

A Qualitative Analysis

Because the models generate different responses with different knowledge given the same input message, it is difficult to design a universal changed knowledge graph for fair comparison of all models. We provide the qualitative analysis for further investigation. Some examples of our proposed Qadpt model with changed knowledge graphs are shown in Table 8. This demonstrates that Qadpt can successfully modify the response with a minor-changed knowledge graph. More examples of response generation are given in Table 9.

Message Input	甄嬛 (甘露寺, 夜。正睡覺, 有野貓闖入): 怎麼了? ——有貓! (Zhen Huan: What's wrong? - A cat!)
Reference Output	浣碧 (一陣慌亂): 槿汐, 快點去打貓, 小姐被貓傷過, 見不得貓的! Wan-Bi: Jin-Xi , go and catch the cat. Mistress was hurt by a cat, and became afraid of it.
Original KG Path	甄嬛(Zhen Huan) → 主僕(IsServantOrMasterOf) → 槿汐(Jin-Xi)
Original Output	槿汐, 是什麼事啊? (Jin-Xi , what happend?)
Changed KG Path	甄嬛(Zhen Huan) → 主僕(IsServantOrMasterOf) → 小允子(Yun)
Changed Output	小允子, 小允子! (Yun, Yun!)
Message Input	[Scene : The restaurant . Chandler and Monica are sitting at a table] Monica: Oh my God, he's gonna do it now. Please, I cannot watch this, let's go.
Reference Output	Chandler: I think we have some time. Have you ever heard him talk? Uh, Phoebe , uh, I would be honoured, uh... Spit it out, David !
Original KG Path	Phoebe → lover → David
Original Output	David is , David , is it ?
Changed KG Path	Phoebe → lover → Mike
Changed Output	Mike ?

Table 8: Some examples of the response generation with a changed knowledge graph.

Input	皇帝（眉莊氣急站立不穩，甄嬪忙扶住）：無妨！都一樣是太醫。
Reference	(Emperor: It's okay! They are all imperial doctors .) 皇后（章彌把脈良久）：章太醫，究竟什麼個情形？莫非驚動了胎氣？ (Empress: Imperial doctor Zhang, what's the situation? is it a miscarriage?)
Seq2Seq	皇上？(Emperor?)
MemNet	浣碧，你看看，你看看，你是個太醫，你也不知道了。 (Wan-Bi, you see, you see, you are an imperial doctor , and you don't know either.)
TAware	謝皇后娘娘。(Thanks to Empress Madame .)
KAware	妃浣碧，我都是了，我是我的，我是我的身子，我也是不是。 (Consort Wan-Bi , I am, I'm mine, I'm my body, I am, right?)
Qadpt	太醫，這是什麼？(Imperial Doctor, what is that?)
Input	年妃（江福海乘船到湖邊）：你說口諭便是口諭了？等本宮見了皇上再說。
Reference	Consort Nian: Whatever you said. Let me see the emperor . 江福海：娘娘，奴才怎敢假傳皇上口諭呢？皇上不想見您也不是一日兩日了， (Jiang, Fuhai: Madame , I do not full you. Dare I say, the emperor do not want to see you.)
Seq2Seq	娘娘，您是不是？(Madame, you are?)
MemNet	是，娘娘說來了。(Yes, madame said she is coming.)
TAware	謝皇上。(Thanks to the emperor .)
KAware	奴婢給娘娘請安。(I pay respects to madame .)
Qadpt	是，娘娘，您的心思是——(Sure, madame , you are thinking about —)
Input	華妃（園中）：免了，本宮可不敢當莞嬪此禮。你越是恭順，本宮就越是覺得可憎。
Reference	(Consort Hua: It's okay, I don't want you pay respects to me. The more respectful you are, the more horror I feel.) 甄嬪：娘娘真是說笑了，難道娘娘是喜歡妹妹對娘娘不恭不順直言犯上嗎？妹妹並不敢肆意冒犯娘娘。 (Zhen Huan: Madame is kidding. Does madame want me to say the truth? I'm not dare to offend you.)
Seq2Seq	臣妾不敢。(I dare not do it.)
MemNet	娘娘，臣妾不敢。(Madame, I dare not do it.)
TAware	娘娘還是這樣，娘娘也不是不是娘娘的。(Madame is still the same. Madame is not madame 's)
KAware	謝妃朕。(Thanks to Consort I .)
Qadpt	娘娘，娘娘別多心了。(Madame, Madame, don't think too much.)
Input	[Scene : The Rehearsal Dinner, Chandler and Monica are greeting guests as they arrive. A woman enters.] Mr. geller: So are you his mother or his father?
Reference	Mrs. geller: Jack !
Seq2Seq	Ross , I'm so sorry.
MemNet	Are you guys doing Chandler ?
TAware	Well, I'm sorry, I'm sorry, I'm sorry, I'm sorry, Chandler .
KAware	Ross .
Qadpt	Jack 's gonna be here!
Input	[Scene: The Rehearsal Dinner, Chandler and Monica are greeting guests as they arrive. A woman enters.] Ross: Can I have everyone's attention please? I'm uh; I'm Ross Geller .
Reference	Mr. geller: Doctor Ross Geller .
Seq2Seq	Hey, Joey , you're gonna have a baby.
MemNet	Well, I'm sorry, I'm not going to be with Emma .
TAware	Oh, Rachel .
KAware	Hey, Ross , you're a great guy.
Qadpt	Hey, Ross Geller , I'm gonna go.
Input	[Scene: Monica and Rachel 's, Chandler and Monica and Rachel and Phoebe are planning their respective strategies to break the other pairing. Joey is not amused.] Joey: Hey, check it out! Check it out! Ugly Naked Guy has a naked friend!
Reference	Rachel: Oh yeah! Oh my God! That is our friend! It's Naked Ross !
Seq2Seq	Hey, Monica , I'm sorry.
MemNet	Hey Ross !
TAware	Ross !
KAware	Oh, Ross , you're so sorry.
Qadpt	Ross , you have to go to the bathroom!

Table 9: Some examples of the response generation.