, and she

recorded what Paul Worthington said in her pocket notebook.

Her note included the following :

“... Poppi is the first one of the twins to wake up, usually gets up 6 to 6 a.m (sic). Has breakfast 9.30 to 10. Usually has two hours sleep. 2 to 2.30 has another sleep and goes back to bed around 7 p.m. Yesterday she went down at 10 a.m. Mother went up at 1 p.m. and Poppi had to be woken up. She didn't have another sleep. Went back to bed at 6.45. Poppi was not unwell, perky and acting normal. She was playing with the other kids. When she was eating her tea she seemed to be wanting to have a poo, but she was constipated. She was still having a poo, but the poo was firm. This was over the last couple of days. She sleeps in a cot in the small room on her own. Poppi wasn't eating as much, but Paul was not concerned. Mother and twin brother downstairs at 2 a.m. as he was bunged up. 5.45 a.m. heard Poppi screaming and Paul went to her bedroom. When he went in it seemed as though she was having a nightmare. She was very rigid, sat up. Paul got her out, took her into their room. She started screaming. Undone her vest. Ran his fingers around the nappy wire to loosen the nappy, as he thought she was wanting a poo. Paul left Poppi lying on the bed whilst he went downstairs for a nappy. He came back upstairs and smelt a smell, as though Poppi had a poo. Poppi was quiet, so Paul thought that she felt better after having a poo. Paul didn't change her nappy as she was quiet. After a while, he doesn't know why, but he went over to Poppi and felt her arm and she was floppy. He then ran downstairs with Poppi in his arms shouting Mother's name, shouting "Get the ambulance." Paul was in the living room on the floor with Poppi and started breathing in her mouth and using one hand to put compressions on her chest. Paul noted the time at 5.56 and Paul continued CPR until they arrived ...”

42. **PC Leanne Clark** performed a similar role to PC Blakeborough and accompanied Mother when she was questioned by Dr Braima, but she made no record of what was said in that

interview.

43. **Inspector Helen Ellis** stated that she attended the Hospital and was present during the resuscitation efforts. She said,

“I believe it was Dr Braima, myself and a nurse who entered the relatives’ room and Dr Braima informed the parents of the death. There was a moment of extreme distress and at 0710 hours I was present in the resuscitation room with Poppi’s mother when she formally identified Poppi to me.”

It was after this that Dr Braima told the witness about blood at Poppi’s anus but, she said,

“I got the impression that he was unable to say whether or not the blood near the anus was through medical intervention.”

Nevertheless, she treated the death as suspicious and identified a number of “scenes” for investigation, including the whole of the house. Before leaving the Hospital Insp. Ellis took possession of the Peppa Pig pyjama top and pink vest top which Poppi had been wearing.

44. **PC Kimberley Stokes** (formerly Harrison) was the first officer to arrive at the house. She had been told to prevent anyone going upstairs. She found Mother and the five children, still in their night clothes, downstairs. She said that on the living room floor she saw what appeared, from its shape, to be a used nappy and she saw a pink blanket with what was possibly a small blood stain, but she did not seize either item. She told me that Sgt. Cubiss attended, the children’s aunt arrived, and Mother

went to the Hospital. None of the children or adults went upstairs while she was present. She did not recall **PC Bernard McGeough** entering the house but he confirmed (in a statement which was read) that he was also present. **PC Lucy Skilling** also attended the house that morning and, after the family had all left, at about 07.50 hours, she took the body-cam footage which was shown at the inquest.

45. **DI John Carton** attended to give evidence and he told me that he attended the Hospital and was one of the officers who viewed Poppi's body in the Children's Ward with Dr Braima. He said that Poppi had no blood on her face at that time. He asked for Poppi's body to be moved to the mortuary and said that when the nurse who moved Poppi,

"held her up in her arms at a sort of vertical level ... I think gravity had played its course and a small trickle of blood had come from her nose".

He arranged for Poppi to be photographed in the mortuary by a police photographer. He explained that the house was searched and photographed on the afternoon of the 12th December 2012 and certain items were seized, including items of clothing and bed linen which appeared to be stained. **PC Samantha Silveri** stated that she searched the wheelie bin at the front of the house next to the front door, from which she retrieved three nappies and these were seized. She did not search the wheelie bin at the side of the house, where Tracy Worthington said she had earlier placed the dirty nappy she had found on the sofa next to the fireguard.

46. I heard from **Claire Benson**, a crime scene investigator with the police, who confirmed that she had taken the video footage and photographs shown at the inquest. She attended the house at 9.40 am on the 12th December 2012 and took the video footage. She later attended the Hospital and took photographs in the mortuary of Poppi and the nappy which had been placed on to Poppi in the Children's Ward. She returned to the house later that afternoon, at about 15.30 hours, when it was being searched, and took more photographs. Further, on the 26th July 2013, she was asked to photograph one of the nappies which had been seized and frozen by the police.

47. I received a review of Cumbria Police's investigation of Poppi's death from **Catherine Thundercloud**, a now retired Detective Superintendent. She had not been involved in the original investigation but had been asked to conduct a fresh inquiry after the first investigation was criticised by the High Court. She highlighted numerous errors and failings in the first investigation which Cumbria Police accept. I do not need to repeat them for the purpose of my review, save that it is relevant to note the many pieces of potentially relevant evidence which were not gathered or obtained. These included, (i) from the house - Poppi's dirty nappy from the afternoon of the 11th December 2012 and her last nappy, the bottom sheet on the double bed, Poppi's pyjama bottoms, Poppi's pink elephant pillow, the kitchen roll on the double bed, the laptop used by Paul Worthington and Mother, and the parents' mobile telephones, (ii) from the ambulance - the sheet on which Poppi was lying and any equipment (including gloves) used, (iii) from the Hospital - the sheet on which Poppi was lying in the resuscitation room, any equipment (including tubes) used, and the blanket in which she was swaddled, and (iv) from Poppi herself -

immediate arrangements were not made for swabs and samples to be taken from Poppi's body for forensic testing while she was still at the Hospital. Ms Thundercloud agreed that the importance of gathering all evidence of potential relevance is not only for the purposes of prosecution, but also because it may exonerate an individual or allay suspicion altogether.

Expert Evidence

48. **Dr Alison Armour** – Dr Armour is a Home Office accredited Consultant Pathologist who conducted a post mortem examination of Poppi on the 17th December 2012 at the Royal Children's Hospital Manchester. As it was a forensic post mortem a Paediatric Pathologist, Dr Bitetti, was also present. Dr Armour explained that the role of the Paediatric Pathologist in these circumstances is to assess the presence or absence of any natural disease process. A full body skeletal survey had been conducted by x-ray on the 14th December 2012 and Dr Armour was aware it had revealed a healing fracture of the right fibula and tibia. She said she received an oral briefing of the history from the police and was shown the photographs taken of Poppi in the mortuary at the Hospital. She was also given a piece of police intelligence regarding a previous unsubstantiated matter relating to Paul Worthington.

49. Dr Armour was asked whether she had expressed a view, before starting the post mortem, as to whether this may be a case of child abuse and she said,

"I think I would have said or the phrase might have been "in cases where there is an occult fracture or fractures" which means there is no history of any accidental trauma and it is picked up at the time of the death of the child and never before, "that this is strongly suspicious of child abuse". They would have been in relation to the fractures."

In view of the x-ray findings, the entirety of the right fibula and tibia were removed at the autopsy and were sent to Professor Freemont for his examination.

50. I do not intend to repeat all Dr Armour's findings. Those of particular relevance include the following :

External :

- The eyes and the conjunctivae were normal and she identified no petechial haemorrhages.
- There was a little liquid blood in and around the nose.
- The anus was dilated and there were possible tears at what Dr Armour described as 12 o'clock, 11 o'clock and 8/9 o'clock and two areas of what she described as flame haemorrhages at 3 o'clock with a possible tear ("flame" being descriptive of the shape).

Internal :

- There were a number of petechial haemorrhages in the forehead (a common finding).
- One petechial haemorrhage to the buccal mucosa, lower lip, left side.
- A punctate red mark to the lower lip, midline.
- Each frenulum was intact.
- A flame shaped haemorrhage/bruise 2x1cm to the posterior pharyngeal wall on the right side, a haemorrhage 0.5 cm to the posterior pharyngeal wall on the right side, and a haemorrhage/bruise 0.5 cm to the posterior pharyngeal wall on the left side.

- Two haemorrhages to the anterior of the oesophageal wall in the lower third (just above the stomach) which were 0.8 by 0.7 cm.
- Numerous blotchy petechial haemorrhages to the anterior and posterior surface of the thymus (a common finding).
- The lungs were a little blotchy and haemorrhagic.
- In the intestines there was no evidence of perforation or impacted food or hard faeces. The contents were liquid faeces (within the range of normality). No evidence of constipation.
- In addition to what was seen externally, a bruise 0.5 cm in diameter to the external anal sphincter at 12 o'clock, a bruise 0.5 by 0.1 cm at 2 o'clock, a bruise 0.1 cm in diameter at 5 o'clock, and bruising 0.4 by 0.5 cm at 7, 8 and 9 o'clock.
- An oblong bruise 2.5 x 1 cm to the right parametrium (a large bruise in relation to the size of Poppi).

Virology :

- Evidence of enterovirus RNA / Coxsackie.

Histology :

- Sections of the lungs showed peri-bronchial mild chronic inflammation with thickening of the bronchial walls (upper respiratory tract infection). The lungs were markedly congested and there was one tiny focus of acute bronchopneumonia or micro-abscess formation.
- Sections of the lungs also showed very recent intra-alveolar haemorrhage (bleeding into the lung spaces) throughout the different lobes of the lungs, estimated to be 30 % in total area.
- There was extravasation of red cells into the parametrium, with marked congestion of the parametrial and tubal blood vessels (supporting the presence of a bruise).
- Slide 71 – the 4 o'clock area of the anorectal area, showed a recent tear in the anus at approximately 6 to 7 mm from the squamocolumnar junction, the

anorectal junction. (Dr Armour stated that what distinguishes artefact from reality is that there were red blood cells found in approximation with both sides of the tear with no evidence of natural disease (chronic inflammation, ulceration, healing or repair) to account for it.)

- Slide 77 – the 10 o'clock area of the anorectal area, showed a tiny superficial tear, 1 to 2 mm from the anorectal junction.
- The histological views of the leg bone did not cause Dr Armour to disagree with Professor Freemont's view.
- The brain was histologically normal, there was no evidence of meningitis, encephalitis, cerebral oedema or ischemic hypoxic change (neuronal change relating to starvation of oxygen).

51. When asked for her opinion as to the cause of Poppi's death, Dr Armour stated as follows. There is no basis for saying this is a natural causes death. There is evidence of an infective illness but not one which could account for her death. There is no evidence of any inborn metabolic error or congenital disease. She then went on to consider her other findings, particularly those which required explanation, in more detail.

52. As far as the blood at Poppi's nose was concerned, Dr Armour said,

"This needs explanation. I know people can spontaneously bleed from the nose. To bleed spontaneously from the nose there must be an explanation. The older the child gets, the commonest would be a bit of trauma, a bang to the nose. They may have an underlying clotting disorder, they may have a viral upper respiratory tract infection and blowing their nose repeatedly. If it isn't any of those reasons, and particularly in a younger child it would be difficult to imagine that, bleeding from the nose is a sign of acute upper airways obstruction. You can see it in cases of smothering, suffocation. Now I do see blood-stained fluid, not frank blood, blood-stained fluid in

cases where I carry out autopsies when children have died in an unsafe sleeping environment and you're looking at overlaying as a possible cause of death. You can see blood-stained fluid within the nose and nostrils of those babies. But frank blood coming from the nose is a very concerning feature. As I have said, I have not seen it in cases of resuscitation."

Dr Armour reiterated that this finding can be sign of asphyxiation, and it may result from the presence in life of an upper respiratory tract infection, but in the latter case it would not occur spontaneously but would have to be associated with, for example, constant blowing of the nose or a trauma to that area. It would not be explained by resuscitation. She said that if it was frank blood, as opposed to blood stained fluid, it is difficult to explain why it was seen for the first time in the mortuary.

53. As far as the anal findings are concerned, Dr Armour stated that a dilated anus can be a post mortem phenomenon, although she had never seen it occurring spontaneously (that is, without an apparent cause) before or since. She said she was aware of the McCann paper, but noted that most of those studied had not suffered a sudden and unexpected death, which was her area of experience. She said that the flame haemorrhages and tears raise the possibility of trauma. There are other possible explanations from natural disease processes (such as haemorrhoids and pin worm), but no evidence of Poppi suffering any relevant disease. The tears could result from anal fissures caused by disease, or they could result from a foreign body passing into or out of the rectum/anus. When shown the photograph of the stool in the seized and frozen nappy, she did not consider that it would have caused the haemorrhages and tears.

54. When asked whether she found anything at autopsy which would account for the reported bleeding from the anus, she said,

“Well, I found two tears, one I appreciate is tiny, but you have to remember when I am examining histological sections, they are 2D, two dimensional, they are not three dimensional. When I looked at the sections, I did not see a tear going right from the inside into the outside, I did not see that macroscopically nor microscopically. All I can say is that tear is in that section and that is what appears in that section. I cannot say how further back it went, how further forward it went because it is a 2D section. That is the first point. There are clearly two tears identified histologically. The anorectal junction is a very vascular part of the body. In my opinion, the presence of these two tears would account for what you are describing.”

The witness said she found no other bleeding point. When asked about where blood from the tears would go, Dr Armour said that the tear at 4 o'clock was 6 to 7 millimetres from the anorectal junction. If the anus was closed it would be bleeding on the inside of the closed sphincter and,

“... it will just bleed into the rectum, that's where it will bleed. It could go up, it could go down, I can't say. It will just bleed into that cavity. Of course, if you're standing up gravity's going to take an effect. More likely than not it's going to bleed down. But if you're lying down when it happens there's no gravity, so I could see how it could go up a bit.”

Dr Armour was also asked whether the bleeding would have continued after Poppi collapsed and her circulation stopped. She said that the collapse,

“would limit the blood loss because you bleed because you have an active circulation from the heart pumping I'm not saying it [the

bleeding] stops completely, of course it doesn't, you can still have some bleeding under gravity, but it limits the blood loss".

55. In relation to the finding at the right parametrium, Dr Armour said that she does not consider that there is any non-traumatic process to account for this. She did not consider that any part of the resuscitation processes, including the femoral cannulation, could be responsible.

56. In Dr Armour's opinion, the findings at both the anorectal junction and the right parametrium were due to traumatic injury. She said that, in her view, the injuries were caused by an erect penis or a penis-shaped object. The bruise in the parametrium is explained by the penetrative object reaching that area. The absence of any significant or obvious bruising between the parametrium and the findings at the area of the anus is not of concern,

"because the rectum is a hollow viscus organ which dilates and can accommodate such an object. I have read many papers on this and it relates to living children not dead, but living, even in children younger than this, months of age, the rectum can accommodate such an object because it is a hollow viscus organ."

57. As for the findings at the pharynx and oesophagus, Dr Armour did not consider these to have been caused by resuscitation, given that Poppi was asystole and the consequential lack of circulation. She said that the findings in the pharynx could be explained by acute upper airway obstruction.

58. For the same reason she was reluctant to attribute the petechial haemorrhage in the mouth to resuscitation and said,

“Again you see these in acute upper airway obstruction but there is only one. I stress that there is only one.”

She added,

“So that it is clear to the court, the petechial haemorrhages found on the under surface of the scalp, I hold no significance to those because they are so frequent and I would not be proposing acute upper airways obstruction as a result because I see those changes so frequently in causes of death from such a range and the same to the thymus. I know that one of the other pathologists has raised the thymus --- petechial haemorrhages possibly indicating asphyxia. I don’t hold to that view because I see it so frequently. I have not relied on petechial haemorrhages to the under surface of the skull nor to the thymus. I just see them too frequently for me to give any, I should say, accurate or considered opinion as to the mechanism of death. I do not rely on them ... and there is none to the conjunctiva of the eyes and there is none to the skin of the eyes, just one, that’s it.”

59. Dr Armour stated that the bleeding in the lungs, at 30%, requires explanation. There are many potential natural diseases which may cause intra alveolar haemorrhage, none of which appeared relevant to Poppi, but acute upper airways obstruction (smothering, suffocation, over-long strangulation) was a possible cause here. The bleeding is the mechanical consequence of a lack of oxygen reaching the lungs.

60. In conclusion, Dr Armour stated that she was sure that her findings,

“...are inconsistent in my view with episodes or episode of constipation and they are in keeping with penetration by a penis or a penis shaped object into the anus/rectum of Poppi Worthington.”

61. Dr Armour raised only two potential modes of death and could think of no other. On the basis of the penetration, she said that anal

dilatation can result in a reflex cardiac arrest. There would be no pathological signs of this. Secondly, on the basis that Poppi may have been in a face-down position in the bed, with her nose and mouth occluded by a pillow or some part of the bedding, she proposed asphyxia. She said,

“The reason why I propose this mechanism is the liquid blood at the nose, the one petechial haemorrhage, and then there is a little punctate mark here which I said could be due to resuscitation, it could be due to pressure at that point, and the bleeding within the lungs. However, those are insufficient findings for me to be sure to say that this is the actual cause of death in this case. It would, however, account for the rapidity of the death. If I can't be sure, I can't say it is so.”

She added,

“In fact, smothering can produce no sign as well. In this case there are signs of asphyxia but I cannot be sure.”

She was asked whether, if Poppi had died of asphyxia, and given the presence of some petechial haemorrhages, she would also expect to have found petechial haemorrhages in the eyes, and she said, “No, not necessarily”.

62. Dr Armour said that although there were findings consistent with asphyxiation, on the basis of the pathological evidence, she could not reach this conclusion, even on the balance of probabilities. In the circumstances, the cause of death must be described as “Unascertained”.

63. In answer to questions from Ms Irving QC, Dr Armour said she disagreed completely with the suggestion that the value of the post

mortem histology was significantly undermined by the five day post mortem interval. She said,

“This is my problem with that proposition. If you are saying autolysis and Dr Cary has said every organ in the body is undergoing autolysis, where are the flame-shaped haemorrhages, haemorrhages, bruising, whatever term you want to use, in the liver, in the spleen, in the kidneys, in the adrenal glands, in the brain, on the surface of the uterus, they’re not there. I have a great problem with the proposition you’ve put to me because of the disparate sites that are involved in this case. In the case of Poppi Worthington, they are occurring at the anorectal junction, anus-rectum, whatever area you want to call it, that’s where they are. There are none further up the gastrointestinal tract. There are none in the small intestine. There are none in particular, Miss Irving, in the pancreas, which I agree is undergoing autolytic change. I could see no extravasation of red blood cells as a result of autolytic change in the pancreas. That is my problem with that hypothesis. I do agree it can happen, but there needs to be a reason for it to happen.”

When asked whether the findings could be the result of prolonged resuscitation, she said,

“Not in my view. As I say, I base that answer on my experience for the last 30 years now carrying out autopsies. I did start carrying out autopsies on children that died of other reasons before I became a forensic pathologist, and that started in Belfast. And all of these babies, without exception, are resuscitated to such a degree because it is a baby, and I have never seen whatever you want to call those areas, bruising, haemorrhage, injury to the anorectal junction, I have never seen them. I have never seen bruising like that as a result of the resuscitation process, no matter how long or prolonged it is. Never seen it.”

64. Dr Armour did agree with Ms Irving QC’s suggestion that the signs in a child who had died of asphyxia as a result of “overlying” may

well be the same as if there was a deliberate asphyxiation. There is often no difference between the two, she said.

65. Dr Armour was asked by Mr Thomas QC about her response to the opinion of Professor Freemont, who had been asked to consider the leg bones and had indicated that the fracture could have been sustained accidentally. Dr Armour had stated in a subsequent report,

“I am aware of the opinion of Professor Freemont as to the nature of this injury ... that it is accidental in nature. I strongly disagree with this opinion. I am unsure as to how he can justify this opinion from observing the histological changes at the fracture site and also from the fracture site itself proximal fibula. In my view to provide such an opinion as to the nature/cause of the injury this can only be done if [the] circumstances are provided for your assessment. I have not been provided with any account whatsoever regarding the injury to this girl. There was no admission to Hospital. There was no attendance at the general practitioner's. Therefore this is an undiagnosed fracture to a long bone diagnosed prior to autopsy and ... in my view non-accidental in nature. As a result of sustaining this injury/injuries this girl would have been in pain, her behaviour would have changed and she would have walked/crawled with a limp”.

Dr Armour was asked by Mr Thomas why she had disagreed with Professor Freemont, who had been consulted for his expert opinion, and she said,

“His expertise, sir, is ageing fractures. Full stop. Ageing them. That's his expertise, ageing them. My problem, because I know you are going to highlight it, with Professor Freemont is: how can you say a fracture is accidental or non-accidental by looking down the microscope?”

Dr Armour denied that she had also been disagreeing with Dr Sprigg (who had also been consulted about the fractures) in that she did not

have his report when she wrote her own (quoted above). She did not accept the suggestion that she had approached this case with a particular mind-set which was betrayed by what she said in relation to the fracture. She did not accept that she had lost her professionalism and objectivity. In relation to being told of the unsubstantiated allegation regarding Paul Worthington, she confirmed that she had been informed that it was completely unfounded and she denied that the information had influenced her findings. She said,

“I want to be clear to the court, that information provided by the police did not influence my opinion in any way, shape or form, sir.”

66. Dr Maria Stefania Bitetti, a Consultant Paediatric and Perinatal

Pathologist, also gave evidence to me and confirmed that her role in the post mortem examination was concerned with natural disease processes only. She said Poppi was a well-nourished child with no evidence of any metabolic disease, dysmorphic features, failure to thrive or congenital abnormality. She said Poppi had a mild viral infection which would explain her mild cold or flu-like symptoms on the 11th December 2012 but could not account for her death.

67. Dr Bitetti deferred to Dr Armour in relation to all other matters found at the post mortem. She said she had never before seen markings in the anus like those described by Dr Armour as flame haemorrhages. She denied suggesting that they had been caused by constipation. She explained that she had mentioned this possibility to Dr Armour only because the safeguarding paediatrician at the Hospital had suggested it. She said she asked the question of Dr Armour but gave no opinion

herself. Dr Bitetti added that there was no evidence of constipation at the time of death.

68. As for the reported bleeding from the anus, she said she had seen no source for the bleeding at gross examination. She agreed with Dr Armour that the cause of death should be described as "Unascertained".

69. **Dr Nathaniel Cary**, a Consultant Forensic Pathologist, also attended and gave me his opinion on all the matters found at post mortem. He had had the benefit of seeing the post mortem photographs and reports and examining the histological slides prepared subsequently. He considered that appropriate investigations had been made.

70. In relation to the anus, he said that dilation is an entirely normal post mortem phenomenon. It is not rare. Taken alone, it is not diagnostic of anal abuse. He also considered the irregularity of Poppi's anus to be normal. He agreed that there were haemorrhages at the anus and that these required explanation but said they were very thin and trivial and were not necessarily traumatic in origin. He considered that the other marks which Dr Armour considered to be bruising were congestion. He emphasised the processes of autolysis and hypostasis and that caution was needed when interpreting these findings, given the five day post death interval. As far as histology slides 71 and 77 are concerned, Dr Cary stated that he could see no convincing evidence of tears or lacerations. He clarified this by saying that what he saw was not sufficiently clear to enable him to reach a view as to whether there was or was not a tear. He agreed that if

there was a tear, it would not have resulted from post mortem changes.

71. Dr Cary was asked about the finding on the right parametrium and said he thought it was of no consequence. He said, "we often find little areas of haemorrhaging internally and they probably relate to congestion and hypostasis" and the finding was :

"entirely explicable on the basis of the post mortem interval. there is no route by which blunt trauma can have found its way into a deep structure, you would expect everything along the way to be traumatised to an extent. So you couldn't just have this as an isolated finding of trauma."

72. Dr Cary was asked whether, in autopsies he had conducted since his first involvement in this case in 2014, he had been curious to look for similar findings in the parametrium and anus. He answered that he "had an even better look", but he did not say he had ever seen similar features since.

73. In relation to the pharynx and oesophagus, Dr Cary's view was that there were clear haemorrhages in those locations. Initially, he stated,

"I find that immensely reassuring that whatever's caused it - and sometimes we don't get to the bottom of all the findings in a PM - it's not trauma because you're talking about something that's quite deep down and well away from anywhere where the trauma could be caused."

However, when he was asked whether these haemorrhages may have been caused traumatically by the use of the laryngoscope and the insertion of the ETT and NG tubes as part of resuscitation, he said,

“That’s possible. You certainly do see pharyngeal trauma in relation to resuscitation and you may see trauma – I mean, an NG tube or an orogastric tube in this case, normally they are designed not to cause mucosal haemorrhage really, but I can’t rule that out. But when I refer to trauma, I’m saying this is not trauma before death.”

Dr Cary was asked to clarify whether the haemorrhages could occur in the course of resuscitation even if Poppi was asystole, and he stated,

“Yes, exactly so, yes. I mean, good chest compressions will produce some circulation, it’s not particularly effective, but it will produce some circulation, so if you’ve traumatised blood vessels, particularly if they’re quite congestive of blood, they will then leak blood out during the course of further resuscitation.”

74. When shown the photograph taken in the mortuary of the blood at Poppi’s nose, Dr Cary said,

“That’s actually blood diluted with mucus. You can see the bubbles of mucus around the left nostril there. That, that blood looks much thinner than frank blood would look if it were that phenomenon. But in any case it’s incredibly common for bodies to purge blood and bloodstained fluid from the nose and mouth after death ... It’s of no consequence at all. Bodies purge blood from the nose and mouth, particularly as the PM interval increases.”

75. The witness said that all the findings could be explained by congestion and post mortem effect. He was asked why it is that they would be found in their specific locations, as opposed to more generally throughout the body and he said,

“I think the first thing to say is there are lots of mysteries when you have post mortem findings and all I can say is that the phenomenon concerning all these areas, the congestion, the haemorrhage, is they particularly affect the mucosa, so linings of structures such as the pharynx, the oesophagus, the anus. So it seems to be something’s causing the mucosa to bleed slightly, albeit in a state where there’s already a lot of congestion there. The findings would lend support to this being a congestive mode of death.”

76. Dr Cary was asked about the reported bleeding from the anus and agreed that it is an unusual finding which required explanation. He agreed that the only potential bleeding points are the two areas which Dr Armour has described as tears. Dr Cary questioned why bleeding from the tears had not resulted in blood loss at the house. He was asked what the source of the blood could have been if there were no tears. He suggested that multiple points in the lining mucosa, where blood vessels are congested, may have leaked some blood and then not become apparent thereafter. He said this would have to have occurred between the lower rectum and the anal margin because the liquid faeces higher up did not look blood stained.

77. As for penetration, Dr Cary had stated in his report that he could not exclude the possibility of some minimal trauma to the anal canal, for example through minor digital penetration. Had there been penile penetration, he would have expected very obvious anal and perianal injury (which he could not see). He was asked whether a smaller penetrative object, even if it had not caused tears, could have irritated the mucosal lining such as to result in the frank blood seen and he agreed that was a possibility.

78. Dr Cary said it was not possible, pathologically, to identify a mode of dying though there may have been an element of asphyxia. The

bleeding in the lungs could suggest this but after prolonged resuscitation this is no more than a neutral finding. He agreed that it is possible to have death by suffocation or asphyxia without any signs being present at autopsy, particularly if it is passive asphyxia rather than active. He suggested that an explanation for death could be co-sleeping or overlaying, in which case the cause of death would be to some extent asphyxial. He pointed out that Poppi was suffering from an active viral infection which may have weakened her ability to breathe adequately if there was some other factor going on like co-sleeping. He said,

“That’s certainly a feature I identify with co-sleeping deaths is that they often have some intercurrent viral illness. Most co-sleeping deaths end up with negative autopsies and I regard this ----it is quite a common phenomenon amongst paediatric forensic cases that you have evidence that the sleeping environment’s been unsafe, whether it’s the settee, on the floor, or something like that with another individual, usually an adult or possibly an older child next to you. And what’s thought to happen there is either there’s really passive overlaying, or inhalation of a large amount of carbon dioxide, because the bedding is largely over your head, or overheating, because you’re next to another person whose body temperature is 37 degrees centigrade and you don’t have a very good means of cooling yourself down by moving away. That’s the sort of thing I have in mind with a co-sleeping death.”

On the same topic, in answer to questions from Ms Irving QC, Dr Cary agreed that a period of five to ten minutes is far too short a time for a co-sleeping death to occur and any conclusion is very fact dependent.

79. In answer to further questions from Ms Irving QC, Dr Cary agreed that if blood or bloodstained stool was seen soon after cardiac arrest

had occurred, that would tend to lend support to there having been bleeding earlier on, as a result of something happening to Poppi in life (at home), although he emphasised that what had happened did not, necessarily, involve a third party and could have been a naturally occurring event.

80. **Dr Liina Palm** is a Consultant in Perinatal and Paediatric Pathology.

Dr Palm had also considered the post mortem evidence.

81. Dr Palm also told me that anal distension is very common after death and the shape of Poppi's anus was not unusual. When asked about the photographs of the anus she identified two haemorrhages (Dr Armour's flame haemorrhages) but she said she would not describe them as bruises, although they could have been. Rather, she attributed them to natural peri-mortem venous pooling. She was asked about histology and said that the delay in the post mortem taking place would have affected the examination particularly because of the denudation of the mucosal surface. On slides 71 and 77 she said that she could see what Dr Armour had described, but her interpretation was different. She could not identify any unequivocal tear and could not confidently rule out artefact. They were, she said, similar in appearance to many other of the slides.

82. When asked about the reported bleeding from the anus, Dr Palm said,

"I cannot possibly provide a valid comment on bleeding that occurs at around the time of death. This is a clinical question. I can only comment on the post mortem findings and in the post mortem findings and the histology slides that I have reviewed, I have seen nothing that would explain where this bleeding came from."

She said that she considered that the tears identified by Dr Armour would have been too tiny to account for the bleeding. Nor was she convinced by Dr Cary's suggestion of bleeding from a raw mucosal surface, saying that Poppi did not definitely have viral gastroenteritis and although this condition can make the mucosal surfaces more fragile and prone to bleeding, she did not consider this could be the cause of the bleeding here. She added,

"This is my problem with understanding this situation with regards to blood coming out. When somebody's in asystole, I cannot possibly see how on earth can blood come pouring out of the anus when there is no circulation going on, but this has always been a bit of a struggle for me to understand."

83. Dr Palm was asked about the parametrium marking and said that on the basis of histology she considered there was bleeding, probably traumatic in origin, although she wondered whether it had been caused by the cannulation. She said it was quite common for blood to track back from such medical intervention, although she could not recall seeing exactly this before. She said she would not remember because, to her, the finding is of no relevance.

84. In the pharynx Dr Palm identified three areas of haemorrhage and suggested they were resuscitation related because nasopharyngeal and endotracheal tubes go through this area. She said this could have been the cause, even if Poppi had been in asystole throughout. Although she said that the findings in the oesophagus were probably post mortem changes she agreed that, given their position, they could

have been caused by the insertion of a naso-gastric tube via the mouth.

85. Dr Palm told me that the bleeding in the lungs is an extremely common finding in children who die suddenly and unexpectedly. It is just a terminal change. It can be seen in acute cardiac arrests, in acute respiratory arrest, in anything that stops the circulation quite rapidly. In the thymus the witness identified small cortical haemorrhages which would be in keeping with an asphyxiation pattern, but are commonly seen in many deaths, including from natural causes.

86. In relation to the issue of penetration, she said that based on the post mortem findings only, there is not enough evidence to support this finding. But it may have occurred. If it did, the witness suggested that the penetrative object may have been something smaller than an adult penis.

87. In Dr Palm's opinion the cause of death was "Unascertained".

88. **Dr Stephen Leadbeatter**, who is a Home Office accredited Forensic Pathologist, provided his opinion to the inquest. Unlike the other pathologists, Dr Leadbeatter said that there is an advantage in being the first pathologist who conducts the post mortem examination and that "images are never quite the same as seeing the actual body and what is removed from it".

89. On the basis of the post mortem photographs, he said he would have described the marks seen on Poppi's anus to the right side (described as at 3 o'clock by Dr Armour) as flame haemorrhages. He said they required explanation. They were due either to trauma or post mortem

change but he would not be comfortable with the latter explanation for such discrete haemorrhage. In answer to questions he said that the haemorrhages were not attributable to post mortem changes and he could find no cause other than trauma. The marks were consistent with a hard object passing either in to or out of Poppi's anus. He was more cautious about attributing a cause to the other markings seen in the area.

90. Dr Leadbeatter had viewed histological slides 71 and 77 and said that he could see the discontinuity referred to but he could not persuade himself that they showed genuine ante mortem tears or splits rather than artefacts. However, when discussing the reported bleeding he did say,

"I would certainly be concerned if someone described to me blood "dribbling" from a child's anus so close to the point of death because that would indicate to me that there has to be a point of bleeding ... Dr Armour and Dr Bitetti say that they saw no other bleeding point, and if that is accepted, that there was no other bleeding point, then that would suggest that what Dr Armour has described as "tears", if the bleeding descriptions themselves are accepted, may be the source of that bleeding, or were the source of that bleeding if no other point has been found."

91. Dr Leadbeatter agreed that something had happened to Poppi in life to cause the bleeding. He said that he had not seen in the literature any description of bleeding coming from the anus because of the presence of coxsackie A6 virus but it might be that diarrhoea and the movement of more liquid faeces over this area might make that area more sensitive to injury through a general softening. A hard constipated stool coming out might also create local injury which might result in bleeding.

92. The witness described the mark seen on the right parametrium as an area of “discolouration” and said he was not comfortable describing it as a bruise because one can see very prominent congested blood vessels. This was his view on the basis of the photographs and the histology. He said that it was not something that he had seen before or since and was not something that the literature draws one’s attention to and he did not therefore know what it means. He could not say that it was not traumatic in origin. He added,

“The only thing that I have seen where blood came close to the parametrium was when there was clear continuity of that blood down to where a needle had been placed during attempted resuscitation and that death occurred several days after the resuscitation had been initially successful.”

93. When asked to consider the above findings, and Dr Armour’s opinion that they were evidence of penetration, as a whole, Dr Leadbeatter stated,

“When one views those findings in that area as a whole then, yes, they raise concern, but the view I have taken is that I cannot from the pathological evidence that I have seen persuade myself that there has been genuine ante mortem penetrative injury ... Because I could not persuade myself of whether what I saw in the context that I am seeing this, in images and not from the original post mortem examination, was sufficient for me to describe each of those findings as genuine ante mortem injury.”

94. When asked about the photographs of the pharynx, Dr Leadbeatter said,

"I'd describe it as areas of haemorrhage, but I'm conscious that in this area there are two potential explanations for haemorrhage. Attempted resuscitation is an area of - is an area in which one may see haemorrhages in this general area, but one may also see artefactual haemorrhage from the dissection and for those reasons I'd be uncomfortable again in saying that this is genuine ante mortem injury."

By way of clarification he said that when referring to resuscitation he had in mind "introducing something into this area". He said the introduction of the ETT and NG tubes was a possible explanation, even though Poppi was asystole, because there is always some blood going to be moving during CPR.

95. He said that he would not attribute any significance to the findings in the oesophagus "given that this is occurring in removal of the oesophagus from an area where again there seems to be vascular congestion", although he added that the findings may have been caused by the insertion of a tube, if the tube had gone down and there had been some movement of the oesophagus.

96. In relation to the bleeding in the lungs, Dr Leadbeatter said that it may be associated with asphyxia but,

"...there is work coming from some authors to say that we see intra alveolar haemorrhage or pulmonary haemorrhage, as they refer to it, in infant deaths whatever the cause, be they sudden infant death or accidental or inflicted suffocation, so it is not a marker in itself that takes you to the cause of death being suffocation."

97. The witness agreed with Dr Armour's evidence in relation to the petechial haemorrhages and, in relation to the blood at Poppi's nose, he said,

“I mean, what I take this to be is what is referred to in the literature as oronasal blood and it is one of those things that again may raise a suspicion of there having been obstruction of the airway as an operative factor in death, so one of the things that the literature says if you have pulmonary haemorrhage, then you should look for other markers that might suggest the occurrence of obstruction of the airway prior to death in the context of accidental or inflicted suffocation but my understanding of that literature is that it actually places more significance on the presence of such oronasal blood before there having been attempted resuscitation rather than its finding after resuscitation and for those reasons, I don’t attach any more significance to the presence of this blood than I did to the intra alveolar haemorrhage.”

98. When asked about the findings associated with asphyxia as a whole, the witness said,

“I think that there is a constellation of findings, one may say the posterior pharyngeal haemorrhages, the intra alveolar haemorrhage and the blood at the nose, that might say consider an asphyxia mode of death but for the reasons I have given that it is not such a clear steer to say you have these findings, that’s what it is, given that one can see the intra alveolar haemorrhage in deaths where it is not considered to be suffocation, given that one can - given that the oronasal blood, to which one’s attention was drawn, is said, as I understand the literature, to be more significant if it is there before resuscitation rather than after, and given that one can never be sure that pharyngeal or haemorrhages within the neck could not be either a consequence of attempted resuscitation or a dissection artefact, then it is for those reasons that I would say while suffocation might be a possibility, I would not go so far as to say that that was what had caused this death.”

99. Finally, Dr Leadbeatter said that there were features of possible non-natural death but he took the view that he did not know what the cause of death was and that he therefore considered that it should be termed “Unascertained”. He added that even if it were established

that penetration had taken place, there is no pathological evidence of injury sufficient to amount to an anatomical disturbance that would result in death.

100. I received evidence of additional scientific testing. I need refer to it only briefly. As stated above, **Professor A J Freemont**, a Professor of Osteoarticular Pathology, considered samples of the leg bones. He concluded that Poppi sustained a fracture of the mid-shaft of the fibula many weeks, possibly months, before death and the injury could have been accidental and is entirely unrelated to her death. **Dr Alan Sprigg**, a Consultant Paediatric Radiologist, gave further views but did not disagree with Professor Freemont.

101. **Michael Scarborough**, who is a Forensic Scientist, conducted a series of tests of items for Poppi's DNA. One test showed Poppi's DNA to be on the shaft of Paul Worthington's penis but it was made plain that he would have had Poppi's DNA on his hands from the CPR and it could have been transferred to his penis when he urinated. I do not, therefore, consider that this assists me at all.

102. Mr Scarborough also tested a 'Little Angels' nappy recovered from the wheelie bin to the right of the front door of the house and seized by PC Silveri. DNA matching Poppi's was found on the nappy. This nappy contained faecal matter and urine, but no blood.

103. In addition to the pathologists, I also received evidence from two Forensic Physicians. The first was **Dr Judith Evans**, a now retired Forensic Physician with a specialism in sexual abuse. Her experience was from the clinical assessment of patients, most particularly

complainants of sexual assault, male and female, adult and child, usually at the request of police or social services. Over the years she had seen hundreds of children referred to her either because sexual assault was suspected or because of concern about the anal area.

104. She said she was aware of the literature reporting findings of dilated anus post mortem, even in cases of no known sexual abuse. She agreed that the finding is not diagnostic of sexual abuse. As for the irregular appearance of Poppi's anus, she said she could understand why it had been described in that way but, certainly in the living, the anus always looks a bit irregular when we see dilatation of both sphincters.

105. Dr Evans was asked to comment on the post mortem findings relating to the anus and parametrium. She said that if they showed bruises and tears, she considered they may have a common cause and she referred to a young child she had examined who had had bleeding in her nappy. She said,

“In a live complainant, of course, you would not have a means of knowing necessarily about either the tears or the parametrium bruise if they were there. You wouldn't be able to tell that just from looking at them from the outside. However, I have seen internal bruising when we have taken a child to theatre with my colleagues and have been trying to understand what's happened to - you know, we're doing an examination under anaesthetic and we're trying to find out what's happened to a child. I've only seen that once, but I have seen that and that - and the explanation we thought for that at that time was that a - I will call it a penis sized object, because we didn't know whether it was a penis or it could have been two or three fingers, I don't know, or some other object - had actually stretch - because obviously the rectum is distensible, it gets bigger as it fills up with faeces, with stool, so that when the object was put inside the rectum it

stretched it sufficiently to then come into contact with the parametrium and that's what caused the bruising. Now, I mean, we weren't there when it happened so we don't know exactly what happened, but that was the explanation which we thought made - you know, explained the findings."

Dr Evans stated,

"I think if the court were to accept Dr Armour's evidence then what I would say is that that pattern of injury is consistent with penetration through the anus into the rectum with a penis sized object."

In answer to a question from Ms Irving QC, Dr Evans stated that the words "penis sized object" would include two or three adult digits. She considered that a large bulky stool could explain the tears, although tears from constipation are usually found at 12 o'clock and 6 o'clock, but she could not think how it could cause a bruise to the parametrium, and bruising at the anus would be explained by an object entering, rather than leaving, the body.

106. Dr Evans did not accept the suggestion that greater injury would be expected if there had been penetration. She said,

"My view would be that it is likely if you had penetration with penis-sized object through the anus in a young child - and let's say a child of Poppi's age - it -- it's likely that you would get injury. However, the extent and the degree of the injury can vary and it can vary hugely from something which is quite minor to something which is so major that you're going to take the child straight to the operating theatre. So -- but I don't believe that we can say -- we know that in children there can -- who are verbal, that you can have penile anal penetration, or penetration with a penis-sized object, and there be no positive findings at all."

She made the point that children will usually be brought to her and Dr Aziz because injuries are seen and so they cannot know how many

penetrations may take place leaving no or minor injury. Dr Evans said that it was her view that anal penetration can take place in a 13-month old without causing injuries any greater than those described by Dr Armour.

107. **Dr Victoria Aziz** is a Forensic Physician who has extensive experience of examination clinically of those suspected of having suffered sexual abuse. She explained that in order to reach a view as to whether abuse had taken place, she is interested in physical signs and symptoms and the history and circumstantial evidence.

108. Dr Aziz was not satisfied that there was evidence of penile penetration. In explaining her view, she said,

“From the literature the average penis size is 25 to 45 millimetres diameter. ... we all know that anal penetration of - from four, five upwards, quite often has no injuries or very mild ones, congestion and swelling. The children under two or 18 [months], even when I try to put my finger, ... I have to do it such a gentleness because it's very narrow. It's not - although it is distensible, and that is why there is no injuries in older one, it's very distensible but under three it's - the diameter is very small and can - up to certain point and there is no way 25 or 45 millimetres shape enters without distending and tearing the area that it is entering as it happens in the hymen or anus. It causes severe pain obviously. It tears the area and may tear anyway. Six o'clock, eight o'clock, nine o'clock, and when the penis comes out, then the bleeding starts. Now, as well as when it came, you can see bruising straight away and you see the swelling, congestion. This is how acute cases of entrance penetration happens with the injuries and I have never - I have seen a lot of children with penetrative trauma but never seen just 0.2 or 0.5 centimetre tears. It goes inside from anal ridge inside because it continues shading the tissue.”

109. When asked about digital penetration the witness said,

“Well again, digital, yes, for example if you go a digit and extend it to the anal area, verge, anal verge, which you causing that streaks of tear, you will still have swelling and bruising, but in casualty this would not report it. And that digit may cause - especially if you with force introduce and cause those splits. And I’ve seen in my experience in examination digital penetrations which we’ve seen the splits, yes, but with swelling, redness, bruises.”

In answer though to specific questions from me, Dr Aziz said that with forceful digital penetration she would expect to see “splits and tears and bleeding”, but not severe, just local, with the bleeding usually stopping.

110. Dr Aziz thought it significant that no blood was found at the house. She said that she could not explain the reported bleeding.

General Comments

111. Before coming to my consideration of the evidence and findings, there are a number of general comments I wish to make in relation to the witnesses and their evidence.

112. First, subject only to my further comments below, I have found that the witnesses who attended and gave evidence did so honestly and sought to assist my inquiry. I am conscious that they have given evidence to me about matters which occurred five years ago and about which many of them have given evidence before.

113. As far as Paul Worthington is concerned, as stated above, for the majority of the time he was giving evidence he exercised his rights

under Rule 22. As a result it was difficult to assess his overall demeanour and his honesty. I did watch him closely during the course of questioning. He responded physically in a number of ways, and on one occasion was visibly upset and the hearing was paused for a while. In my experience people are predisposed to answer questions and when they do not do so over a prolonged period of time they are often embarrassed and behave awkwardly. In these circumstances, I concluded that I could not form any reliable view as to his honesty on the basis of his performance in the witness box. Therefore, apart from those questions he did choose to answer, I must rely on, and assess, what he has said elsewhere (and I shall return to this below).

114. As for Dr Armour, I have noted and considered the suggestion put to her, on behalf of Paul Worthington, that she pre-judged matters and has lost objectivity. Dr Armour agreed that, at the start of the post mortem examination, she made reference to child abuse and explained that this was in the context of the skeletal survey having revealed a previously unreported fracture. Her opinion was that in the case of an infant who could not yet walk, an unreported and untreated leg fracture which only became apparent at autopsy, was evidence that it was non-accidental. She based this on her experience and the literature. Dr Armour resisted Professor Freemont's position because she interpreted his evidence as being that the fracture was accidental and she did not consider he could form this view on pathology alone. The professor's opinion was, in fact, more nuanced but I am satisfied that Dr Armour's response must be seen in this context. Dr Armour was also challenged about her replies to a question by the CPS, which was, "Will the anus remain open on

death simply as a result of someone dying.” Her reply was “No”. It was a poor question, as it is not suggested that Poppi’s anus was “open” prior to death. Dr Armour’s own experience is that she has not seen gaping anuses in infants after death. Her comments, whilst robust, are not outside the bounds of reasonable medical opinion and, in my view, do not undermine her credibility as an expert witness.

115. Dr Armour stated, in the clearest terms, that neither her comment prior to the autopsy, nor the opinions she has subsequently expressed, have been affected by the unsubstantiated allegation against Mr Worthington about which she was told by the police. I do not consider there is any proper basis for the suggestion that she has lost objectivity. It is correct that some, though certainly not all, of her views are unsupported by her colleagues but that cannot, in itself, be evidence of a loss of professionalism. It is of the very nature of a difference of opinion amongst experts. Dr Armour has attended court and fully and clearly answered all the questions put to her in order to explain her opinions. Whether I accept her views or not will be a matter for me, but I have seen no evidence to suggest, or proper basis for suspecting, that she has expressed or maintained any view for any unprofessional reason. All the experts are agreed that this is a difficult case and I consider that they have all approached their evidence in an objective and professional manner, doing their best to assist me.

116. I will now comment on the evidence we do not have. In my review of the evidence I highlighted the potentially relevant evidence which was not gathered or obtained in this matter. I cannot know what such evidence may or may not have revealed, if anything. I

have made it plain that I must not and will not speculate about what it would have revealed. The “missing” evidence does not assist me at all, therefore, and I intend to reach my findings solely on the basis of the evidence I do have before me. On behalf of Paul Worthington a legal submission was made that, in reliance upon the case of *Amory v Delamirie* (1722) 1 Strange 50, I must go further and presume that, had the evidence been gathered or obtained, it would have shown that he did not commit a sexual assault. I do not accept that I am bound to make such a presumption. These are not adversarial proceedings; rather, I am conducting an inquiry in order to ascertain certain facts about Poppi, most particularly how she came by her death, and I must do so without presumption of facts and speculation.

117. Finally, for the avoidance of doubt, I have placed no reliance on the fact of, or evidence concerning, the earlier fracture to Poppi’s leg. I accept the evidence of Professor Freemont and Dr Sprigg. Given that it may have been caused accidentally and has played no part in causing her death, I do not consider that it assists me at all in determining how she died.

Findings of Fact

118. I will now turn to my consideration of the evidence and my findings of fact. Save where otherwise indicated, I have reached my findings on the balance of probabilities.

119. I find that Poppi Iris Worthington was born on the 20th October 2011 in Barrow in Furness. Throughout her short life she was

generally in good and robust health. She was an active and sociable 13 month old toddler who ate and slept well. She was the first in the family to wake, usually at about 6.00 am (Mother refers to a timeframe of 5.30 am to 6.00am) and once awake she was ready to get up. By December 2012 it was usual for her father, who slept in the room next to her, to go to her when she woke and to take her downstairs for a nappy change and breakfast, before her sisters and brothers awoke. She generally drew attention by rattling her bottle on the side of the cot.

120. On the 11th December 2012 Poppi was mildly unwell. In the morning she was up with her father as normal but she was snuffly, she slept for longer than usual when she had her morning nap, and she was warm when she woke up. She had some appetite and in the course of the afternoon and early evening she ate some food at lunch and teatime. At some point after lunch Poppi had diarrhoea and produced loose, foul-smelling faeces. When she died she was found to be infected by a virus. I find that all the children had suffered from a bug, in all probability that which was isolated in her at post mortem. It is a common childhood virus and normally self-limiting. The other children, including her twin, who was not as robust, were affected for a short time before it resolved. This virus was not something which caused, or medically contributed to her death, but it probably explains her discomfort seen on the 11th December 2012 in her high chair, and the pungent stools produced at that time, and in Poppi's last nappy which was put in the wheelie bin by Tracy Worthington.

121. After her nappy was changed on the afternoon of the 11th December, I find, by Mother, Poppi appeared to be fine and she was playing and socialising with those present in the house. I find that, although Poppi suffered variable bowel movements from time to time, she was not constipated or producing rabbit-dropping like stools at any time on the 11th December 2012. With regard to constipation I am satisfied that Poppi did on occasion pass hard stools to the extent that Mother did mention it to the Health Visitor. However, she never sought medical advice beyond this and there appears to be no reference to it in Poppi's medical notes. I find that Poppi did not suffer from a form of constipation, chronic or otherwise, which was a significant problem. Rather she did have variable stools, depending on the state of her health, diet and fluid intake. I am satisfied that there was one incident of a small amount of blood being seen in the summer of 2012, which may have been following a hard stool, and that father was aware of that incident. In particular, I find that Poppi was not prone to "rabbit dropping" like stools.

122. Poppi was put to bed for the night, in her cot, by Mother at about 7.30 pm. She was wearing a clean nappy. She had been dressed for bed by Mother in a pink popper vest which fastened between the legs, a Peppa Pig pyjama top and pyjama bottoms. Poppi went to bed with a bottle of milk which was placed in her cot. There is a lack of clarity as to whether she also had a bottle of juice. Also in her cot were her blankets and her pink elephant pillow, her comforter, which I find was always kept in her cot, and on which she liked to lie when sleeping. Poppi remained asleep in her cot until, at least, when Mother last checked her which was at some time prior to about 2.30 am. When checked, Poppi was alone in her bedroom, in her cot. She

was alive and asleep. Paul Worthington was in the double bedroom next door and Mother went downstairs to sleep on the sofa. She had intended to sleep in the double bed but had to be near S6 who she took downstairs so he could sleep in his buggy.

123. I accept Mother's evidence that she was awoken by a loud scream from Poppi, that she heard Paul Worthington walking on the noisy floorboards in the double bedroom, and that she believed that he was going to Poppi and so she went back to sleep. She was awoken for a second time when Paul Worthington came downstairs saying he was getting a clean nappy for Poppi and that she then went back to sleep. And I find that Mother was awoken for a third time when Paul Worthington brought Poppi downstairs in a collapsed state.

124. When Poppi was brought downstairs she was not breathing and Paul Worthington started to perform CPR. Mother telephoned for an ambulance at 5.56 am. The ambulance arrived at 6.06 am. Nicola Lynn, an experienced paramedic, scooped Poppi up. I am satisfied that she was in asystole and then already dead. CPR continued on the short journey to the Hospital. I find Ms Lynn to be a clear and accurate witness. Whilst this was a stressful incident, it was part of her job and completing the Patient Record Form was a matter of normal procedure. I find that there was blood on the ambulance sheet, that Ms Lynn did subsequently see blood on Poppi's bottom and that, when asked about it, Paul Worthington did say Poppi had been passing rabbit dropping type stools.

125. Resuscitation was continued at the Hospital until 7.07 am, when Poppi's death was pronounced. She was in asystole throughout. The resuscitation processes included the use of a laryngoscope for the introduction of an endotracheal tube (twice) and a stiffened nasogastric tube via the mouth. There was intense activity to try to revive Poppi and this involved some ten professionals. At post mortem, areas of what I find to be haemorrhage were found in the discrete areas of the pharynx and the oesophagus. These findings require explanation. It has been postulated that they were due to post mortem change over the time between the death and the autopsy. No such similar changes were reported to have been found elsewhere. These haemorrhages were found in areas where there had been direct medical intervention with equipment. It required two attempts with a laryngoscope to place the endotracheal tube, and then a tube to attempt to deflate the stomach was introduced. This tube will have passed down the oesophagus. These interventions all took place in the busy and stressed atmosphere of the resuscitation, and I am satisfied that these post mortem findings have been caused by the medical interventions, although some post mortem congestion may also have gathered around the sites of the insults subsequently. Although the process of inserting tubes is routine, Dr Ajai recognised a risk of bruising and, in my view, it is significant that there were ten or so professionals working around Poppi's small body for nearly an hour. Dr Armour was concerned that the injuries could not be caused by resuscitation given Poppi's lack of circulation, but the other pathologists considered that the effect of the CPR would be sufficient for this purpose, and I accept their views in this regard.

126. I am satisfied, and I find, that there was bleeding from Poppi's anus. Nurse McQuistan, who had carried Poppi to the resuscitation table, saw frank blood and in the subsequent examination by Dr Braima she saw so much blood that she could not visualise the anus. I find that she was a clear and truthful witness. I accept the evidence of Dr Braima who described seeing blood dribbling from her anus in the Emergency Department and when he examined Poppi five hours later in the presence of the Police. It is clear from DI Carton's evidence that by that time Poppi had been cleaned (which should not have happened) but there was some blood on the fresh nappy (which was photographed) as well as frank blood appearing from her anus.

127. I find that Poppi had sufficient blood inside her to stain two sheets, to obscure her anus and to be dribbling out in the Emergency Department, then to stain a fresh nappy even after cleaning, and to be dribbling out still some hours later. I find that a reservoir of blood had built up in Poppi's rectum before she died and that the quantity of blood, first seen in the ambulance, cannot be explained by the dying process, by CPR or other resuscitation, or by post mortem changes.

128. In reaching these findings I have not relied upon the evidence suggesting that Paul Worthington had made some reference to the paramedic about seeing blood in Poppi's nappy. Nurse McQuistan was an entirely truthful witness but she did not include in her almost contemporaneous written account any reference to the exchange she later recalled between herself, Ms Lynn and Mr Worthington. I believe she may be conflating this with the paramedic's report about there being blood on the ambulance sheet. Ms Lynn, I believe, would have

recorded this conversation on the Patient Record Form if it had taken place.

129. As far as the other post mortem findings are concerned, I find that Poppi's anus was dilated but that this is a recognised post mortem phenomenon (although the personal experience of the pathologists may vary). I have, therefore, placed no significance on this finding. The same is true of the anus' irregular appearance.
130. Dr Armour found evidence of several haemorrhages in the anorectal area, and in particular the "flame" haemorrhages to the right at 3 o'clock, together with a haemorrhage in the right parametrium, all of which she considered to be traumatic in origin. Dr Leadbeatter agreed that the flame haemorrhages were traumatic in origin and Dr Palm agreed that the mark on the parametrium was a bruise. Apart from this, broadly the other pathologists favoured, or could not rule out, the findings being the result of autolysis and post mortem changes. My concern about this latter explanation is two-fold. First, the findings are agreed to be unusual and I would expect them to be common place if they were the result of the inevitable process of autolysis, especially given that a five day interval between death and post mortem is not unusual. If these findings were common at autopsy I would have expected the pathologists to have seen similar before or since. None has. Given the nature and history of Poppi's case this is something I would have expected them to look for, out of professional and intellectual curiosity at the very least. Secondly, the haemorrhages identified are in specific, discrete locations and do not appear to be part of a wider picture of similar haemorrhages elsewhere. If the change to the right parametrium was post mortem

one might expect the mirror image to the left to be similarly affected. It is not. Although Dr Cary was initially “re-assured” by the haemorrhages in the pharynx and oesophagus as evidence of wide spread post mortem changes, he then accepted that they too could have been traumatic in origin (albeit from medical intervention). In relation to these findings, I accept the evidence of Dr Armour and I find that the haemorrhages identified in the anorectal area and the right parametrium were caused traumatically. It is not insignificant, in my view, that in at least one case, if not both, the flame haemorrhages appear to be on a “ridge” or prominent fold on the anus and thus likely to be in contact with something passing through.

131. In considering whether Dr Armour is correct about the existence of the tears, I have borne in mind that a significant amount of frank blood came from Poppi’s anus in the hours following her death. The tears are the only potential bleeding points which have been identified. It is clear that the tears are in the area from which the blood must have come (because the faeces seen higher up the rectum are not blood stained). It is broadly agreed that the tears are capable of producing the quantity of blood reported. I do not reject Dr Cary’s suggestion that there may have been some mucosal haemorrhage because of Poppi’s diarrhoea, but I do not consider that it could, alone, have accounted for the quantity and timing of the frank bleeding. The pathologists were agreed that if the tears existed, they were traumatic in origin. I find that the tears did exist, that they were caused by a trauma, and that they were the source of the bleeding. Whilst respecting the opinions of the pathologists who were reluctant to interpret the finding as other than an artefact, tears are

the only explanation for the quantity and location of the blood which was seen.

132. It is my clear view that the fresh bleeding from Poppi's anus, seen in the ambulance and at the Hospital, resulted from trauma to her anus and rectum at some point in the period between her being taken from her cot and her death. There is no evidence of any object leaving Poppi's body which could have caused this damage. I find that the bruising to Poppi's anorectal area and parametrium, and the tears which resulted in the bleeding, were all caused by anal penetration. Dr Armour stated that the bruise in the parametrium is explained by the penetrative object reaching that area and the absence of any significant or obvious bruising between the parametrium and the findings at the area of the anus is not of concern, because the rectum is a hollow viscus organ which dilates and can accommodate such an object. I accept that evidence and I found Dr Evans' evidence, particularly her reference to the young child who had been found, clinically, to have similar injuries, of support for this finding.

133. Although I find that the principal source of the bleeding must have been the tears, it is possible that the penetration also irritated the mucosal lining of the rectum, which may have been vulnerable because of Poppi's diarrhoea, as Dr Cary suggests.

134. I do not accept Dr Aziz' suggestion that there would, inevitably, have been a greater degree of injury if penetration had taken place. Dr Evans, whose evidence I prefer, suggested otherwise and it is noteworthy that all the pathologists indicated that they could not exclude the possibility of penetration. It may well be that the injuries

found in Poppi suggest digital rather than penile penetration, but it is, nevertheless, penetration which has caused the bruising, tears and bleeding. Evidence given orally was that the gaping anus seen in the photographs was 1 to 2 centimetres in diameter. The pathologist's finger can also be seen. I find that this child's anus could accommodate adult digital penetration albeit with some consequential stretching and damage. It was stated that it was a matter of centimetres from the anus of a small child to the parametrium. I am satisfied that an adult male finger is long enough to reach and cause bruising to the delicate parametrial tissue through the wall of the rectum. I find that the rectum is a tough muscular organ and that the absence of marks to it does not prevent the transmission of force through it to adjacent tissue.

135. As already stated, the evidence suggests that a relatively significant quantity of blood came from Poppi's anus after her death. It is clear to me that there must have been a period of bleeding in life to account for this. Dr Armour explained that as bleeding is dependent on a circulation, bleeding will diminish post death, even if there is resuscitation. I therefore conclude, and find, that Poppi probably did not die in the course of or immediately after the penetration. The penetration having created the bleeding points, there must then have been a period of life during which bleeding occurred. Dr Armour said that the tear at 4 o'clock was 6 to 7 millimetres from the anorectal junction. If the anus was closed it would be bleeding on the inside of the closed sphincter and, "it will just bleed into the rectum." I find that after the penetration had taken place, Poppi was lying on the bed and she bled into the rectal canal, thereby creating the reservoir of blood which started to dribble out when her

subsequent death caused her anus to start to lose tone and dilate. It would appear this first occurred when she was in the ambulance. This explains why no blood or even faeces was seen on the sofa or living room floor of the house, even though Poppi's nappy was removed when CPR was commenced there.

136. I now turn to what happened to Poppi at home, prior to her death. The precise time at which Poppi was taken from her cot is not apparent from the evidence. On the basis of Mother's evidence, I accept that she checked Poppi prior to about 2.30 am and that she telephoned for the ambulance at 5.56 am, shortly after Poppi was brought downstairs. However, the precise times at which Mother was awoken for the first and second times are not apparent. In her first account she said that she dropped off to sleep at around 2 am and that it was "not long after I'd gone to sleep" that Paul Worthington came down for the nappy, saying that Poppi was still tired and he was going to lie her next to him. Mother did not see a clock at any point.

137. Only Paul Worthington can provide an account of what happened upstairs between about 2.30 am and 5.56 am. All his accounts suggest that at some point he took Poppi from her cot and into his bedroom and placed her onto or into his double bed, that at some point he removed her pyjama bottoms and undid the poppers on her vest, that at some point she defecated, and that at some point she stopped breathing. I find that these events did occur. Clearly, however, these findings do not reflect everything that happened after Poppi was taken from her cot. I have considered Paul Worthington's accounts to see whether I can obtain from his evidence a complete and reliable

explanation of what happened. As I have already indicated, this is problematic because his accounts differ and they raise concerning questions which have not been addressed. As he answered so few questions when giving evidence to me, I was unable to form a view as to his general honesty and credibility. But for the reasons I have already given, I have concluded that whilst parts of his previous accounts may be true, I cannot rely upon any one of them as providing a complete and truthful history of what took place between his taking Poppi from her cot and her death.

138. The time at which Poppi was taken from her cot is of importance. This is a matter about which Mr Worthington's previous evidence raises questions. In his first account to the police on the 12th December 2012 he stated that Poppi awoke shortly before 5.45 am and was "due up in 15 minutes", but he did not explain why he did not, therefore, take her downstairs for her nappy change in the usual way. In contrast, in his statement of December 2013 Mr Worthington described Poppi as waking "nearly an hour early". I consider and find that it is likely that Poppi was taken from her cot earlier than 5.45 am, and more than the suggested 11 minutes before her collapse.

139. Paul Worthington's accounts of what then took place do not stand up to scrutiny. Poppi was a child of routine. She was the family alarm clock, waking at between 5.30 to 6 am daily. If she had woken as Mr Worthington suggests this would have been normal. He would then, as normal, have taken her downstairs for a nappy change if needed, and as normal given her breakfast. She would, as normal, have been away from the other children so as not to wake them prematurely. If she had been upset, by reason of a nightmare or

feeling unwell, that would have been all the more reason to take her downstairs, possibly to have some assistance from Mother. It would not have been necessary to remove her pyjama bottoms or undo the vest poppers to establish whether she had defecated or help her do so. Given the nature of the faeces in her last nappy, as described, it would have been obvious. I do not believe he built what might be described as a “channel” at the side of the double bed in which to place Poppi whilst he collected a fresh nappy from downstairs. Apart from that being a departure from normal routine, it would have taken longer than him simply taking her downstairs with him. Placing her sideways on the bed would have been dangerous, particularly for a distressed infant who would have found herself in the dark, in an unfamiliar situation. She was active and mobile and with two pushes with her feet she could have fallen off the bed directly on to her head. I consider that it is also not credible that on returning upstairs he would simply lie down in bed with Poppi in that position. It was December, she was a little unwell and he had removed her pyjama bottoms. Without bed clothes she would have been cold. He would have covered her with something to keep warm, particularly if he had in mind that she might lay there for some time. Further, on the accounts given, there is no explanation for the baby’s bottle on the bedside cabinet, or the leaking baby’s bottle on the bed in the place he says he placed Poppi and she had been laying. I note that when the police attended that morning, the bottle and damp patch on the sheet were covered from view by the duvet which had been pulled up to the pillow. The accounts do not explain when or why the pink elephant pillow, which lived in Poppi’s cot, was moved to the double bed.

140. Looking at all the evidence, I have concluded that the broad sequence of events is probably as follows. At some time after 2.30 am Poppi was taken from her cot into the double bedroom and placed in or on the double bed, probably with her dummy and bottle. Her pyjama bottoms and nappy were removed and she was anally penetrated, probably digitally. As a result, Poppi cried out loudly and this probably brought the penetration to an end. The floor boards of the double bedroom were heard by Mother to creak at this time. I find that father brought Poppi's pink elephant pillow in to his bedroom at some point and it may be that it was at this time, but it is not possible to ascertain this from the evidence. In any event, Poppi was placed back in to her nappy, but not her pyjama bottoms, and the poppers on her vest were not re-fastened. The penetration caused bruising to the anus and parametrium and tears to the rectal canal. Poppi bled from the tears, and possibly the irritated mucosal layer, causing a quantity of blood to build up in her rectal canal.

141. I find that after the penetration the bedclothes were placed over Poppi and, given that no further noise was heard from her by Mother, that she went to sleep. I find that Poppi and her father both went to sleep beside each other for some significant period of time, with Poppi in such a position that her breathing was compromised, either due to the position of the bedclothes, her position within the bed or overlaying, or a combination of all three. I find that she was in an unsafe sleeping environment. Her viral infection would, in all probability, also have compromised her ability to breathe freely. At some point she defecated but I am not able to ascertain precisely when. Nor am I able to ascertain precisely when father went downstairs saying that he was collecting a nappy, but I find that he

did do so at some point. In any event, when father awoke he discovered that Poppi was no longer breathing and, shortly before 5.56 am, he took her downstairs in an unresponsive state. I find that, in fact, she was dead at that point.

142. **The Cause of Death.** All the pathologists have given the cause of death as "Unascertained". They are not, on the basis of the pathological evidence, able to provide a cause of death. I, as Coroner, must look at the totality of the evidence and take account of my findings as to what happened. I am satisfied that whilst in the unsafe sleeping environment described above, Poppi's ability to breathe was compromised. The post mortem findings included changes which are found in cases of asphyxia. These include the findings in Poppi's lungs, the bleeding from her nose, and the petechial haemorrhage on her lip. It is clear that these findings can be present where a child has died of a cause other than asphyxia and they are not, in and of themselves, individually or cumulative, diagnostic of asphyxia as the cause of death. However, it is also important to note that a child can die an asphyxial death without there being any signs at post mortem at all. The matter must be approached with due caution.

143. It has been suggested that anal penetration can cause reflex cardiac arrest. This would have resulted in an immediate end to life and blood circulation. I have already found that Poppi lived for some time after the penetration and I discount this as an explanation for the death.

144. Poppi was a fit and active, robust little girl. All her siblings, including her weaker twin, survived the common virus from which

she also suffered. There is no evidence to suggest or support a natural cause of death. There is evidence that she has been placed in an adult's bed alive and, sometime later, that she has been found there dead. I have found that, immediately prior to her death, Poppi was in an unsafe sleeping position, sharing a bed with an adult. Mother was fully aware of the risk, and so it had not happened in the house before. I find that it is likely that Poppi stopped breathing because her ability to do so was compromised by her unsafe sleeping environment. The changes in Poppi's lungs and some other features at post mortem are consistent with an asphyxial mode of death. On the balance of probabilities I am satisfied that there has been an obstruction of this child's airways whilst she was sleeping and that she has been deprived of oxygen and died. The cause of death is asphyxia.

Conclusion as to the Death

145. At the end of the evidence I received legal submissions from the representatives of the Interested Persons as to the possible conclusions available to me. I received written and oral submissions, all of which I have considered and taken in to account.

146. Before turning to the particular conclusions, I must record that all the representatives reminded me of the importance of the "Galbraith plus" approach when considering what possible conclusions are available on the basis of the evidence. The importance of what is now clearly a two-stage approach was emphasised in *R (Secretary of State for Justice) v HM Deputy Coroner for the Eastern District of West Yorkshire* [2012]

EWHC 1634 (Admin) in which Haddon-Cave J. ruled that the *Galbraith* test alone was not enough and more was needed. He stated :

“It is clear, therefore, that when coroners are deciding whether or not to leave a particular verdict to a jury, they should apply a dual test comprising both limbs or “schools of thought” [as discussed in *Galbraith*], i.e. coroners should (a) ask the classic pure *Galbraith* question “*Is there evidence on which a jury properly directed could properly convict etc. ?*” ... plus (b) also ask the question “*Would it be safe for the jury to convict on the evidence before it ?*”,

and

“The second limb, arguably, provides a wider and more subjective filter than the first in certain cases. In my view, this extra layer of protection makes sense in the context of a coronial inquiry where the process is inquisitorial rather than adversarial, the rights of interested parties to engage in the proceedings are necessarily curtailed and coronial verdicts are at large.”

The test as addressed there is in the context of a coroner considering which potential conclusions may safely be left to a jury for their consideration but I too, sitting alone, have taken full account of this approach in seeking to reach my conclusion. In respect of each possible conclusion, I have asked myself whether there is evidence on which I could find it and whether it would be safe, on the evidence, for me to do so.

147. Against this background I have considered the following. I first considered whether a short-form Unlawful Killing conclusion is available to me and ought to be recorded. In order to reach this conclusion I would need to be satisfied, beyond reasonable doubt, that Poppi had died as a result of an act of murder or manslaughter. It is entirely clear that this conclusion is not available to me, whether on

the basis of unlawful act manslaughter or otherwise. Although I have found, on the balance of probabilities, that Poppi was anally penetrated prior to her death, I have also found that she did not die in the course of or immediately following the penetration and the penetration did not cause her death. There can, therefore, be no question of an Unlawful Killing conclusion. In the circumstances, it is not necessary for me to consider whether I am satisfied beyond reasonable doubt that the penetration took place and I make no express finding as to that. As stated above, I have come to a conclusion on that issue on the basis of the lower standard of proof.

148. I next considered whether a short-form Accidental Death conclusion is available to me and should be recorded. This is an appropriate conclusion where a coroner is satisfied, on the balance of probabilities, that the death has resulted from an unintended act or omission or is the unintended consequence of a deliberate act or omission. On the basis of my findings of fact this conclusion may be open to me but, in my judgment, it would not be appropriate to record it. Given that Poppi had been harmed and placed in an unsafe sleeping environment prior to her death, I do not consider that this short-form conclusion properly reflects my conclusion as to the death.

149. I was reminded of the short-form Natural Causes conclusion which it is appropriate to record where a coroner is satisfied on the balance of probabilities that the death resulted from a naturally occurring illness or disease or internal malfunction of the body. None of the Interested Persons submitted that there is any evidence upon which this conclusion could be recorded in relation to Poppi and that is my view also. It would be inconsistent with my findings of fact.

150. I was also asked to consider an Open Conclusion and it was submitted by counsel for Paul Worthington that this is the only proper conclusion in this case (that submission being made, of course, before I had reached my findings of fact). An Open Conclusion would be appropriate if the evidence had failed to satisfy me, to the requisite standard of proof, of the elements required for any other conclusion. Recording an Open Conclusion is not a failure of the process if it is reached because of the absence of necessary evidence. Even though guidance suggests that this conclusion should be avoided if possible, if I had been unable, on the evidence, to reach any findings of fact as to Poppi's cause of death and how it came about, an Open Conclusion may well have been appropriate. However, given that I have reached findings on those matters (as set out above and for the reasons set out above) I am of the clear view that an Open Conclusion would be inappropriate.

151. In my view, it is appropriate in all the circumstances of this case for me to reach and record a Narrative Conclusion reflecting the findings I have reached as to Poppi's death and how it came about, and that is what I shall do.

Prevention of Future Deaths

152. There were a range of very significant failings on the part of Cumbria Police in relation to their investigation of Poppi's death. I have considered whether I am obliged to issue a Report for the Prevention of Future Deaths in this regard. If I am aware of ongoing matters which give rise to a concern that there is a risk that future

deaths will occur unless action is taken, then I must report those matters to a person or body who may take action (see paragraph 7 of schedule 5 to the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013). Although failures of investigation may not cause, directly, any future deaths, I am satisfied that inadequate death investigation, especially of child deaths, may in itself result in a failure to prevent future deaths. I received written and oral submissions about this matter from the Interested Persons which I have considered and taken into account.

153. I received detailed relevant evidence from Catherine Thundercloud and DCS Andrew Slattery. As stated above, Ms Thundercloud is now retired but she was a Detective Superintendent and, in that capacity, she conducted the re-investigation of Poppi's death. DCS Slattery is currently in Cumbria Police's Crime Command. It is not necessary for me to repeat all their evidence but, in summary, it was to the effect that Cumbria Police have accepted all the criticisms made of their investigation (Ms Thundercloud sought to identify each and every shortcoming) and have taken action, which is being taken forward, to address all the issues arising and to ensure that there is full compliance with all relevant protocols concerning the investigation of child deaths. Both witnesses gave detailed evidence to this effect. I accept their evidence and I do not consider that there is, now, a requirement for me to send a Regulation 28 Report to the Chief Constable or any other person or body.

154. In the context of prevention of future deaths, I will note also the concern raised at the inquest about the fact that Poppi's post mortem examination was not conducted until five days after her death. The

factual explanation for this was explored in the evidence but I agree with Ms Irving QC about the importance of there being systems in place to ensure that the autopsies in child deaths take place as quickly as possible, and certainly within the *Kennedy* guidelines. I can record that, currently, there are systems are in place to seek to achieve this in my office and our statistics show that the average time over the last three years between reports of paediatric deaths and their autopsies is 2.75 days, this reflects the fact that such autopsies are conducted at either Manchester or Newcastle upon Tyne.

Record of Inquest

I shall, therefore, record the following on the Record of Inquest :

Box 1 : Poppi Iris Worthington

Box 2 : Asphyxia

Box 3 : On the 12th December 2012 the Deceased was at her home address when, at some time after 2.30 am, she was taken from her cot to a double bed where she was anally penetrated. She subsequently went to sleep in the double bed with an adult sleeping close to her. She was suffering from an upper respiratory tract infection and her ability to breathe was compromised by her unsafe sleeping environment. Shortly before 05.56 hours she was found to have stopped breathing. Resuscitation was commenced at her home and was continued by the emergency services and at the Furness General Hospital to where she was taken, but she was asystolic throughout. Despite

resuscitation her death was pronounced at 07.07 hours at the Furness General Hospital, Barrow in Furness, Cumbria.

Box 4: Narrative Conclusion: The Deceased died as a result of her ability to breathe being compromised by an unsafe sleeping environment.

Box 5 :

(a) 20th October 2011 at Barrow In Furness

(b) Poppi Iris Worthington

(c) Female

(d) –

(e) 12th December 2012 at [home address]

(f) [Identity of parents and home address]

David Ll. Roberts
HM Senior Coroner for Cumbria
15th January 2018