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“In these pandemic times”: The role of temporal meanings in ambient affiliation about COVID-19 on Twitter

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Abstract
This paper explores the role of a particular set of commonly occurring temporal meanings relating to the shared experience of being in a pandemic (e.g., in these unprecedented times) and how these foster ambient affiliation on Twitter. Temporal meanings can be realised as a range of grammatical structures in texts and are linguistic resources that add meaning – in terms of dimensions such as manner, time, or place – to the main activities, entities or events in a clause. While often viewed in terms of their role in how experience is represented, we suggest they play a pivotal interpersonal role in how values are positioned and how social bonds are offered to ambient audiences. The paper also draws on communing affiliation, a system in the ambient affiliation framework for understanding how people share and contest values in social media environments, to show how these temporal meanings are functioning. Corpus-based discourse analysis of the contribution of temporal meanings to communing affiliation in a large of corpus of COVID-19 tweets was undertaken. Three major affiliation strategies that these temporal meanings were involved in were observed: CENTRING in the service of CONVOKING affiliation, CONTRASTING in the service of FINESSING affiliation, and ACCENTUATING in the service of PROMOTING affiliation.

1. Introduction: “during a deadly pandemic”

The social distancing and lockdowns1 necessitated by COVID-19 pandemic have meant that people have developed an acute concern with our collective experience of the pandemic and the ‘times’ that we are living in. One small way in which this has been visible is in idiomatic email signoffs such as:

“Stay safe in these unprecedented/strange/unusual times”

“Take care in these difficult/tough/scary/troubling times.”

The phrases underlined in these signoffs are all circumstances of time, that is, linguistic resources for adding contextual meanings about the main activities taking place in a clause (in these instances the acts of staying safe and taking care). Their presence indicates the importance of the times, or time more generally, as part of the lived experience of pandemics, as people frequently make mention of these in their discourse practices. The phrases in these difficult times or even, in these pandemic times are temporal meanings about the experience of being ‘within’ an ongoing pandemic which have proliferated in social media discourse. This paper is focused on the role that choices in temporal meanings of this kind play in how people foster certain kinds of social connection – what can be referred to technically as ‘ambient affiliation’ (Zappavigna and Martin, 2018a). Ambient affiliation refers to how social connection is forged in social media discourse, even in the absence of direct interaction between users. It can be seen in the ways that people commune around shared experience and values on any given topic, often through particular digital affordances such as hashtags. Ambient affiliation has been applied across a range of social media contexts such as deceptive communication (Inwood and Zappavigna, 2021), political discourse (Zappavigna, 2019), YouTube discourse (Zappavigna, 2021), and sporting discourse (Tovares, 2020), and is closely related to ideas of axiological affiliation (solidarity through shared attitude) (Zhao, 2020), social bonding through shared values (Xie, Tong, & Yus, 2020), and alignment with putative readers/audiences (White, 2021).

Qualitative studies have sought to understand how COVID-19 has impacted the subjective experience of time in people’s daily lives (Bolander & Smith, 2020). Some studies have suggested that

1 A term used during the pandemic to describe stay at home orders issued by governments when COVID-19 cases needed to be controlled by restricting citizens’ movement. Possibly derived from prison discourse.
time is experienced differently during pandemics: as cycles of recurring phases which lack the transformative element that occurs from knowing when something will come to an end (De Pascale, 2021). Velasco, Perroy, and Casati (2021, p. 449) argue that occurs from knowing when something will come to an end (De Pascale, 2021). Velasco, Perroy, and Casati (2021, p. 449) argue that occurs on social media platforms (Zappavigna, 2011).

Table 1

| Type & subtype         | Probe                      | Example                                                                 |
|------------------------|----------------------------|------------------------------------------------------------------------|
| Extent: duration, frequency (temporal), distance (spatial) | How long/often/ far?       | Mf pandemic for two yearssssssssss [Circumstance]                      |
| Location:              | When? Where?               | i was crying n my doctor said "do u need a hug? in the middle of a pandemic?" 🤧💦💦 [Circumstance] |
| Manner: means, quality, comparison, degree                | How?                      | How quickly people forget that we are in the midst of a deadly pandemic 🤔 [Circumstance] |
| Cause: reason, purpose, behalf                           | What for? Why?            | Vaccines are the nuclear option for ending this pandemic [Circumstance] |
| Contingency: condition, concession, default              | In case of?               | Some private hospitals are creating fake demand of beds in order to plunder money from the people. [dependent clause] |
| Accompaniment: comitation, addition                      | With whom/ what?          | 2021 is the year I been waiting for (besides all the burnout from working through a pandemic) [Circumstance] |
| Role: guise, product                                      | What as?                  | Pandaspicious When a company or person tries to use the pandemic as a way to up charge or charge without cause [Circumstance] |
| Matter                                                            | What about?               | New rules about eating, exercising and sleeping as you age and prepare for the next pandemic [Qualifier of a nominal group] |
| Angle: source, viewpoint                                      | According to whom?        | Pandemic fatalities close to 6.8 million, according to University of Washington's Institute for Health Metrics [Circumstance] |

In terms of affiliation, we argue that temporal circumstantial meanings can play an important role in positioning and contextualising the attitudinal stances that underly social bonds. This is due to the way in which circumstantial meanings create a shared discursive frame which grounds affiliation – for instance, in a particular temporal location such as in these pandemic times, which we explore in this paper. In mass communicative contexts such as social media, this kind of temporal grounding enables communities to be called together or “convoked” around shared values and experiences, particularly where the temporal meaning features in a hashtag (Zappavigna & Martin, 2018a, p. 9). This kind of temporal grounding afforded by temporal circumstantial meanings is important for fostering a sense of shared humanity during mass crises such as the current pandemic. In short, we argue that the temporal meanings that are the focus of this paper act as linguistic resources that support ambient affiliation – the kind of social bonding that occurs on social media platforms (Zappavigna, 2011).

Temporal meanings in circumstantial phrases such as in these unprecedented times have proliferated across social media and other forms of digital communication (e.g. in email signoffs) as people attempt to bond with their audiences or with interlocutors over the impact that the pandemic has had on their lives. Using social media datasets to understand how people experience epidemics and pandemics, such as the ‘Swine Flu’ pandemic of 2009, has been a focus of social media research across both communication studies and health-related disciplines (Lampos & Cristianini, 2010; Ritterman, Osborne, & Klein, 2009). Since the current COVID-19 pandemic is one of the most discussed topics on social media at the present time, it has also become the focus of discourse analysis. Attention has been given to the linguistic choices made in discussing the pandemic on social media platforms, for example, how the pandemic is conceptualised on Twitter (Wicke & Bolognesi, 2020) where COVID-19 neologisms such as covidiot and coronacation have proliferated (Khalfan, Batool, & Shehzad, 2020), and on other platforms such as Reddit (Aggarwal, Rabinovich, & Stevenson, 2020).

| Location: | Type & subtype | Probe | Example |
|-----------|----------------|-------|---------|
|          | Extent:        | How long/often/ far? | Mf pandemic for two yearssssssssss [Circumstance] |
|          | Location:      | When? Where? | i was crying n my doctor said “do u need a hug? in the middle of a pandemic?” 🤧💦💦 [Circumstance] |
|          | Manner:        | How? | How quickly people forget that we are in the midst of a deadly pandemic 🤔 [Circumstance] |
|          | Cause:         | What for? Why? | Vaccines are the nuclear option for ending this pandemic [Circumstance] |
|          | Contingency:   | In case of? | Some private hospitals are creating fake demand of beds in order to plunder money from the people. [dependent clause] |
|          | Accompaniment: | With whom/ what? | 2021 is the year I been waiting for (besides all the burnout from working through a pandemic) [Circumstance] |
|          | Role:          | What as? | Pandaspicious When a company or person tries to use the pandemic as a way to up charge or charge without cause [Circumstance] |
|          | Matter:        | What about? | New rules about eating, exercising and sleeping as you age and prepare for the next pandemic [Qualifier of a nominal group] |
|          | Angle:         | According to whom? | Pandemic fatalities close to 6.8 million, according to University of Washington's Institute for Health Metrics [Circumstance] |
While there does not appear to have been any work in social media discourse analysis focused in particular on temporal meaning, the grammatical concept of a circumstance has been used across a range of linguistic traditions that recognise “some kind of syntagmatic cline from the process nucleus of a clause via different kinds of participant to a circumstantial periphery or margin” and use terms such as case frames and grid or argument structure (Halliday & Matthiessen, 2014, p. 221). An early approach in work on syntax is Tesnière’s distinction between actants (arguments) and circipients (circumstances) in relation to the “little drama” of a verb, where the circumstance might be thought of as a kind of stage direction (Fillmore, 1994, p. 158). The approach adopted in this paper draws on the social semiotic tradition encapsulated in Systemic Functional Linguistics. Within this tradition Halliday and Matthiessen (2014, p. 221) consider the grammatical circumstance as the element which augments the central process in a clause “temporally, spatially, causally, and so on” but which has a more peripheral “status in the configuration [since] unlike participants, they are not directly involved in the process”. In other words, circumstances can express meanings about how the activity or happening is occurring. However, Dreyfus and Bennett (2017) showed that circumstantial meanings are not only realised in circumstances but in a variety of other grammatical structures, from clauses to clause constituents such as participants as well as within participants and noun groups. They also showed that if you do not count the circumstantial meanings occurring in locations other than the constituent of circumstance, you miss half of the circumstantial meaning. We thus talk about circumstantial meaning, rather than circumstances. Circumstantial meaning might involve information about when, where, how, why things are happening, as shown in the examples in Table 1; these examples are drawn from the corpus of posts about COVID-19 to be analysed in the paper.

While Table 1 shows all the different semantic types of circumstantial meaning, it also shows that while the circumstance is the most frequent way of instantiating these kinds of meaning, other grammatical structures may do it too. For instance, the examples for Cause and Matter in Table 1 include realisations as dependent clauses (e.g., *Some private hospitals are creating fake demand of beds in order to plunder money from people*) and Qualifiers in nominal groups (e.g., *New rules about eating, exercising and sleeping as you age and prepare for the next pandemic*). And there are other grammatical structures that are possible. Particular types of circumstantial meanings that have been explored using Halliday and Matthiessen’s framework are circumstantialisation of place (Dreyfus & Jones, 2011), circumstance of projection, focusing on angle (e.g., *according to prepositions*) (Chen, 2016), Cause circumstances (Hao, 2018), and a the use of circumstances in contexts such as EAP instruction (Walsh Marr & Martin, 2021). While circumstantial meaning is usually understood to construe ideational meanings such as time, place, manner (etc.), we argue here that it can also work to build affiliation, and it is this work that we explore in this paper. The evaluative function of circumstances was first proposed by Bennett (2016), who found that within the introductions of journal articles, circumstances have a persuasive role in arguing for research gaps.

2. Dataset and sampling

The dataset explored in this study is a corpus of tweets containing any of the following case-insensitive search terms commonly used to refer to the COVID-19 pandemic: Coronavirus, SARS-COV-2, corona, covid, covid19, covid, rona, and pandemic. While the focus of the data analysis was on circumstantial meaning, broad selection criteria were used in the hope that this would gather a wide assortment of COVID-19-related discourse. The software ‘Social Feed Manager’ was used to harvest these tweets, querying Twitter every 30 mins from the 6th–7th May 2021. The harvest produced a set of 1,217,825 tweets which resulted in a corpus of 331,008 posts (7,810,129 words) following removal of duplicate tweets, tweets that appeared to be made by bots, and tweets in languages other than English (since the detailed discourse analysis required high levels of understanding that were not possible for other languages due to the researchers’ language proficiency and lack of descriptions of functional grammar for some of these languages).

Circumstantial meaning was very frequent in the corpus, as evidenced by the fact that seven out of the ten most frequent 3-grams functioned for the most part as circumstances (shown in bold in Table 2, noting that even the unbolded 3-grams might be involved in circumstantial meaning if a broader window was selected (e.g., ‘during the covid pandemic’). This suggests that circumstantial meaning is very important within Twitter discourse about COVID-19.

In order to sample a workable dataset for close discourse analysis of temporal meanings from this large corpus, a purposive sampling approach was adopted, focused on identifying patterns of temporal circumstances in terms of how they seemed to enact communing affiliation. The first step was determining some of the most frequent types of time entities in the corpus (Table 3) to isolate examples. This included lexical items that directly indicate time (e.g., *year*) as well as those that don’t mention time directly but instead package it into episodes (e.g., *wave*). We return to this point at the end of this section in relation to historical discourse.

While the singular ‘time’ was the most frequent time entity in the corpus, it referred to a variety of temporal meanings, such as ‘time of day’. In contrast the plural ‘times’ construed meanings about an era. Thus, a decision was made to focus on ‘times’ (shown in bold in Table 3), which likely refers to any shared experience of a pandemic and thus underscores our collective experience and possible trauma.

The most frequent 4-grams for *times* are shown in Table 4. As this table shows in bold, seven of the ten most frequent 4-grams have the pattern *in these ___ times* this pattern was chosen as a potentially fruitful starting point for closer discourse analysis using the analytical methods described in the next section. There were 251 tweets containing this pattern, and each was analysed using the methods described in the next section. Table 5.

3. Method of analysis

The following types of analysis were conducted on the sample of in these ___ times tweets described in the previous section. The aim was to understand the role that the circumstances were playing in affiliation within this dataset. The analysis involved a
combination of corpus-based techniques such as inspection of frequency lists, n-grams and concordance lines – in conjunction with close discourse analysis. This discourse analysis incorporated analysis of temporal circumstances and their function in terms of affiliation, by which we mean alignments around stances, as detailed in Section 3.2.

Table 3
Most frequent Time entities in the corpus.

| N  | time entity | Frequency |
|----|-------------|-----------|
| 1  | time        | 8095      |
| 2  | year        | 6253      |
| 3  | crisis      | 5876      |
| 4  | day         | 5641      |
| 5  | today       | 5570      |
| 6  | lockdown    | 4633      |
| 7  | wave        | 4254      |
| 8  | life        | 3633      |
| 9  | days        | 3441      |
| 10 | times       | 3084      |

Table 4
Most 4-grams containing ‘times’ in the corpus.

| N  | 4-gram                          | Frequency |
|----|---------------------------------|-----------|
| 1  | helps in corona times           | 34        |
| 2  | in these tough times            | 33        |
| 3  | in these covid times            | 28        |
| 4  | in these difficult times        | 26        |
| 5  | be safe in times                | 25        |
| 6  | in these testing times          | 23        |
| 7  | in these hard times             | 17        |
| 8  | strain at least 15 times        | 16        |
| 9  | in these pandemic times         | 14        |
| 10 | in these trying times           | 14        |

Table 5
Semantic categories of temporal resources.

| Type               | Function                      | Key resources                                                                 | Examples                                                                 |
|--------------------|-------------------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| sequencing time    | temporally linking unfolding events | Temporal conjunction & dependent clause (simultaneous) Temporal conjunction & dependent clause (successive) | They are the ones who suffer when people get covid. [dependent clause] @User After I got banned some of my friends told me they did too ... [dependent clause] Last year I went to a restaurant and got pasta for the first time. And then the pandemic happened. [independent clause] |
| segmenting time    | dividing of time into segments | nominal group, normalization, specialized lexis                             | The extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures [in nominal group in Qualifier] |
| setting in time    | locating events at a particular point in time | Circumstance of time: location                                                                 | Most people in UK did not work from home in 2020 [Circumstance] |
| duration in time   | specifying how long an event lasts | Circumstance of extent: duration                                                                 | the vaccine will be needed for many years to come. [Circumstance] |
| phasing time       | indicating the beginning, continuation and end phases of an event or activity | Process nominal group                                                                 | The onset of the pandemic had a far-reaching impact [noun/entity] |
| organizing through time | structuring texts                                         | Internal conjunctive Adjunct external conjunctive Adjunct | I will WFH full time by the end of the year. [Circumstance] finally in 2015 i decided my next job would be at home. [Circumstance] |

3.1. Analysing temporal circumstances

Halliday and Matthiessen (2014) distinguish two key dimensions of time: location, answering the semantic probe “when?” and duration, answering the probe “for how long?”, as was exemplified in examples in Table 1. The present study also draws on Coffin’s (2009, p. 102) configuration of semantic resources for constructing time. These resources include sequencing time, setting in time, duration in time, phasing time, and organizing through time. Of most relevance to the “in these ___ times” pattern is ‘setting in time’ realised through a variety of grammatical structures including circumstances of location in time.

Martin, Maton, and Matruglio (2010, p. 441) note the role of episodic time in history discourse for “interpreting the past in uncommonsensical ways which involve packaging up sequences of actions by individuals into episodes”. This packaging allows episodes to be named (e.g., the Industrial Revolution, the Great Depression etc.) and thus positioned or framed in various ways, for example, via evaluation resources (e.g., the catastrophic Great Depression). We argue here that similarly to the packaging of time in history discourse, social media discourse on the pandemic packages the pandemic as serial time that is loosely bounded (Bennett, 2016), being only during the pandemic, but also unbounded as no one knows when (and if) the pandemic will end. The approach to understanding the complexity of temporal circumstances adopted in this paper draws on Bennett’s (2016) study of the persuasive function of temporal qualities in academic discourse. 

3.2. Affiliation analysis

The affiliation strategies (or functions) in the sampled dataset were explored using the system of communing affiliation (Fig. 1), which forms part of the ambient affiliation framework. This system was originally developed to understand how hashtags are used in
Twitter discourse to create ambient attitudinal alignments even in the absence of direct interaction between social media users (Zappavigna and Martin, 2018a).

### 3.2.1. Analysis of communing affiliation strategies

Three systems of communing affiliation were used to analyse the text samples from the corpus:

- **CONVOKE** – Mustering a community around a bond, for instance, via resources such as vocatives, which foster collectivity and togetherness.
- **PROMOTE** – Adjusting the prominence of a bond, for instance, by raising or lowering its stakes, such as through the upscaling or downscaling of graduation resources.
- **FINESSE** – Positioning a bond amongst networks of other potential bonds, for instance via resources of heteroglossia, e.g., engagement choices such as contraction.

As the brace in the communing affiliation system network indicates, these systems represent simultaneous rather than mutually exclusive choices and can potentially co-occur within a single post.

The **CONVOKING** system involves tendering a coupling to a particular community by ‘pitching’ or ‘calling together’ a group to bond around the coupling or by suggesting the parameters of the community to which the bond appeals. We can further delineate resources that **MARSHAL** a community from those that **DESIGNATE** a community, although these two options can co-occur in a text. For example, vocatives or other resources of address can be used to **MARSHAL** a group to align with a coupling (e.g., *guys*). Alternatively, the relevant community may be **DESIGNATED** through an explicit reference to a group (e.g., *nurses*). **FINESSE** is concerned with modulating the coupling in relation to other potential stances that may be present in the social stream through resources that parallel or oppose bonds such as choices in **ENGAGEMENT**. For example, a particular coupling might be affirmed through **EMBELLISHING** it via **ENTERTAINING** possibility (e.g., *must*) or by setting it in contrast to other potential couplings, **CONTRACTING** the potential of other voices and thus **DISTILLING** the coupling (e.g., *never*). Finally, **PROMOTING** raises or lowers the interpersonal stakes of a coupling by raising or lowering the strength or scope of the bond and hence raising or lowering its stakes. For example, **FOSTERING** might be achieved via upscaling the **GRADUATION** through intensification (e.g., *really*). The scope of a bond can also be adjusted by **MODULATING** the prototypicality of the coupling against some standard (e.g., *true*). It should also be noted that while choices from the Appraisal framework (Martin & White, 2005), are the most obvious resources involved in the affiliation strategies at work on a given coupling, there are a wide range of resources that can be deployed at any stratum of language, and indeed, as burgeoning work on paralanguage is suggesting, across different semiotic modes (Martin and Zappavigna, 2019; Ngo et al., 2021).

### 3.2.2. Ideation-attitude coupling analysis

Critical to understanding how affiliation works is the concept of an ideation-attitude ‘coupling’, which refers to how social bonds are construed in language as a combination of content-meanings and value-meanings. In other words, analysis of attitude alone is insufficient for understanding communing affiliation since we “don’t after all simply affiliate with feelings; we affiliate with feelings about people, places and things, and the activities they participate in, however abstract or concrete” (Martin, 2008, p. 58). Thus the affiliation systems used in this paper are concerned with what Han (2015, p. 30) has termed “alignment to the coupling”, that is, how a text works to cultivate a particular interpersonal orientation to an ideation-attitude coupling where this coupling is the value construed in the text as an evaluation about an entity or process: What is of central concern in relation to strategies of affiliation is … ‘alignment/disalignment’ towards value positions, as this determines whether the writer is introducing the coupling to commune around a bond or to reject it. (Han, 2015, p. 57).

This kind of concern with alignment/disalignment is also seen in the body of work on stance and positioning amongst speakers/writers (Du Bois, 2007; Du Bois & Kärkkäinen, 2012; Ochs, 1996.)
The concept of coupling is grounded in Knight’s (2013) work on affiliation in casual conversation, where a coupling is the linguistic realisation of a social bond between people and/or communities. Couplings have been used as an analytical unit to explore affiliation in a diverse range of areas such as restorative justice (Zappavigna and Martin, 2018b), business discourse (Szenes, 2021), internet hoaxes (Inwood and Zappavigna, 2021), terrorist discourse (Etaye and Zappavigna, 2021) and stand-up comedy (Logi and Zappavigna, 2019; Logi and Zappavigna, 2021).

The evaluative dimension of the coupling was analysed using the APPRAISAL framework (Martin & White, 2005), specifically the system of ATTITUDE. APPRAISAL is a framework for analysing evaluative language and has been applied to a vast range of domains of communication, including work on social media, “since sharing and contesting opinion and sentiment is central to social media discourse” (Zappavigna, 2017, p.435). The system of ATTITUDE maps evaluation as a choice between AFFECT (expressing emotion, e.g., love, disgust, fear etc.), JUDGEMENT (assessing people and their behaviour, e.g., evil, ethical, trustworthy etc.) and APPRECIATION (estimating the value of phenomena and situations, e.g., beautiful, treasured, noteworthy etc.) (Fig. 2). All of these systems can be realised by specific attitudinal lexis or through phrases or longer stretches of discourse. In addition, attitudinal meaning can be hinted at or implied, and this is termed INVOKED attitude in the appraisal framework, including attitude that is realised through metaphors or shared cultural understandings about what is valued.

The construal of evaluative meaning is very complex, particularly in social media environments which often tend to involve layers of complicated intertextual references and span multiple contexts that can be difficult to untangle (sometimes referred to as context collapse (Marwick & boyd, 2011; Wesch, 2009)). Most social media texts are tinged in some way with evaluative meaning and implicate particular value positions, (cf. Voloshinov’s (1929/1973/1986, p. 103) idea of an ‘evaluative accent’). The APPRAISAL framework attempts to factor in this complexity by distinguishing ATTITUDE which is INScribed (realised via explicit evaluative choices) from ATTITUDE which is INVOKed (hinted at or suggested by particular linguistic choices that imply evaluative meaning). APPRAISAL distinguishes between three systems of implied evaluation: PROVOKE, FLAG, and AFFORD. Attitude may be provoked via lexical metaphors, flagged via graduation resources (upscaling or downscaling a meaning), or afforded by ideation that has accrued a positive or negative association.

The ideational dimension of the coupling was analysed using Hao’s (2020, p. 64) discourse semantic systems for describing entity types (Fig. 3) and figure types (Fig. 4). Entities are the ideational discourse semantic units construing items in a field of experience. They can be categorised into source entities (for instance, participants projecting verbiage e.g., doctors, experts, reporters etc), thing entities (a person, place or object e.g., mask, vaccine, needle, hand sanitiser), activity entities (an activity or sequence of...
activities e.g., vaccination, elimination), semiotic entities (verbiage or ideas, e.g., reports), place entities (e.g., hospital, vaccination clinic) and time entities (e.g., three hours, 2020).

Figures can involve one or more entities in a process of change (occurrence figures), or in relations (state figures). For example, the top example in Fig. 4 is an occurrence figure where an occurrence is construed by an activity (dying), whereas the bottom example is a state figure where an entity (COVID-19) is evaluated by a quality (deadly in the elderly). For example,

3.3. Data annotation

The format for integrating the coupling analysis and analysis of circumstantial meaning in a single annotation is the following: the ideation in the coupling is in italics and underlined, the attitude is in bold, and the circumstance is shown without italics but still underlined. For example, consider the tweet:

Weekends are the only positives in these Pandemic times.

Ideation-attitude couplings were annotated using the following convention, together with associated circumstantial meaning:

[i: ideation / e: evaluation] x Circumstance.

The square brackets in this annotation indicate the fusion of ideational and attitudinal meaning into a single value that is open for negotiation. The ‘x’ is used to indicate that this coupling is inflected or framed by the circumstance. For example:

Weekends are the only positives in these Pandemic times.

The following annotation strategy is used to represent the coupling’s inflection or modulation by the circumstance:

[i: entity / e: positive appreciation] x location in time.

4. Analysis: The affiliative functions of temporal circumstances

The examples used to illustrate the system of communing affiliation in Fig. 1 in the method section show that each affiliation strategy can co-occur with a circumstantial meaning of Extent or Location (e.g., during a global pandemic, during this horrible pandemic, during a pandemic, during COVID, during the pandemic, during a pandemic). Zooming into “in these ___ times” in particular, three major affiliative functions that these circumstantial meanings were involved in were observed:

- CENTRING in the service of CONVOKING affiliation, where a key bond is foregrounded or put at the deictic centre by the temporal circumstance.
- CONTRASTING in the service of FINESSING affiliation, where a key bond is set in opposition with another bond.
- ACCENTUATING in the service of PROMOTING affiliation, where a key bond is upsampled.

The sections which follow explore each of these patterns. Since the aim was to explore the function of circumstantial meanings in terms of how they contribute to ambient affiliation, rather than to assess quantitatively how frequently they occurred, statistical information is not included.

4.1. CENTRING values on “these times” through CONVOKING affiliation

Temporal meanings foregrounding the shared nature of time through deictic resources (i.e., pointing to the shared ‘times’ e.g., these times) operated in the services of CONVOKING affiliation. These resources include place/spatial deixis used to locate the relative position of the time entity in the circumstance. We describe the function of these kinds of deictic in terms of affiliation as CENTRING, drawing inspiration from the idea of a deictic centre (Lenz, 2003) but considering this concept through a more social expansive lens, in order to think about how the deixis can operate to coordinate mass sharing of a collective pandemic experience. In other words, the deixis does not only function to coordinate a speaker and listener around a single shared instance in their localised discursive environment (e.g., in their local co-text or context) but operates on a larger scale to coordinate discourse about the collective times that the large-scale ambient audience are co-experiencing (See also Lemke (2000) for work on time scaled and discourse). For example, consider the “these times” in the following concordance lines where the deictic ‘these’ CENTRES the shared experiences in the temporal location of the unfolding pandemic:

Maybe if there wasn’t a pandemic they could but even selling 50 k + during these times is great.

…can you please guide how to NOT feel Anxious during these times, when there is so much negativity because of the pandemic.

Any research intention will just self-combust in these times! Playing petty politics in these times of pandemic. Shame!!!
Further evidence that this kind of CENTRING is operating on a mass scale is the use of #thesetimes as a hashtag to coordinate shared feeling about the experience. For example, the following instances were retrieved via a Twitter search:

This was a good weekend. The best you can expect in #thesetimes.

I need a mask so I can go in a shop, to buy a mask. #thesetimes
Sad news!!! If this doesn’t keep the people home and healthy! #thesetimes
Working from home. #thesetimes.

This search also uncovered the following post which indicates that ‘these times’ is considered a significant enough concept to warrant a museum project:

I’ve been documenting my daily walks during #COVID—19 as a part of @ MuseumOrdinary’s #TheseTimes project. Really excited to get all of this film developed. When that will be is another whole question [selfie of the photographer’s hand holding a digital camera showing the image being taken on the screen].

The elevation of this temporal meaning to a hashtag signals its traction in convoking people around particular ideas or stances. Hashtags are a form of social metadata that can both enact particular linguistic functions when co-occurring with clauses as well as having an aggregation affordance (linking a post to other posts containing the same tag). They have also been identified as a resource for enacting communing affiliation (Zappavigna and Martin, 2018a).

The pandemic itself was often a Classifier for the kind of times, for example, in circumstances such as in these covid times (36), in these pandemic times (14), in these #covid19times (3), and in these corona times (2). These examples invoke rather than inscribe negativity: a pandemic can function as a token of negative appreciation of a period of time (i.e., bad times when disease is spreading). These kinds of temporal meanings occurred with a range of affiliation strategies, for example, in posts promoting an ‘angry reaction’ bond featuring negative affect:

I want a dislike button or may be angry one to be added by Twitter esp in these Covid-19 times. … There are so many posts on which I just want to click the angry emoji. …

| ideation: | location in time. |
| --- | --- |
| semiotic entity | negative affect |

but also in calls for benevolent action:

@User In these pandemic times, please release all political prisoners and show humanity.

| ideation: | location in time. |
| --- | --- |
| occurrence figure | positive propriety |
| release | show |

They are also implicated in ‘laughing-off’ (Knight, 2013) a bond about the unusual social interactions that covid has generated, for example:

@User I would think that greeting someone at the door with hand sanitizer could actually be considered to be the epitome of hospitality in these Covid times.

| ideation: | location in time. |
| --- | --- |
| occurrence figure | positive propriety |

The CENTRING function of ‘in these times’ also seems to be part of how these temporal circumstances invoke blame and casualty, that is, the stance that blame for the bad things can be laid squarely on COVID-19.

4.2. CONTRASTING shared values with ‘tough times’ through FINESSING affiliation

A prominent pattern in the dataset was establishing an evaluative disparity between the current pandemic times and other points in time, through what we refer to as CONTRASTING. In terms of affiliation, this involved shared positive experiences that were set in contrast to the negative situation indicated in the circumstance. CONTRASTING is part of a broader choice in tenor relations in terms of how interpersonal relations can be organised: LIKENING where meanings are associated (e.g., via resources such as similarity conjunctions) and OPPOSING where meanings are disassociated (e.g., via resources such as negation) (Doran, 2019; Doran et al., 2023).

A frequent pattern involving CONTRASTING in the corpus were circumstances in the format “in these [negative attitude] times” set in opposition to shared positive feelings and experiences. The ATTITUDE in these temporal circumstances was most often either an instance of negative APPRECIATION [REACTION], for example, in these tough times, or a Classifier, for example, in these pandemic times. The most frequent 4-grams for times, all of which are circumstances of the pattern “in these _____ times”, are shown in Table 6. The most frequent evaluation in this pattern was NEGATIVE ATTITUDE: tough (34), difficult (26), testing (23), hard (17), and trying (14). One way in which CONTRASTING was involved in affiliation was through the coordination of temporal meanings that include negative attitude such as in these tough times, with FINESSING affiliation strategies where tough times are contrasted with positively evaluated relationships with family or with highly valued people such as health workers, as in the following examples:

In these tough times you need your family members near you (I’m saying this because I have experienced it).

| ideation: | location in time. |
| --- | --- |
| occurrence figure | invoked positive affect |

Salute volunteers as well as corona warriors who are serving the people in these tough times.

| ideation: | location in time. |
| --- | --- |
| occurrence figure | positive judgement |

If we consider the evaluation inside these temporal meanings, they themselves incorporate a coupling [ideation: Time entity/attitude: negative attitude], where the time entity targeted by the evaluation is a plural noun ‘times’ suggesting an extended period of time, historical period, or the span of a particular world-view or perspective. For example:

We’re all going thru tough times. We’re all doing our bit to help others. In these hard times just wanted to share a Covid related story that gives us courage hope and lift our spirit. Have a good day! [embedded image of a newspaper article about a 102 year old man who recovered from covid-19 in 20 days].

The Time entity (times) seems to contribute to the.convoking as it flags a shared experience of an ongoing situation rather than an individual experience of a particular point in time. This also functions to enact CONVOKING affiliation by MARSHALLING shared awareness of shared feeling (us, our, shown in underlining above). The ‘bad times’ bond can be set in contrast with other bonds about positive feelings and experience realised, as we saw in the examples explored earlier and as is visible in the positive ATTITUDE (shown in bold italics above) in this example.
As the most frequent 4-grams for ‘times’ (in these tough times) in Table 6 indicates, while the times are characterised as negative in this pattern, the rest of the post typically was saturated with positive attitude, rallying the ambient audience around positivestances or behaviours they might adopt in reaction to the negative times. The examples in Table 6 involve negative evaluation instanti-ated in the main circumstantial meaning in the post, together with activities and entities that are positively evaluated in couplings such as [ideation: entity (healthcare workers)/attitude: positive; tenacity (prove as frontline)]]. For example, the third instance in the table involves negative evaluation of healthcare workers both in the verb-based and in emoji such as ✊. It enacts invo-cing affiliation by designating (healthcare workers, nation, HealthcareHeroes and FrontlineWarriors) and fosters through accentuating (all, forever). Similarly, the fourth instance in the table invokes the ambient audience through mar-shalling them around activities which they should undertake in order to fight the pandemic. The marshalling is construed via reference to shared collectivities (us, we, together) and fostered by accentuating (all, a priority,!) and 🙌, the emoji intensifying the imperatives in the body of the post and in the hashtag (#StayHomeStaySafe).

The kind of converging identified in the examples above is part of how circumstantial meanings can be involved in the ways bonds are arranged or organised within a particular bond cluster (i.e., configuration of values) that might be held by a particular community. The discursive patterns identified above have become established enough that they are themselves the target of metadiscourse critiquing the use of certain evaluative phrases such as ‘unprecedented’ in temporal meanings. For example, posts such as the following which mock the kinds of negative appraisal that have become prevalent.

If I see one more email about grad students being ‘resilient’ in these ‘unprecedented’ ‘extraordinary’ pandemic times I will flip a table.

I’ve aged so much in the past months, my hair is turning white more frequently, and every grad student I know is stressed, treading water.

In terms of their role in ambient affiliation, circumstantial meanings could be used to raise the interpersonal stakes of the bond realised by an ideation-attitude coupling in a post through promoting affiliation. Temporal circumstances were often involved in accentuating prosodies of negative attitude targeted at state and occurrence figures about activities and situations relating to the pandemic involved in construing ‘bad situation’ and ‘bad activity’ bonds. An example is the following tweet realising a ‘bad behaviour’ bond that was posted in response to a tweet about someone spitting at a rape victim outside a court:

That’s disgusting anytime... more so now in these covid times. Absolute filth.

In this example the temporal circumstance coordinates with two coupleings negatively judging the spitter and their behaviour. In combination with the accentuating (more so, absolute), the circumstance fosters the ‘bad behaviour’ bond construed via these coupleings. In addition, the first temporal circumstance (anytime), is set in contrast to the second temporal circumstance (in these covid times) and is an example of the way that contrasting can support accentuating. Since creating an opposition can also act as a form of emphasis. Another example is the following:

Yes, in these trying times, we definitely see Humanity winning the race against this Pandemic 🙆‍♂️ COVID19 🎫 CovidHelp #COVIDEmergencyIndia.

In this example a ‘good people’ bond is contrasted with a ‘bad pandemic’ bond at the same time as contributing to the accentuating of the ‘good people’ bond. Other resources such as ‘definitely’ and the ‘raising hands’ emoji 👍 also contribute to the interpersonal emphasis. The general function of the accentuating is to cultivate alignments with the ambient audience through underscoring the extent of the shared hardship that so many people have been experienced during the pandemic.

5. Conclusion

While there are so many ways humans can construe separation from each other – by nation, region, political affiliation, and a vast array of other dimensions of variation – the COVID-19 pandemic offers a unique opportunity to explore global shared experience.
This paper has explored temporal meanings as a resource for building solidarity in social media posts about the COVID-19 pandemic. Circumstantial meanings are often foregrounded in interpersonal analysis since they are part of experiential meaning. However, as this paper has shown, temporal circumstantial meanings are critical to the way interpersonal meaning is construed and affiliation is enacted in posts about COVID-19.

This paper has detailed three major patterns in terms of how temporal meanings, most frequently instantiated as circumstances, coordinate with communing affiliation strategies: CENTRING in the service of CONVOKING affiliation, CONTRASTING in the service of FINESSING affiliation, and ACCENTUATING in the service of PROMOTING affiliation. The analysis focused on the temporal circumstantial meaning “in these ___ times” in the dataset of tweets about the pandemic, where the open slot was filled with either a Classifier e.g., in these COVID times, or evaluation, e.g., in these tough times. In this particular set of temporal meanings, the Deictic ‘these’ was important in terms of how the temporal meaning coordinated with affiliation strategies as it offers a CENTRING the shared context within which to bond. It also offered a means of CONTRASTING the current time with other times, by ACCENTUATING positive and negative oppositions in terms of other moral evaluations (e.g., how health workers were being treated or how people were generally treating each other now compared to at other times). This opened up the possibility creating social alignments as shared stances (or bonds) regarding the state of the world and how we treat each other at times of crisis. Such sharing of opinion is important since the COVID-19 pandemic brings into stark relief our shared humanity.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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