

1 **Title:** Lying in the Time of Crisis

2

3 **Abstract**

4 Beginning with an examination of the recent Nature news story based on Harvard-Lancet-Mehra

5 et al. COVID-19 research scandal, which brings into focus a subtle form of lying, I put forth

6 thinking mechanisms—for further debate—to safeguard the integrity of science in a time of

7 crisis.

8 Let us begin with the concept of LYING (van Ditmarsch, Hendriks, and Verbrugge, 2020). As a
9 case study, I consider the Nature News: "India expands use of controversial drug for coronavirus
10 despite safety concerns" (Pulla, 2020). The Nature news article, citing an editorial 'Expression of
11 concern'-marked paper (Lancet Editors, 2020), which has since been retracted (Mehra et al.,
12 2020), first states: "people who took it [hydroxychloroquine] were more likely to die than those
13 who didn't", and later on adds: "Scientists have since raised serious concerns about the study's
14 data and analysis."

15 The above sequence of statements, according to *Dharma* or "cosmic law", constitutes lying. In
16 Mahabharata, Yudhishtira first says: "Aswathama died", which leads Dronacharya, who is
17 undefeatable, to drop his weapons thinking his son Aswathama died, and in turn gets killed by
18 Yudhishtira's army. Yudhishtira thinks, since an elephant [also] named Aswathama has been
19 killed, his murmuring "Aswathama, the elephant" after saying "Aswathama died" would retain
20 his status as one who tells the truth. Fortunately, cosmic law thought otherwise and sentenced
21 Yudhishtira to hell!

22 As though adopting Yudhishtira's failed strategy to retain the status of truth-teller, Nature
23 published its first update: "This article was updated to note the retraction of a study suggesting
24 that hydroxychloroquine might be dangerous to patients with COVID-19" at *the end* of their
25 article (<https://www.nature.com/articles/d41586-020-01619-8#correction-0>). Subsequently,
26 Nature added another update at *the beginning* of the article, which acknowledges that their article
27 cites the retracted paper: "a study reporting that hydroxychloroquine is dangerous to people with
28 COVID-19, referenced in this article, was retracted" (without acknowledging that the retracted
29 Lancet article is the only scientific study cited in the Nature News article, which warrants
30 "despite safety concerns" in the Nature article title), all of which compounds confusion.

31 More broadly, part of the problem is with editorial "Expression of concern". In the case of
32 Mehra et al. (2020), The Lancet editorial Expression of concern alerts "readers to the fact that
33 serious scientific questions have been brought to our [editors] attention" (Lancet Editors,
34 2020). Given that raising serious scientific questions is the norm in science, it would be more
35 helpful to explicitly state that an 'Expression of concern'-marked paper can be reported only after
36 categorically stating that the paper is under investigation and not the other way around (as
37 Yudhishtira and Nature did, which is confusing if not lying). This is one of the moral lessons
38 that the Harvard-Lancet-Mehra et al. research scandal teaches us.

39 Even more broadly, in the context of the novel coronavirus crisis, studying "Thinking in an
40 Emergency" (Scarry, 2012) can be useful. Oftentimes, during emergencies and crises,
41 governments and other institutions of power unleash mechanisms that stifle dissenting voices in
42 the name of: It's time to act; there's no time to waste on time-consuming debates or
43 thinking. However, more than anything else, *reason* is the need of the hour in the time of
44 crisis. How do we reconcile these two [seeming] incompatibles: reason vs. action? The answer
45 is to transform reason into [conscious-reflex] action by preparing and practicing for imagined
46 emergencies (cf. firefighters; a related phenomenon is practicing for a performance, see
47 d'Amboise, 2006). It is in this context cognitive scientists can contribute their share to the
48 ongoing global struggle in dealing with the COVID-19 pandemic by elucidating the
49 transformations between thought and action.

50 We may not know exactly when, how, or in what form a crisis might show up, but we do
51 know, upon looking at our history, that crises sure do visit us every so often. We find the
52 COVID-19 crisis unprecedented, but it is not novel to humanity. Humanity has been through a
53 lot and has prevailed in large part due to the crisis-preparedness that has been made part of

54 human culture. For example, in my state Andhra Pradesh, New Year's Day (Ugadi) is celebrated
55 with Ugadi pachadi, a festival dish with six different tastes: sweet, salty, hot, sour, tangy, and
56 bitter, symbolic of wishing one another well in preparing for the happiness, fear, anger, disgust,
57 surprise, and sadness that the New Year may have in store for us.

58 In a similar spirit, science publishers may want to consider putting in place crisis preparedness
59 plans to preserve their commitment to presenting truth in a time of crisis. Time, of course, is of
60 essence in a time of crisis, but there is no reason not to solicit more reviews, open reviews, and
61 delete author and affiliation information (to protect the reviewers from the intimidation that
62 comes attached with names like Harvard). In the face of hundreds of thousands of tragic human
63 deaths, switching from the usual *confidential* positive reviews to mandatory *open* positive
64 reviews as the criterion for publication of a scientific report, which has global impact, is not too
65 much to ask for. In this context, nothing is more important than bringing into figural salience—
66 for all to see—the fact that there is no dearth of sincere scientists speaking truth loud and clear.
67 It is the *open letter* written by James Watson (2020) on the behalf of more than two hundred
68 physicians, scientists, and statisticians from all over the world that forced The Lancet to mark
69 Mehra et al. paper with 'Expression of concern'.

70 However, it may be difficult for any individual editor to hastily make up a new review policy
71 during a crisis. It is exactly for this reason that we need, in addition to thinking individuals,
72 institutions to pitch in thinking in a time of crisis. Science journals and universities are two
73 spaces, where such institutional thinking (that needs to get triggered automatically by crises)
74 takes place. It is our collective responsibility to safeguard the integrity of these thinking
75 institutions. In this spirit, I call upon cognitive scientists, with their expertise in reasoning,
76 intuition, habit, and action, among others, to take a proactive role in crafting crisis preparedness

77 programs for universities and science publishers so that they can avoid the ignominy of lying or
78 propagating fake news (Posina, 2020).

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80 there is no conflict of interest.

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