Table of Contents

Project Summary

Emotion is a powerful commitment device (Frank, 1988). Political psychology literature has established a persistent association between emotions and political participation behaviors. However, the question of "which emotions play what role" still remains highly debated with conflicting results derived from different contexts. Pertaining to Hong Kong's context, previous survey data have found that fear and anger were important in mobilizing citizens to partake in the protest. The widespread fear and anger might serve as a common ground to unite people from all walks of life and bring out solidarity across the board. Against this backdrop, current project is aimed to advance our understanding of how emotions shape the solidarity on social media. The analysis draws on more than 28 million posts collected from LIHKG between April 2019 and July 2020.

Particularly, we will adopt a supervised machine learning approach to evaluating emotion-related features of the LIHKG posts. Supervised machine learning includes human knowledge in the training process and therefore can come up with more interpretable and theoretically more interesting results. To obtain the human knowledge, we will conduct three runs of manual coding. In the first two runs, our task is to establish intercoder reliability based on a small number of sentences (N=500) and in the third run, with the IRR guaranteed, one or two coders will continue to code the remaining sentences (N=4,500).

The workflow of manual coding is as follows:
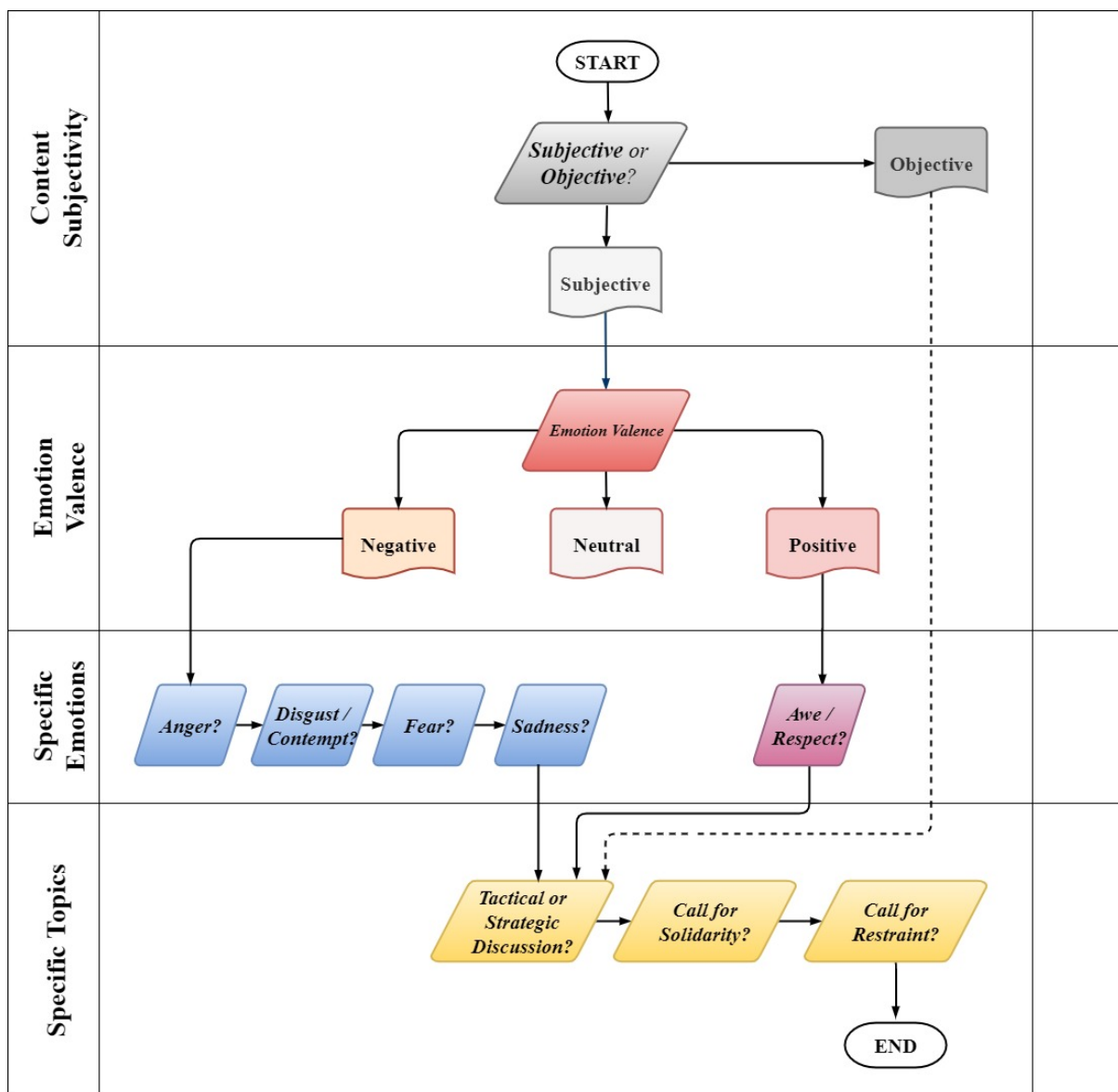
Rationale for Manual Coding

We are going to annotate the content in four aspects: Content Subjectivity; Emotion Valence; Specific Emotions; Specific Topics. The unit of analysis is sentence. However, given that sentences are extracted from user-generated content, they could be ungrammatical, colloquial, and even uncivil. Deciphering their meaning requires a more thorough reading of the context. Therefore, the focus sentence that you are required to code will be embedded in its original context, which is composed of two sentences, one before the focus sentence and one after it. The focus sentence will be highlighted in RED as follows:

有人話佢衝動、唔理智甚至傻。但我認為，佢好冷靜，好清晰。佢知道
　　Context (Before)　　　　　　　Focus Sentence
香港人缺少啲乜。
Context (After)

Please be noted that the focus sentence is more important than contextual sentences. You must first try making judgements solely based on the focus sentence out of the context. Only if the focus sentence is confusing or can be interpreted in very different ways, you can consult the contextual sentences for disambiguation.

1. **Content Subjectivity**

    i. *Definition*: Objective content presents only factual information, while subjective content conveys non-factual information, such as **opinions, emotions, speculations, evaluations, or other private states**.
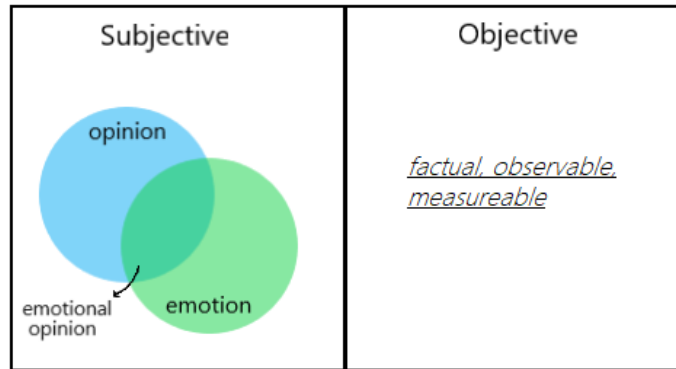
ii. *Reminder*

a) **We DO NOT distinguish different sources of subjectivity**. The posts that convey either the author's opinion or others' opinions are considered as subjective. As long as non-factual information is present in the text, we should regard the text as subjective.

b) **Factual = Observable**. **Action is observable yet intent is not observable**. To be considered as objective, the speaker should only depict what has happened while not suggesting the intent of actors, **UNLESS** quoting scientific reports or observable evidences. For example, 「香港人都不希望香港變成中國的一個城市」is <u>subjective</u>, yet「XX 調查發現多數香港人都不希望香港變成中國的一個城市」is <u>objective</u>. 「我地面對嘅事想殺死我地嘅人」 is subjective, as the intent to kill cannot be directly observed unless the person poses apparent death threats.

c) **Please pay EXTRA ATTENTION to the adjectives and adverbs, while DOWNPLAYING the importance of verbs**. A complete sentence is composed of two parts: subjects and predicates. Predicate always includes a verb. That is, the verb is an essential component of a sentence while the adjectives and adverbs are not. The misuse of verbs and nouns is acceptable since people might lack energy, literacy, or training in finding the most accurate verbs and nouns to depict a situation. For example, 「三個大漢係旺角搗亂」 and 「地鐵站塞爆」. Although the **verbs**「搗亂」 (disrupt, make trouble) and「塞爆」 (explode with crowds) could appear to be subjective and less accurate statements of the realities, compared with more factual counterparts like「三名男子於旺角持 XX 襲擊在場人士」, the conflict did happen and the crowded MTR station was observable. Therefore, we consider these two sentences as <u>objective</u>. To the contrary, adjectives and adverbs are used to depict the **EXTENT** of an activity, which in the most scenarios is hard to be directly measured or observed. So, if speakers do use adjectives or adverbs in their utterances, it would be a more telling cue to their subjectivity than the use of verbs.

d) **Posts with emoji are more often than not subjective**.

iii. *Examples:*

a) 「任內派一兩次糖，之後就可以同中央講成功修補社會撕裂」 → Answer: Subjective (Expressing one's own opinion)

b) 「文章指出，每當有新社運形式出現，總有知識分子或社運人抱持懷疑眼光，然後引用傳統的社運理論指指點點，以前輩經驗教導新人甚麼才是『真正』社運」→ Answer: Subjective (Citing opinions from an article)

c) 「民陣發起遊行反對修訂《逃犯條例》，當港島銅鑼灣和天后等多個地鐵站塞爆、附近維園和灣仔路面也擠滿人時，香港科技大學經濟系前主任雷鼎鳴稱，經他採用『科學方法估算遊行人數』，於下午 3 時 10 分，經過點算站所錄得的遊行人數是 8510 人；至下午 3 時 45 分，則有 21,020 人」→ Answer: Objective (Factual account of an event)

2. Emotion Valence

i. *Definition:* Emotions can be generally divided into two big categories: positive emotions and negative emotions. Positive emotions are the psychological responses to pleasant experiences, including joy, anticipation, and gratitude, while negative emotions are the psychological reactions triggered by unpleasant experiences, such as hate, fear and anger.

ii. *Three valences*: Positive; Neutral (no apparent emotion); Negative.

iii. *Reminder:* Again, **we DO NOT distinguish author's emotions and other person's emotions**. As long as the sentence is emotional, you should label it as such. However, if the author's emotion and other person's emotions are concurrently mentioned in the same sentence, we should prioritize the author's emotion. For example, "I am so happy to see his frustration about the decision." This sentence should be classified as "positive" in emotion valence. If you cannot directly read the emotion from the text, you should label it as **NEUTRAL**.

iv. *Examples:*

a) 「彭定康斥港府分裂社會」→ Answer: <u>Negative</u> (Citing other person's negative emotion)

b) 「香港一失守 我諗好快會變死城 周街屍體」→ Answer: <u>Negative</u> (Expressing one's own fear)

c) 「香港人　崛起！」or 「光復香港，時代革命！」→ Answer: <u>Positive</u> (spirited words expressing excitement and hope)

d) 「小弟真係好開心攞到咁多席，多謝大家」→ Answer: <u>Positive</u> (Expressing one's own gratitude and joy)

e) 「口罩...身上危險物品要棄置、必要時換埋衫」→ Answer: <u>Neutral</u> (Tactical discussion)

3. Specific Emotions

i. *Discrete Emotions:* (a) Negative: Anger, Disgust/Contempt, Fear, Sadness/Compassion; (b) Positive: Awe/Respect.

ii. *Reminder:* Again, **we DO NOT distinguish author's or other people's emotions**.

iii. *Definitions:*

a) *Anger:* Anger is a typical response to an insult to <u>justice</u> or one's <u>self-esteem</u>. One will feel angry if he or she perceives the negative events as predictable and brought by others, and others need to be held accountable. In other words, anger arises from appraisals of **other-condemning (other-responsibility) and a sense of certainty of what happened**.

   • *Example*: 「司機義載抗爭者：政府爛透」 (citing the driver's anger at government), 「非民選的港府一事無成卻毫無民望負擔」 (expressing his or her own anger at government)

b) *Disgust/Contempt:* Disgust and contempt are similar to anger in that they all condemn others for bringing out negative events. However, they are **weaker** than anger. Besides, they indicate an underlying hierarchy where people who feel disgust and contempt are on the top of the ladder and looking down on lower-status others. Generally speaking, disgust and contempt arise from appraisals of **other-condemning (other-responsibility) and other-belittling**.

   • *Example*: 「開實彈個下，猶如入球一刻，班藍絲廢老支持警方開始用更強硬手段」 (廢老廢青, the useless elderly and youth, when being used to depict others, should be

regarded as a word with *contempt*. However, if people refer to themselves as 廢青 for self-mockery, we should regard these words as *neutral*.) 「離開香港仲唔係 freeride 抗爭？」 (showing contempt for freeriders) 😡, contempt emoji

c) *Fear:* Fear arises from a **strong sense of uncertainty and situational control**. People will feel fear if they perceive the negative events are unpredictable and are dependent on the situation, instead of specific individuals.

- *Example*: 「問題來了，如果裡面既人和學生，無野食或飲，餓死左，點算？」 (fear of uncertainty) 「驚㗎，因為仲唔知個打壓有幾大！」 (fear of uncertainty)

d) *Sadness/Compassion:* Sadness might arise from one's own miserable experience or their empathy for other people's miserable situation.

- *Example*: 「佢無戴任何口罩 眼鏡 頭盔，都俾啲煙搞到呼吸困難不斷話好辛苦，我講到佢真係覺得好傷心」

e) *Awe:* Awe is a response to human perfection. People will feel awe, when exposed to moral exemplars, holy persons. Out of awe, they will possibly be motivated to imitate these exemplars.

- *Example*: 「記唔記得 我們有 200 萬戰友 無懼烈日當空 一齊出黎」 「記唔記得 我們有良心醫生護士站出來捉揭破黑警謊言」「呢一 d 壯舉 呢一 d 感動 呢一 d 義行 唔會磨滅」「鄺神辛苦了」

※ The Power of Emoji

Emoji provides us a shortcut to people's emotion. I compiled a full list of 425 emojis that have ever appeared in our LIHKG dataset and labeled their emotional orientation. Please refer to the Google sheet (https://docs.google.com/spreadsheets/d/1XZoWsY5TkjloYFc-F1d2klN7kB_D3nMWrjGQMwThzmY/edit?usp=sharing).

4. **Specific Topics**

i. *Tactical/Strategic Discussion:* Does the post discuss protest strategies or tactics? Protest strategies and tactics here refer to **WHAT** the protest is for and **HOW** the protest **SHOULD** be carried out to accomplish its task.

ii. *Call for Solidarity*: Does the post call for solidarity among the users/protesters?

iii. *Call for Restraint*: Does the post call for restraint over the use of violence?

Timeline

Date	Task	Target
09/21 - 09/28	First-run coding (N=250)	IRR ≈ 0.8
09/28 - 10/05	Second-run coding (N=250)	IRR ≈ 0.8
10/05 – 10/09	Move on to code the remaining 4,500 sentences.	