Dear Reviewer,

Thank you so much for your time and energy in reviewing our paper. Your suggestions have helped us improve the manuscript significantly. All major changes are tracked in red in the document, and we describe how each are addressed in response to your suggestions in line below.

Best,
The Authors

I found the paper had a very similar approach with regard to the application of Effort to the UAV motion as the paper of Sharma, M.; Hildebrandt, D.; Newman, G.; Young, J.E.; Eskicioglu, R. Communicating affect via flight path Exploring use of the Laban Effort System for designing affective locomotion paths. 201 8th ACM/IEEE International Conference on Human-Robot Interaction (HRI), 2013, pp. 293–300 (which is cited by the authors)
I would like to have more explanation about what is really new in this research and its approach compared to the previous study.

We have expanded our comparison to this important prior work through a new Section 5.1; by adding this extended discussion to the conclusion, we can compare with more detail our work to this important work by Sharma et al. We thank the reviewer for pointing out this opportunity to clarify our approach and contribution.

In section 3, the authors explain that one task has been generated in different Effort configurations (table 1). Then the paper says that a CMA observed each simulated motion, evaluated and noted each of them in Motifs notation. In section 3.1, the paper mentions that the CMA’s evaluation and notation in Motifs are much more detailed than the researcher thought – what I understood. However, I really do not understand what the meaning of this process that the CMA observes and notes the robot motions which have already classified by Effort criteria. Is it a kind of verification process to assess if the simulated motions with Effort configuration truly correspond to the CMA’s observation?

We have clarified the role of the CMA in the second paragraph of Section 3.

Concerning the description of Motif criteria by using words in order to for lay individuals to assess the robotic motion, I would like to have more explanation about who chose these words and how. I think that giving such words (hurried, puffy, chaotic) might result from subjective interpretation of the robotic motion of those who chose these words. Effort enables to classify the quality of motion, but giving such word-label to a motion warrants more investigation. For instance, if the motion which is classified as Time-sudden and Space-direct, it can give us an impression of 'harried' but it is only an impression and interpretation. Moreover, some words are confusing like 'clear'. What does it mean the motion is ‘clear’? The lay observer can be confused by such terminology if they are asked to assess the robotic motion or the robot intention expressed by its motion.

We have clarified this idea in Section 3, in describing the role of the CMA. These imagistic words are how story and meaning in motion is created.

In the introduction, the authors evoked potential adoption of the expressive UAV to in-home situation for the elderly population. I find it hard to imagine the use of this kind of robot in in-home context and for the
elderly population, even if I totally agree with the need to generate appropriate and safe robotic motion. In the conclusion, there is no discussion about the potential adoption of the expressive UAV. It is advisable to develop further the usefulness of this kind of robot for in-home context.

We have extended this discussion in Section 5.2. We have also clarified in this section how far away this work is from being implemented in real homes.

Here are few minor suggestions.

- It is preferable to write; ‘Unmanned Aerial Vehicle (UAV)’ in the first phrase instead of using directly an abbreviation.
- Please add in Abbreviations: ‘UGV’ Unmanned Ground Vehicle

Both of these have been fixed in the paper.