

# The raw and the (over)cooked

## STATES ARE PHYSICAL QUALITIES

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Researchers have long recognized the role of metaphor in conceptualizing states. We contribute to research on the conceptualization of STATE concepts in two ways. First, we identify a not-yet-recognized metaphor system commonly used to conceptualize states: STATES ARE PHYSICAL QUALITIES. We contend that STATES ARE PHYSICAL QUALITIES is an elaboration of the image-schematic STATES ARE LOCATIONS metaphor, with a higher degree of specificity, affording entailments not supported by STATES ARE LOCATIONS. After introducing the physical qualities metaphor system, we examine the function of STATES ARE PHYSICAL QUALITIES in the social world, finding that people use it to evaluate objects across many domains. Specifically, there is a significant distinction between two prototypical physical qualities – *processed* and *unprocessed* – used to conceptualize socially salient state differences, with “cooking” as the prototypical form of processing. Particularly in the domain of aesthetic evaluation, this is seen in the metaphor AUTHENTIC IS UNPROCESSED. In practical domains such as sports and science, this is seen in the metaphor DEVELOPED IS PROCESSED. In all these cases, the evaluation of people and objects is grounded in the perception of their states, comprehended as physical qualities.

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### 1. Background

The condition of people or things at specific times, as given by the concept of STATE, is foundational in social life. How people think or act relative to a person or thing is informed by the state of the person or thing. A boss in a foul mood is not approached like a boss in a good mood, and a road in disrepair is not traveled

like when it is freshly paved. Understanding and evaluating states is a mundane practical skill (Garfinkel, 1967).

Given the importance of the STATE concept, how do people conceptualize it? Researchers in cognitive semantics have long recognized the role of metaphor in conceptualizing states. Previous work finds that states are typically conceptualized as *locations* – defined as “bounded regions in space” (Lakoff & Johnson, 1999, p.180) – and expressed in the primary metaphor: STATES ARE LOCATIONS (R. Gibbs, 2017, 2019; Jeppsson et al., 2013; Johnson & Larson, 2003; Lakoff, 1993; Lakoff & Johnson, 1999).<sup>1</sup> This primary metaphor is seen in phrases such as “I’m *in* love,” or “he’s *on* the verge of a breakdown,” which use prepositional phrases typically used to indicate spatial relations. Many specific state metaphors, such as HAPPY IS UP/SAD IS DOWN (Lakoff, 2016, pp.269–273), are also instantiations of STATES ARE LOCATIONS insofar as they conceptualize states as a point in space (e.g., “she’s *on* cloud nine”).

To date, metaphor research on the conceptualization of states has focused on the STATES ARE LOCATIONS metaphor (or the more distilled rendering: STATES ARE CONTAINERS). More generally, Lakoff and Johnson (1999, p.180) doubt that states can be conceptualized as anything besides locations:

We have tried to conceptualize a state without these features of bounded regions in space, but we simply cannot do it. In short, the conceptual metaphor STATES ARE LOCATIONS (bounded regions in space) seems to be central to the concept of a state.

In this paper, we contribute to metaphor research on the state concept in two ways. First, we identify an additional, not yet recognized metaphor system commonly used to conceptualize states: STATES ARE PHYSICAL QUALITIES. We contend that STATES ARE PHYSICAL QUALITIES is an elaboration of the image-schematic STATES ARE LOCATIONS metaphor, with a higher degree of specificity affording entailments not supported by STATES ARE LOCATIONS alone. Furthermore, although all states can be reconstructed as locations, people often experience states directly as physical qualities.

After introducing the physical qualities metaphor system, we examine the function of STATES ARE PHYSICAL QUALITIES in the social world. We show that people use the STATES ARE PHYSICAL QUALITIES metaphor to evaluate actors and objects across many domains. Specifically, we observe a socially significant dis-

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1. Researchers sometimes identify the primary metaphor STATES ARE CONTAINERS, though this is little more than a more distilled rendering of STATES ARE LOCATIONS, given the latter implies the CONTAINMENT image schema (Brookes & Etkina, 2007; Daane et al., 2018; Kövecses, 2008; Kuzmina, 2013; Nam, 2010).

inction between two physical qualities, namely, *processed* and *unprocessed* – with “cooking” and its cultural derivatives as the prototypical processing activity and “rawness” as the prototypical unprocessed quality – used to conceptualize socially significant state differences. In aesthetic domains, this is seen in the metaphor AUTHENTIC IS UNPROCESSED; this is also seen in the metaphor DEVELOPED IS PROCESSED, common in various practical fields such as sports and science. In all these cases, we find repeatedly that the evaluation of people and objects is grounded in the perception of their states, comprehended as physical qualities.

## 2. STATES ARE PHYSICAL QUALITIES

How do people conceptualize states? When considering the abstract concept of a state, recourse to containers and/or locations is likely unavoidable. However, when people consider the states of specific objects or experiences, they do so not only in the abstract but also as they experience and feel it, conceptualizing states via the qualities associated with these experiences and feelings. Thus, while recognizing the image-schematic primacy of STATES ARE LOCATIONS for the abstract conceptualization of states, we argue people commonly conceptualize states via the more specified metaphor, STATES ARE PHYSICAL QUALITIES. Consider, for example, two possible responses to the question: “What is the state of the manuscript?” One could describe a manuscript as “*in progress*,” which is an instantiation of STATES ARE LOCATIONS. Additionally, one could describe a manuscript using the specified metaphor “*undercooked*,” an instantiation of STATES ARE PHYSICAL QUALITIES. The latter is a valid and reasonable conceptualization of the state of a manuscript that is systematic yet less abstract than recourse to spatial relations.

STATES ARE PHYSICAL QUALITIES is not a free-floating, independent alternative metaphor system to STATES ARE LOCATIONS. Instead, it is an elaboration of the image-schematic metaphor (see Figure 1.), as given by the fact that STATES ARE PHYSICAL QUALITIES metaphor can be redescribed in terms of STATES ARE LOCATIONS. For example, “the manuscript is undercooked” can be rephrased as “the manuscript is in an undercooked state,” although this last rendering is much less conventional than the first. However, the systematicity of STATES ARE PHYSICAL QUALITIES is not sufficiently explained by a reduction to STATES ARE LOCATIONS. The former is a more specified metaphor system with entailments not supported by STATES ARE LOCATIONS alone, making the STATES ARE PHYSICAL QUALITIES system an unavoidable resource when conceptualizing and evaluating specific properties of objects and people.

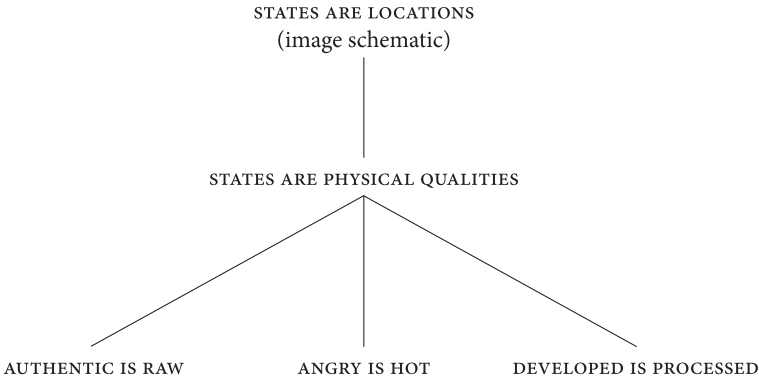


Figure 1. Organization of STATE metaphors

STATES ARE LOCATIONS inherits the topological affordances of bounded regions, accounting for its flexibility and conceptual limits. As bounded regions, states can be entered and exited, and paths can be drawn between them. In this way, STATES ARE LOCATIONS enables comprehension of the temporal dimensions of states and facilitates the construction of narratives (e.g., “we went *from* bad *to* worse”) and desires (e.g., “get *in* the mood”). Nevertheless, the entailments afforded by metaphors based on the STATES ARE PHYSICAL QUALITIES mapping are not merely stylistic riffs on STATES ARE LOCATIONS but meaningful elaborations with distinct evaluative and practical implications. For example, many metaphors based on STATES ARE PHYSICAL QUALITIES situate states within a teleological framework of *directed* state change. Employees begin “unseasoned,” eventually becoming “seasoned” with experience. Similarly, “unpolished” becomes “polished” after skillful revision. Such metaphors also typically entail *valence* because physical qualities are associated with embodied affordances (Davis, 2020; Gibson, 2014). *Undercooked* foods are unpleasant and disappointing to consume. *Polished* surfaces are bright and aesthetically pleasing. For this reason, using the STATES ARE PHYSICAL QUALITIES metaphor helps people evaluate the practical and aesthetic affordances of people and objects. Thus, to say that a manuscript is “undercooked” is to make a normative judgment about its state, borrowing negative connotations from experiences of undercooked food. The manuscript is *disappointingly* incomplete. Alternatively, calling a manuscript “polished” highlights its *pleasant* and *distinctive* completeness.

In addition to affording conceptualization of directed state change, STATES ARE PHYSICAL QUALITIES affords a more elaborate conceptualization of how states change. STATES ARE LOCATIONS conceptualizes state change as movement between locations (Jeppsson et al., 2013). By contrast, the STATES ARE PHYSICAL QUALITIES metaphor conceptualizes state changes as changes in physical qualities.

Consider the following examples:

- (24) [I]t's an issue that becomes more smoothed out in later episodes as the series finds its footing.<sup>2</sup>
- (21) The potential was there... and ever since then his art has grown and developed to become more refined.<sup>3</sup>

In (24), the author describes a state change in a television series using the metaphor of “smoothing out.” The state of the “issue,” which presumably began as “sticking out,” becomes “more smoothed out.” Notably, although we *could* describe this change in terms of movement between locations (e.g., *from* “sticking out” *to* “smoothed out”), change is here expressed as a “becoming” – a change in physical qualities. Similarly, (21) describes a state change in a person’s art in terms of “growth,” “development,” and “refinement.” Although these could be rephrased as STATES ARE LOCATIONS, people frequently conceptualize state changes using the more specified physical qualities metaphor rather than the image-schematic movement metaphor.

Conceptualizing states as “qualities” opens myriad ways to conceptualize change beyond the narrow choice of *in* and *out* or *to* and *from*. Rough things may be smoothed, raw things may be cooked, and hot things may be cooled. This conceptual flexibility allows people to choose qualities whose implied state change fits the target. For example, a project may be described as “rough” and in need of “smoothing” or “undercooked” and in need of further “cooking.” The former implies a finished draft that needs editing, but the latter implies an unfinished project that requires completion. Thus, STATE CHANGE IS CHANGE IN PHYSICAL QUALITIES can provide a descriptive state change model.

Our argument regarding the metaphorical importance of qualities in conceptualization builds on pragmatist observations about aesthetic experience. Mark Johnson, summarizing John Dewey’s views on the link between qualities and experience, explains (2008, p. 73):

If you pay attention to how your world shows itself, you will indeed see that the flow of experience comes to us as unified wholes (gestalts) that are pervaded by an all-encompassing quality that makes the present situation what and how it is.

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2. <https://www.themarysue.com/marvels-m-o-d-o-k-follows-a-supervillain-going-through-a-midlife-crisis/>

3. <https://petapixel.com/2021/06/15/photographer-combines-fantasy-and-boudoir-for-cinematic-results/>

Applied to states, we argue that states are often directly experienced as pervasive qualities. In these cases, states are not initially conceptualized abstractly as locations with qualities attached but *as* qualities themselves. For example, people frequently conceptualize the state of talent *as* raw (“raw talent”) rather than as locations with attached properties (“in a raw state”). As Johnson says (2008, p.72), “*pervasive qualities are not properties of objects*,” but rather characterize entire situations. Although we can and do think about states abstractly as locations with physical qualities, states are also experienced directly as “pervasive qualities,” and thus, moving from conceptualizing states as physical qualities to locations entails a jump to a less specified, more image-schematic representation, shifting attention from the qualitative experience of the state to the abstract nature of the state *qua* state.

Primary metaphors like STATES ARE LOCATIONS develop via repeated experience in “primary scenes” (Grady, 1997a). Lakoff and Johnson (1999, p.52) argue that the primary scene for STATES ARE LOCATIONS is “experiencing a certain state as correlated with a certain location (e.g., being cool under a tree, feeling secure in bed).” The direct experience of state change as a change in physical qualities may emerge from a different primary scene that does not entail physical movement. Specifically, we propose that routinely observing changes in the physical qualities of stationary objects may ground many metaphors of states and state changes conceptualized as physical qualities. For example, when noticing how ingredients change when cooked or when objects get wet. Primary scenes linking qualities with the properties of objects and settings and changes in qualities with concomitant changes in those properties support the emergence of STATES ARE PHYSICAL QUALITIES and the direct experience of states.

Although previous research does not explicitly identify STATES ARE PHYSICAL QUALITIES as a way of conceptualizing states, many previously identified metaphors can be profitably understood as instantiations of STATES ARE PHYSICAL QUALITIES, including ANGER IS HEAT (R. Gibbs et al., 1997; Lakoff, 2016), MORAL PURITY IS CLEANLINESS (Yu, 2022), and BAD IS STINKY (Lakoff & Johnson, 1999, p.50). Research on specific states illustrates that many metaphors link states to the experience of physical qualities, such as temperature, cleanliness, and smell.

In sum, people conceptualize states as locations when considering states *qua* abstract states, but people also frequently and intuitively conceptualize states via a more specified metaphor as physical qualities. STATES ARE LOCATIONS is foundational for conceptualizing the temporal dimensions of states constructing abstract narratives of change. It is the image-schematic primary metaphor for STATES. STATES ARE PHYSICAL QUALITIES elaborates this metaphor, providing unique affordances that STATES ARE LOCATIONS do not entail. For example, STATES ARE PHYSICAL QUALITIES metaphors may entail teleological models of directed

change, convey valence, and provide semantically rich models of transformation beyond the abstract model of physical movement. Qualities objects and people gain (or lose) resulting from human intervention can be conceptualized via the various processing metaphors, while liabilities and virtues of not having been subject to any processing can be conceptualized via qualities associated with “rawness.” Although all STATES ARE PHYSICAL QUALITIES can be redescribed in image-schematic terms, people directly experience states as physical qualities, likely anchored in primary scenes involving the observation of changes in the physical qualities of objects.

### 3. STATES ARE PHYSICAL QUALITIES IN THE SOCIAL WORLD

As discussed above, conceptualizing states as physical qualities helps to evaluate the practical and aesthetic affordances of people and objects because physical qualities are associated with embodied affordances. In this section, we take a closer look at the social uses of STATES ARE PHYSICAL QUALITIES, with its unique entailments and affordances for evaluations related to improvement, expertise, authenticity, and human potential.

We have observed that states are conceptualized as specific physical qualities. Furthermore, states are conceptualized according to different *types* of qualities. What are these types? Classical anthropological culture theory proposes that objects may have two prototypical types of qualities essential in human life: qualities given by nature and qualities acquired due to human intervention (Lévi-Strauss, 1969/1983). Objects may either be in a natural, unprocessed state or a modified, processed state. Anthropologists note that the prototypical example is the contrast between raw and cooked foods, with cooking being a uniquely human process responsible for state change. According to Claude Lévi-Strauss, “cooking” can be considered what today would be referred to as a “primary scene” (in the sense of Grady, 1997a) present in all human societies. Lévi-Strauss argues that cooking is a metonym for human culture, conceptualized as an intervention into natural processes and materials to better them for human use and consumption, as contrasted to nature (Lévi-Strauss, 1969/1983, pp. 142–3).

Cooking is the original conceptual foundation for widespread notions concerning natural objects’ transformation and status transition of a natural object (e.g., raw meat) across states via human-guided “processing” (e.g., “cooking”), particularly when it comes down to fundamental changes in the object’s essence, coextensive with human intervention in the natural world. Transformation of raw food material via cooking is also associated with a change of status such that the transformed version of the object (e.g., cooked food) is now usable or consumable by

people and thus part of human society. For instance, when meat goes from “raw” (not yet prepared for human consumption) to “cooked” (usable for humans), it is seen as having been improved via human intervention. Essentially, “the cooked is a cultural transformation of the raw” (1969/1983, p. 29).

Cooking is also the primary way “natural” things are transformed into “social” or “cultural” things (e.g., Lévi-Strauss, 1969/1983, pp. 336–7). Thus, cooking implies a transition from “nature” (unmodified or untouched by people) to “culture” (modified by human technology and expertise). Cooking as the first technology (connected to domesticated fire, a perennial symbol of knowledge and civilization) thus becomes favored ground for the more general notion of “improvement via human modification.” More generally, cooking can become semantically generalized to refer to state transitions due to human intervention, including the status transition of people during rites of passage (Hage, 1979, p. 82ff; Lévi-Strauss, 1969/1983, p. 336).

This account helps explain why processing metaphors associated with objects’ qualities can help evaluate specific objects’ goodness or readiness. Mainly, when an (implied) desired “correct” state exists, cooking metaphors can be used to make *normative* judgments regarding either insufficient modification of the object or activity (undercooking) or overdoing of the transformation (overcooking). However, as we will see below, “rawness” has an inherent conceptual connection to an object’s “naturalness” (unperturbed, virginal, pristine status). Via metaphorical extension, rawness can thus refer to the “unspoiled” or unmodified essence of any object, activity, or person, a quality that is also helpful in evaluation. Accordingly, whenever acts of aesthetic or moral judgment want to highlight this aspect of an object – usually in a positive sense – then metaphorical constructions using raw as a source domain become one of the few games in town.

While grounded in concrete ethnographic material, the classical anthropological approach was also meant to abstract from culturally specific and semantically rich contexts within which cooking – both in literal and ritual senses – is enacted to convey meaning, changing the status of objects (including people) via ritual performance. In that respect, the general anthropological argument is well-positioned to organize a wide range of cross-cultural data and unify historical, ethnological, and contemporary conceptualizations of the raw and the cooked. Furthermore, Lévi-Strauss hypothesized that there was no theoretically significant distinction across anthropological and modern contexts regarding the semantic and functional use of the basic schematic structure of the raw and the cooked, “whatever our native language happens to be” (Lévi-Strauss, 1969/1983, p. 338).

Despite the suggestive interpretive analyses first provided by anthropologists and other scholars working in food studies (Clark, 2004; Segal, 1974), there has

not been a systematic consideration of raw/cooked metaphors using the theoretical apparatus of modern cognitive semantics and conceptual metaphor theory. Instead, much of the work on processing and cooking metaphors remained tied to restrictive approaches inspired by structural linguistics and componential semantics, confining the original processing qualities hypothesis to the “lexical field” of food, narrowly conceived (e.g., Clark, 2004; Harrison, 1983; Lehrer, 1972), precluding a systematic investigation of metaphorical meaning extensions of the raw and the cooked to conceptualize the status of objects, actions, and activities outside the culinary domain (but see Segal, 1974).

In the remainder of the paper, we examine two common and socially important metaphorical instantiations of STATES ARE PHYSICAL QUALITIES involving PROCESSING. A state change may be a discontinuous transformation when a dichotomous pair of states are construed as distinct categories. “In-between” stages either do not exist or happen too quickly to be conceptualized and singled out for special attention. Drawing on the source domain of cooking, we depart from the classical anthropological argument that raw is to cooking as continuous is to discontinuous (Lévi-Strauss, 1969/1983, pp.28, 52–54, 279) and argue that the transformation itself may be continuous or discontinuous. A pervasive case of discontinuous processes involves the aesthetic and normative judgment that even the smallest amount of cultural intervention contaminates a person, object, or state of affairs, no longer making them raw. Thus, as we will see, a negative valence is assigned to the processed pole. In contrast, judgments may be construed as continuous when a desired ending state is not realized. Here, the processing is generally conceptualized as ongoing improvements and thus places a positive valence on the processed pole, leading to the two novel instantiations of the STATES ARE PHYSICAL QUALITIES metaphor: (1) AUTHENTIC IS UNPROCESSED, OR INAUTHENTIC IS PROCESSED and (2) DEVELOPED IS PROCESSED OR UNDEVELOPED IS UNPROCESSED. We discuss each in turn.

### 3.1 AUTHENTIC IS UNPROCESSED, INAUTHENTIC IS PROCESSED

The following metaphors draw attention to whether an entity is processed rather than its degree of processing and highlight the valence of the pole. This discontinuous specification of STATES ARE PHYSICAL QUALITIES is pervasively used in aesthetic and moral judgments. In this section, we consider examples specifying this schema in terms of rawness and naturalness. Objects, actions, or people are described as either *unprocessed* or *processed* since the judgment structure is discontinuous. A lexical frame indicating an either-or judgment can readily identify these metaphors, following a “one drop” rule logic (Brekhus, 1996, p.514). In this frame, any amount of processing, no matter how minute, disqualifies the target

from being unprocessed, similar to how changes in state in the DIRTY/CLEAN metaphor system are conceptualized (Lizardo, 2012). Typically, only one pole of the opposition is “marked.” Furthermore, with the discontinuous metaphors in the linguistic data, there is a marked asymmetry to the valence of judgments, with unprocessed (natural, raw) being generally good, honest, aesthetically worthy, and so on. Therefore, AUTHENTIC IS UNPROCESSED, and INAUTHENTIC IS PROCESSED.

- (1) It’s so raw and so real and so genuine,” Kennedy said. “Not that many people get to represent that on TV.”<sup>4</sup>
- (2) Cube reminded the nation of rap’s ability to speak the raw, uncut truth to power.<sup>5</sup>
- (3) “Manis Hair Boutique Offers 100% Unprocessed, Virgin Hair While Also Supporting the Black Community”<sup>6</sup>
- (4) Played with admirable rawness and perfectly timed humor by Kathryn Hahn<sup>7</sup>
- (5) in which Krasinski used his raw, powerful acting chops to lift up otherwise boring text<sup>8</sup>
- (6) Boys & Girls delivered a fresh take on the jangly-garage sound that seemed to sweep the post-Black Keys rock community and introduced us to knockout lead singer and guitarist Brittany Howard, who is raw, real, and totally unforgettable.<sup>9</sup>
- (7) She found that, unlike other forms of writing, poetry had an efficiency and raw honesty that made it a fitting outlet for her observations as a trauma nurse.<sup>10</sup>

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4. <https://www.buzzfeednews.com/article/krystieyandoli/everything-sucks-lgbt-lesbian-netflix-representation>

5. <https://www.npr.org/sections/therecord/2017/06/12/532474238/ice-cube-leaves-bill-maher-shaken-and-stirred-over-the-n-word>

6. <https://www.prnewswire.com/news-releases/manis-hair-boutique-offers-100-unprocessed-virgin-hair-while-also-supporting-the-black-community-301229907.html>

7. <https://www.npr.org/2017/05/12/528108784/streaming-services-put-female-characters-at-the-center-with-anne-and-dick>

8. <https://mashable.com/2016/01/28/john-krasinski-lawn-mower/>

9. <https://www.npr.org/sections/world-cafe/2017/04/01/521959208/25-albums-for-25-years-of-world-cafe>

10. <https://www.npr.org/sections/health-shots/2017/04/30/526056664/a-trauma-nurse-reflects-on-compassion-fatigue>

- (8) Lauren Duski wants her fans to know there is strength in letting their most raw selves shine through... the Michigan native released the accompanying music video that includes an empowering message about inner beauty.<sup>11</sup>
- (9) And, like Dylan, she puts raw feeling into the delivery of the words, making them bristle and growl.<sup>12</sup>
- (10) The novel tackles themes that, at the time, were almost taboo for anyone to write about, much less a black woman: raw and vivid depictions of slavery<sup>13</sup>
- (11) Through Holly and Leadbelly, he was exposed to the raw nerve and roots of American music.<sup>14</sup>
- (12) He wrote what he felt, as raw as it may have been, as hard as it may have been to digest for African-Americans. And so I respected Spike for changing the game in film.<sup>15</sup>
- (13) Waylon and co. were making their raw, revolutionary mid-'70s records, and troubadours like Guy Clark and Townes Van Zandt... were adding their game-changing brand of song poetry to the mix.<sup>16</sup>
- (14) His songs have an exquisite, rawboned realism and deeply embedded class-consciousness, partly because he's dedicated himself to cultivating his literary gift and partly because it's often been the contours of his own life, begun in the hardscrabble setting of rural, northern Alabama, and the lives of people he understands, that he's tracing.<sup>17</sup>
- (15) It is a raw, revealing memoir which bleeds like a stab wound.<sup>18</sup>

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11. <https://people.com/country/lauren-duski-costume-party-music-video/>

12. <https://www.npr.org/2017/01/20/510625686/songs-we-love-charles-lloyd-the-marvels-masters-of-war-feat-lucinda-williams>

13. <https://www.npr.org/sections/codeswitch/2017/02/10/514397472/the-joy-and-fear-of-making-kindred-into-a-graphic-novel>

14. <https://www.npr.org/sections/therecord/2017/06/05/531593030/watch-bob-dylan-explains-his-roots-as-only-he-can-with-nobel-lecture>

15. <https://www.npr.org/2017/06/07/531840764/better-call-saul-actor-giancarlo-esposito-on-the-making-of-an-iconic-villain>

16. <https://www.npr.org/2017/06/08/530911290/first-listen-steve-earle-so-you-wannabe-an-outlaw>

17. <https://www.npr.org/2017/06/12/530277867/first-listen-jason-isebell-the-400-unit-the-nashville-sound>

18. <https://www.theguardian.com/music/2016/jul/28/run-dmc-autobiography-darryl-mcdaniels>

Judgments can be directed at both abstract and concrete targets when unprocessed is connected with displays of authenticity and unfiltered expression. Abstract targets like truth (2), acting performances (4), (5), singing performances (6), the self (8), and feelings (9) may be described as raw because they have not been refined, filtered, or repressed. The same goes for artistic performances in music, movies, television, or theater (5–9), products of aesthetic labor like poetry (7), novels (10), writing (12), records (13), a memoir (15), a television show (16), or songs (11), (14). More concrete targets, referring to elements of a person's appearance (3), evoke naturalness in contrast to abnormal or dishonest displays which have been obscured or masked. In this valence structure, unprocessed is positive, while processed is negative. The relationship between processing and dishonesty is also revealed in (1), with the use of “raw” and “real” as synonymous descriptors, implying a contrast with “fake.” This metaphorical use of processing is primarily found in the domain of arts and culture and specifically applied to objects and activities or performances, but may also be applied to the appearance of people in general.

These metaphor-aided moral judgments imply that any deviation from unprocessed will ruin the “truth” of the object, revealing the discontinuous, either-or structure. The connection to rawness in cultural industries is often connected to the authenticity of the artists' connection to the material. For instance, in (12), during an interview with NPR's Terry Gross, Giancarlo Esposito characterizes the screenwriting of Spike Lee as “raw.” This rawness is, for Esposito, responsible for its revolutionary impact in American film precisely because Lee stayed true to his feelings and perspective without trying to accommodate the expectations and tastes of most white gatekeepers and audiences. The same rhetorical purpose is achieved in (14), where the songwriter, Jason Isbell, whose songs have a “rawboned realism,” is portrayed as “tracing” the “contours of his own life,” implying that the songs stay close to a personal, unfiltered perspective. Similarly, in (15), a memoir is characterized as “raw” to indicate the author did not hide or omit painful or otherwise uncomfortable aspects of their life experience. Their story is unprocessed and thus making it more honest and authentic.

The implication of all three of these excerpts is that any filtering, omission, or censoring in the process of screenwriting, songwriting, or book writing, especially when work involves a person's autobiographical experiences or unique perspective, would have qualified as “processing” the raw material and thus as compromising any claim to rawness, making the work less authentic. Excerpt (16) shows a different variation of this metaphorical use of rawness in discussing sartorial fashion changes in the ways superheroes were depicted in comics from the 1990s (in comparison to their counterparts in previous decades):

- (16) The editorial thinking went: ‘These new heroes are more complicated than our classic heroes’ – (psst: They really, really weren’t, you guys) – “so their look should reflect that. We’ll make them look contemporary, raw, in-your-face.”<sup>19</sup>

Here, the author notes that their new look reflected their more authentic self-presentation as characters with conflicted and complicated inner lives and perhaps a more ambiguous moral arc; hence, their “raw look” matches this more ambiguous (but, because of that, more “honest”) portrayal.

Any use of the “raw” quality metaphor implies activation of the cooking frame, where raw states oppose cooked states; this may seem unusual, given that people do not commonly refer to “cooked emotion” or “cooked nerves” but do refer to “raw emotion” and “raw nerves.” We can draw on work on linguistic marking to explain this asymmetry (Waugh, 1982), noting that generally, unprocessed and thus rawness is a marked (i.e., exceptional) category in aesthetic domains. A common distinction between marked and unmarked categories is that marked categories have lexical signifiers that unmarked categories lack (Battistella, 1990). For example, Brekhus (1998, p.35), describing the classification of sexual identities, observes that there are common words for marked identities, such as people who have excessive amounts of sex (e.g., “slut”) or no sex (e.g., “virgin”), but no term for people who have average amounts of sex. In the case of aesthetic judgment, it is taken for granted that most things are processed; in this context, being unprocessed is the exception that garners special attention.

### 3.2 DEVELOPED IS PROCESSED, UNDEVELOPED IS UNPROCESSED

Another instantiation of the STATES ARE PHYSICAL QUALITIES metaphor also involving physical processing is the DEVELOPED IS PROCESSED metaphor, which is often used to describe either the *development* or prescriptive evolution of ability or expertise. Although UNPROCESSED is typically used to make favorable judgments or statements of aesthetic worth and authenticity in cases where the “development” frame is active, UNPROCESSED is not synonymous with authenticity and aesthetic superiority but a marker of mediocrity and/or incompleteness. In these cases, there is sometimes an implicit, unmarked judgment that the product or performance should have been more *refined*, *elaborated*, *polished*, or otherwise executed in a better way, as seen in the following examples:

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19. <https://www.npr.org/2017/01/18/510264892/jacket-required-with-the-return-of-the-ray-superhero-fashion-gets-layered>

- (17) It's reasonable to assume that the very best artists available were hired to decorate London's Palace of Westminster, yet paintings that survive from this royal medieval English building are cheerily crude rather than aesthetically refined.<sup>20</sup>
- (18) The 1973 film *Westworld*, directed and written by Michael Crichton, was a crude movie about crude machines staffing a depraved theme park.<sup>21</sup>

In (17), we see a reference to the aesthetic of a set of murals in the town of Stratford-upon-Avon in England as being “crude” – from the Latin *crudus* meaning “raw” – in contrast to refined, which is a variation of the PROCESSING IS COOKING metaphor. In (18), the action Western film *Westworld* is likewise described as “crude,” indicating a lack of sophistication. In both cases, UNPROCESSED is negatively valenced because these examples invoke a different conceptual metaphor: UNDEVELOPED IS UNPROCESSED. Although the lack of processing can denote authenticity, it may also denote a lack of.

Whereas the AUTHENTIC IS UNPROCESSED metaphor typically construes state change as a categorical transformation, the DEVELOPED IS PROCESSED metaphor construes it as a gradual shift in essence. For example, in the DEVELOPED IS PROCESSED metaphor, something begins in an unprocessed or raw state but can be observed developing at various stages. In one stage, the entity has already begun to undergo processing but is not yet “done.” Here, the entity is in a liminal state *between* the raw and the cooked (e.g., “undercooked”). Another stage is when the entity finally enters the category of “cooked.” Importantly, there is a third possibility: the cooking process goes on for too long, in which case we observe a third change of state, namely, going from cooked to “overcooked.” In this last case of over-processing, the resulting evaluative judgment reverts to negative, just like under-development.

Although both PROCESSED metaphors we have considered are used in evaluative judgments, they tend to use different source domains, explaining their differing valences toward processed and unprocessed states. When making moral or aesthetic judgments from the AUTHENTIC IS UNPROCESSED perspective, any degree of processing threatens to ruin the “truth” of the object. In contrast, when judging ability from the DEVELOPED IS PROCESSED perspective, people begin as “raw” or “rough” and eventually, with practice and experience, become “seasoned,” “refined,” or “polished.” Thus, skill and experience acquisition is understood as a

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20. <https://www.theguardian.com/artanddesign/jonathanjonesblog/2016/nov/24/shakespeare-father-stratford-murals-guild-chapel>

21. <https://www.theguardian.com/tv-and-radio/2016/oct/31/westworld-hbo-villains-ai-robots>

form of gradual processing of the self that enables people to reach their full potential, as seen in the following examples:

- (19) We are committed to developing raw talent and giving young people opportunities to forge exciting new careers.<sup>22</sup>
- (20) He has big talent – there’s no doubt – it’s just very raw at this point.<sup>23</sup>

Examples (19) and (20) use the [RAW TALENT] construction to indicate that “talent” is not expected to remain in its “raw” state. Instead, it must be “developed” so that it goes from raw to “seasoned,” contrasting semantically to the various uses of the [RAW NOUN] construction discussed in the AUTHENTIC IS UNPROCESSED metaphor, where the “raw” state of the object was both coded as positive and stable, with any further processing of the “rawness” of the object destroying its appeal. Contrastingly, talent becomes more effective and desirable in the development frame once further processed beyond an initial “raw” condition. In this respect, when talent is metaphorically construed as “raw,” in the development frame, it is done to indicate *potential* further for growth and a lack of readiness in the present.

When applied to objects, the DEVELOPED IS PROCESSED metaphor describes the amount of labor that has been put into helping the object reach its potential. Unlike the AUTHENTIC IS UNPROCESSED metaphor discussed above, these metaphors typically give processing a positive valence. Here, more processing is associated with superior quality:

- (21) The potential was there, Koeppen says, and ever since then his art has grown and developed to become more refined.<sup>24</sup>
- (22) The Hot for 2019 outfit – comprising Barry, Cian, Danny and Graham – have already nailed their sound, delivering polished indie-pop with a glossy '90s sheen and intricate details.<sup>25</sup>
- (23) Where those games are typically snapshots of something that is either finished or close to it, these demos are for games in the earlier stages of development, with much more polishing on the way.<sup>26</sup>

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22. <https://www.scottishconstructionnow.com/article/barratt-west-offers-apprenticeship-opportunities-beyond-2021>

23. <https://www.si.com/nfl/49ers/news/chris-simms-quarterback-rankings-for-the-2021-nfl-draft>

24. <https://petapixel.com/2021/06/15/photographer-combines-fantasy-and-boudoir-for-cinematic-results/>

25. <https://www.hotpress.com/music/new-irish-songs-to-hear-this-week-25-22863030>

26. <https://screenrant.com/xbox-demos-best-summer-game-fest-2021-microsoft/>

- (24) ...it's an issue that becomes more smoothed out in later episodes as the series finds its footing.<sup>27</sup>

Examples (20), (21), (22), and (23) describe objects whose aesthetic quality is measured by their degree of processing. For, (23) describes the current state of a video game being developed, which is expected to improve in quality with “more polishing”; (22) describes an artist’s work as becoming “more refined” with experience. In (24), an “issue” negatively affects the quality of television series until it is more “smoothed out.” Earlier, we saw that UNPROCESSED states are positively valenced in aesthetic domains. However, in (21)–(24), we see that processing can *also be positively* valued in aesthetic domains. These competing findings echo sociological work on aesthetic fields, where some people champion raw, “authentic” creation while others promote more “polished” and “refined” work, emphasizing craftsmanship and skill (Lembo, 2017).

A variation on the refined/polished specification uses the metaphor of “marination,” yet another variation of the PROCESSING IS COOKING metaphor:

- (25) Fernando ‘Ferocious’ Vargas says he would like to see Ryan Garcia and Gervonta ‘Tank’ Davis let their clash marinate more to pump it up to create more interest and make more money before fighting.<sup>28</sup>
- (26) There are other good reasons for starting early on major presentations, but giving it time to marinate in your mind is an unexpected bonus.<sup>29</sup>
- (27) Boris Johnson has undercooked his Covid plan.<sup>30</sup>

Examples (25) and (26) describe objects that are allowed to “marinate” so that they can progress along some expected developmental path. Like the other examples of processing considered, marination is expected to improve the object’s qualities. For example, in professional fighting, promoters try to improve the experience of fights by letting them “marinate,” meaning allowing time to build anticipation and hype. Similarly, letting ideas “marinate” is an act that is commonly believed to improve the quality of thinking. At the other end is (27): “Boris Johnson has undercooked his Covid plan.” The plan is lacking or lacking an adequate amount of processing.

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27. <https://www.themarysue.com/marvels-m-o-d-o-k-follows-a-supervillain-going-through-a-midlife-crisis/>

28. <https://www.boxing247.com/boxing-news/fernando-vargas-ryan-garcia-tank-davis-should-let-their-fight-build/169060>

29. <http://jackmalcolm.com/2015/02/let-things-marinate-in-your-mind/>

30. <https://www.thetimes.co.uk/article/boris-johnson-has-undercooked-his-covid-plan-mhorbword>

#### 4. Discussion

In this paper, we argued that states are conceptualized in terms of physical qualities, in addition to being conceptualized as locations, containers, and objects (R. Gibbs, 2017, 2019; Grady, 1997b; Jeppsson et al., 2013; Johnson & Larson, 2003; Lakoff, 1993; Lakoff & Johnson, 1999; Murphy, 1988). We also argued that STATES ARE PHYSICAL QUALITIES implies a state change metaphor: STATE CHANGE IS CHANGE IN PHYSICAL QUALITIES, meaning state changes must specify a *means* via which this change is accomplished, which we argue is based on prototypical ways people use cultural technology to change the qualities of “natural” objects, with cooking as the prime anthropological example (Lévi-Strauss, 1969/1983), with the associated transition from the quality of “raw” to the quality of “cooked.” Cooking, in turn, is a metonym for all forms of human-aided “processing” of objects that results in changes in the qualities of concrete and abstract objects, as when a project goes from “unfinished” to “finished.” We outlined the practical implications of this metaphor system, including its affordances for evaluating people and objects and for creating rich, descriptive models of state change. We then discussed two previously unidentified state metaphors that rely on the same source domain: AUTHENTIC IS UNPROCESSED, and DEVELOPED IS PROCESSED.

Despite their differences, both AUTHENTIC IS UNPROCESSED and DEVELOPED IS PROCESSED showcase the social usefulness of the STATES ARE PHYSICAL QUALITIES metaphor. Both are apt for making evaluative judgments that assess the quality of things based on our grounded experiences with physical objects. The physical objects that people interact with differ in their degree of processing, whether favorable or unfavorable, depending on the circumstance. Since an object’s degree of processing affects its affordances to the user, processed and unprocessed states acquire connotations of utility and quality. We also anticipate that comparative analysis of this metaphor across time, place, and domain would reveal exciting variance in the valence assigned to the PROCESSED or UNPROCESSED.

In analyzing these metaphor systems, we also draw attention to PROCESSING as a culturally pervasive source domain for aesthetic and normative judgment grounded in material practices, such as cooking and polishing. We propose that STATES ARE PHYSICAL QUALITIES is a *primary* metaphor or a profoundly entrenched association between fundamental concepts grounded in universal human experience (Grady, 1997a, 1997b; Grady & Ascoli, 2017). PHYSICAL QUALITIES are a fundamental human concept, and people likely intuitively grasp different types of object qualities as schematically similar. If people’s conceptualization of states is grounded in the primary metaphor STATES ARE PHYSICAL QUALITIES, we would expect people to be able to create, mix, and grasp metaphors grounded

in the same structure with ease: (2) “Cube reminded the nation of rap’s ability to speak the raw, uncut truth to power.” The author uses multiple source domains: cooking in the case of “raw,” and something else, perhaps lapidary, in the case of “uncut” and “unpolished.”

By differentiating STATES ARE PHYSICAL QUALITIES from STATES ARE LOCATIONS, we do not intend to cast doubt on the validity of previous findings. STATES ARE PHYSICAL QUALITIES is an elaboration of STATES ARE LOCATIONS, with additional affordances. The STATES ARE LOCATIONS metaphor commonly appears when the immediate task involves drawing attention to the unique position of the state, as when stating a goal (e.g., “let’s get out of this mess”) and/or implying the non-normative quality of the current moment (e.g., “I’m down in the dumps”). The STATES ARE PHYSICAL QUALITIES metaphor appears regularly when the immediate task involves evaluating the practical or aesthetic affordances of people and objects, such as the evaluation, “This dissertation is really undercooked.”

As STATES ARE PHYSICAL QUALITIES is an elaboration of the STATES ARE LOCATIONS metaphor, they frequently appear in conjunction, without redundancy, as seen in the phrase, “It’s just *very raw at this point*.” Here, the state of an athlete’s talent is described as “very raw,” consistent with the STATES ARE PHYSICAL QUALITIES metaphor. However, this metaphor is immediately followed with the prepositional phrase “at this *point*,” suggesting that the state of “rawness” is a location that may change with further training. Thus, in a single sentence, the author employs the two-state metaphors to evaluate the state of a person’s talent both in terms of its practical significance and its developmental trajectory, demonstrating the metaphors’ distinct but complementary affordances.







Future research on STATES ARE PHYSICAL QUALITIES metaphors will benefit from cross-cultural and cross-linguistic comparisons. This paper highlighted PROCESSED metaphors involving human intervention, like cooking, but other metaphors implying systematic changes in an object’s qualities lack human involvement, such as aging, ripening, or rotting. We expect that cultures vary in their use of PROCESSED metaphors based on whether they perceive development and growth as a natural accomplishment or a result of human intervention. We expect to see similar variations across religious and moral traditions based on whether they presume that humans are naturally evil and need processing (e.g., “crooked” people who must be “straightened” through moral instruction) or naturally good and thus corrupted by human intervention. Groups and societies may also vary concerning the valence of PROCESSED metaphors, and the same society may change the valence of PROCESSED metaphors across historical eras. For example, the current positive aesthetic valuation of “rawness” in the West may be a modern phenomenon developed in response to the proliferation of artificial, synthetic objects.

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