The Anthropology of Intensity

Language, Culture, and Environment

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Introduction: Intensity

Too Close for Comfort

This book is about intensity, which might be provisionally understood as significant degrees of salient dimensions in shared worlds. For example, what counts as *too hot*, *very cruel*, *not far enough*, *over-priced*, *most pressing*, *underwhelming*, *sooner than previously believed*, *excessively polite*, *almost unlivable*, or *extremely shortsighted*. As may be seen, such assessments involve dimensions such as heat, speed, proximity, cruelty, price, importance, unlivability and shortsightedness. Such assessments involve degrees, and ways of manipulating them: discursive resources and embodied registers for sensing and expressing how hot, cruel, close, expensive, shortsighted, or unlivable something is. And such assessments involve the particular worlds in which such dimensions and degrees come to matter: not just physical places with ecological potentials and material constraints, but also imagined worlds of possibility and necessity, normative worlds of permission and obligation, economic worlds of credit and debt, affective worlds of anxiety and desire, and far beyond.

What are the conditions of possibility for assessments of this kind? And what are the consequences? For example, why do certain dimensions become salient, or certain degrees become significant, such that they are subject to shared judgments? Conversely, why is it that other

dimensions and degrees – potentially just as critical – remain relatively unnoticed, such that judgments about them remain fleeting or singular, isolated or suspect? What sets the thresholds that such assessments are sensitive to, such that something may be judged to have too much of one dimension, or not enough of another? How are such seemingly qualitative and subjective assessments of intensity coupled to quantitative, objective, or legal standards, such that a judgment like 'too hot' can come to mean 'hotter than 102 degrees', or a judgment like 'too much pollution' can provoke a particular intervention? What is presumed and produced by such assessments, such that they may reflect and transform the ontologies (theories, cosmologies, ideologies, intuitions, identities, etc.) of the agents who express them? And how are such assessments coupled to causal logics, ecological understandings, and if-then imaginaries, such that they may influence the inferences, affects, and actions of those agents?

What kinds of resources do agents rely on to make such assessments, and which kinds of agents have access to such resources? Crucially, such resources include not just the semantics of words like 'too' and 'enough', or 'very' and 'more'; but also the pragmatics of their deployment in situated interactions. And such resources include not just grammatical categories and discursive practices, but also modes of sensation and techniques of assayal, embodied intuitions and distributed infrastructures, regimenting institutions and organism-specific instincts, intersubjective grounds and distributed agents. How do such assessments, and the resources they depend on, change over time and shift over scales? And what is the genealogy and politics of such transformations? Finally, in regard to the Anthropocene, what kinds of effects do such judgments, actions, inferences, and affects have on the existence, perdurance, destruction, or overthrow of the worlds in question, and on the lives and livelihoods of those who inhabit them? By answering such questions this book offers a natural history of intensity in exceedingly tense times.[1]

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Language, Culture, Environment

At the center of this book are speakers of Q'eqchi', a Mayan language spoken in Guatemala and Belize by upwards of one million people.[2] It focuses on the last twenty years of life in and around a small village in the cloud forests of Alta Verapaz, and a range of ecological crises that have confronted villagers since the end of the Guatemalan civil war: landslides, deforestation, climate fluctuation, and the contamination of commons resources. Of particular interest are the Mayan (quasi) equivalents of the following kinds of world-specific, dimension-sensitive, and degree-setting constructions: *too* and *enough*; *more* and *less*; *a lot* and *a little*; *exceedingly* and *slightly*; as well as closely related constructions such as: *already*, *no longer*, *still*, and *not yet*; *in place of* and *in comparison to*; *because of* and *for the sake of*; *if* and *then*; *may* and *must*; *unless* and *until*; *only* and *also*. Based on ethnographic and linguistic fieldwork undertaken during the last five years, and building on more than twenty years of research in this area by the same author, this monograph analyzes the ways speakers use such resources to understand, communicate, and counter the changing worlds around them.

While this book makes its case through a careful analysis of such ethnographic and linguistic evidence, its arguments aim to be much broader in scope. In part, it achieves this analytic portability by focusing on categories (indefinite quantities, comparative strategies, causal constructions, etc.) that have long existed in most languages. In part, it achieves this by focusing on dimensions (such as price, temperature, degradation, etc.) that are currently salient to most collectivities given the global dangers that confront us in the Anthropocene. In part, it achieves this by focusing on entities and events that stand at the intersection of material processes, communicative practices, affective unfoldings, and social relations. And, in part, it achieves this by backgrounding more technical linguistic

arguments, and letting the events, actors, and ethnography carry the narrative. In these ways, the book is designed to bring together not only anthropologists and linguists, of various persuasions, but also ecologically oriented readers, critical theorists, and environmental scientists, whatever their background.

As may be seen in the table of contents, this book is composed of twelve chapters divided into three parts: Grounds, Tensors, and Thresholds. Each of these interrelated terms refers to a relatively shared interpretive resource that speakers of Q'eqchi', and most other languages, depend on. Such a set of resources, as a kind of semiotic commons, allows speakers to judge intensities, draw inferences, communicate and critique values, act effectively, experience affectively, relate socially, and both configure and inhabit possible worlds. The next three sections introduce readers to each of these key themes, while motivating the content and organization of the chapters that follow.

Grading, Gradients, Degradation, Grace

Here are somewhat extended passages from two very different kinds of texts: (1) a thesis in geological engineering on the causes of landslides in settlements around Guatemala City; (2) a newspaper's description of one such landslide, and some of its horrific effects.

(1) The settlements are exposed to high landslide risk because they are located in very steep and large ravines made of weakly cemented pyroclastic deposits. In addition to the weak slope conditions, the occurrence of landslides is further exacerbated by hurricanes, severe wet seasons, and earthquakes. There is significant vulnerability because the majority of the population in the settlements is in impoverished conditions with very low-income leading to poorly planned developments made of badly constructed structures that are frequently damaged by landslides. Families have typically migrated from rural areas to the urban settlements because they sought economic opportunities that are more apparent [in such places]. (Faber 2016:1)

(2) At least 220 bodies have been recovered after a massive landslide
buried part of a town in Guatemala last week but about 350 people
are still missing, the country's national disaster agency has
announced . . . Loosened by heavy rains, a hillside collapsed on to
Santa Catarina Pinula on the south-eastern flank of Guatemala City
on 1 October, burying more than 100 homes under tonnes of earth,
rock and trees, and sparking a huge rescue effort . . . Prosecutors in
Guatemala said they are looking at whether there was any criminal
misconduct at the site after Conred [the National Coordinator for
the Reduction of Disasters] warned of the risks of building homes in
the neighborhood, which lies at the bottom of a deep ravine.
(*The Guardian*, October 8, 2015)

These passages illustrate two key themes of this monograph. First, there
is the social and semiotic mediation of *causal grounds* – in particular,
the way people come to understand, and alter, the sequencing of events,
or the channeling of forces. For example, apparent economic opportun-
ities cause migration to urban settlements; low income leads to poorly
planned developments; rains loosen hillsides; buried homes spark rescue
efforts. Second, there is the social and semiotic mediation of *compara-
tive grounds* – in particular, the way people come to understand, and
alter, the relative intensity of entities and events. For example, what
counts as a steep slope, a low income, a heavy rain, a more apparent
economic opportunity, or a huge rescue effort.

Part I of this monograph is about the intertwining of such causal and
comparative grounds. Focusing on the multiple processes that mediate
people's understandings of landslides in a Mayan village, it shows the
ways these grounds relate to physical forces and phenomenological
experiences, as much as to communicative practices and social conven-
tions. And, as intimated by these examples, it highlights the political,
economic, affective, and ecological stakes at play in such forms of
mediation.

Framed another way, which should foreground the relation between
such fieldsite-specific themes and the global *Anthropocene*, as a

particularly timely locus of more general anthropological concern, Part I is about *gradients* (the way qualities vary in their intensity over space and time, and the ways such variations relate to causal processes), *grading* (the ways agents assess and alter such intensities, and experience and intervene in causal processes), *degradation* (the ways highly valuable variations in qualitative intensities are lowered or lost), and *grace* (the way agents work to maintain gradients, care for those whose lives have been degraded, and value those agents who work and care in such ways).

Chapter 1 will focus on comparative grounds. Chapter 2 will focus on causal grounds. Chapter 3 will focus on the ways such grounds mediate phenomenological experience and material culture. Finally, Chapter 4 will relate all of these concerns to Mayan cosmology, the origins of the Anthropocene, and the foundations of anthropology. In moving from landslides to heat flows, and in showing that there can be no 'anthropology of energy' without a simultaneous account of work, power, temperature, and entropy, it offers an analytic that might best be called *thermodynamic anthropology*.

The first part of this monograph thereby sets the stage, and develops the stakes, for later arguments. The next two parts – on tensors and thresholds – take up particular categories and themes introduced in Part I and develop them in greater detail.

The Genealogy of Intensity

Part II analyzes the structure, function, and history of what might best be called *tensors*: the semiotic resources speakers of Q'eqchi' have, qua context-sensitive and culturally salient arrays of values, for registering intensities and/or regimenting tensions. To introduce readers to the phenomenon at issue, the following examples show common functions of two contrasting – if not dueling – intensifiers: *mas* 'very' and *jwal* 'very, very'.

(3) ab'an wi   x–Ø–in–hupub'   l–in   kaxlan,
     but   if   PERF–A3S–E1S–cover   DM–E1S   chicken
     'But if I covered my (brooding) hens,

          xko'–in   chi   b'eek,
          go.PERF–A1S   PREP   walk
          (and) I went for a walk,

     t–e'–moq   li   kok'   kaxlan
     FUT–A3P–hatch   DM   small.PLR   chicken
     (when) the chicks will hatch,

          mas   najt   t–e'–xik
          very   far   FUT–A3P–go
          they will go very far (away from home).'

This multipart utterance (from fieldwork undertaken in 1999), spoken by a young woman who had three hens and thirteen chicks at the time, describes one of the many taboos (*awas*) that regiment women's behavior in relation to the chickens (*kaxlan* < Spanish *Castillan*) they care for. As may be seen from the two sets of parallel constructions, just as a woman covering her brooding hens with a basket is similar to – and a condition for – the chicks hatching from their shells, a woman taking a walk (while her hens are thus covered) is similar to – and a cause of – the chicks wandering far from the homestead.

As may be seen in the last line, this utterance involves a degree modifier *mas* ('very, much'), that is modifying an adverb (*najt* 'far'), that is itself modifying a verb (*xik* 'to go'). In particular, the chicks don't just wander somewhat far from the homestead (as all chicks do, in their search for food and so forth), they wander *very* far, and thus are easy prey for the chicken hawk.

Note, then, the relation between intensity, taboo, causality, and accountability. Just as a woman's movements (while her hen is brooding) are coupled to the movements of the hen's chicks, a woman's movements are constrained insofar as she herself is thereby accountable

for the health of her hen's chicks. Or, as it might be put in English, a woman shouldn't go *too* far, or else her chicks will *too*.

(4) qawa' Trump (k)i–Ø–x–ye,
SD PN INF–A3S–E3S–say
'Trump said,

    l–aa'in wan–Ø–Ø jun in–boton chan–Ø–Ø,
    DM–A1S exist–PRES–A3S one E1S–button say–PRES–A3S
    "I have a button," he said.

      mas nim, w–e
      very big E1S–DAT
      "Mine is very big."

        t–Ø–in–pitz', ut t–ex–in–kamsi,
        FUT–A3S–E1S–press and FUT–A2P–E1S–kill
        "I will press it, and I will kill you (plural)."

li jun chik k–Ø–ix–ye,
DM one more INF–A3S–E3S–say
The other one said,

    l–aa'in wan–Ø–Ø ajwi' jun li w–e,
    DM–A1S exist–PRES–A3S also one DM E1S–DAT
    "I too have a button."

      jwal nim ke chi–r–u l–aaw–e,
      very.very big COMP PREP–E3S–RN DM–E2S–DAT
      "Mine is very, very big in comparison to yours."

        t–Ø–in–pitz', t–at–in–kamsi
        FUT–A3S–E1S–push FUT–A2S–E1S–kill
        I will press it (and) I will kill you (singular).'"

In this example (from fieldwork undertaken in 2018), a man used two sets of parallel constructions to report the gist of a much publicized "conversation" between Donald Trump and Kim Jong-un regarding nuclear missiles. If Trump described his missile-launching button as *mas nim* or 'very big' (in implicit comparison to a typical button), Kim described his button as *jwal nim* or 'very, very big' (in explicit comparison to Trump's button). That is, Kim not only one-upped Trump by

Dimension (size)

Figure$_2$ (size of Kim Jong-un's Button)

Direction (Greater than)

Magnitude (*jwal*)

Ground$_2$ = Figure$_1$ (size of Trump's Button)

Direction (Greater than)

Magnitude (*mas*)

Ground$_1$ (size of Typical Button)
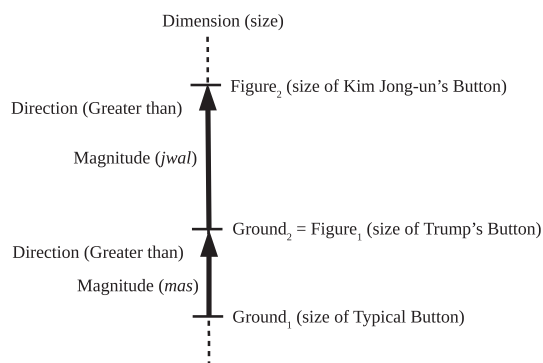
Figure I.1 Sizing up Kim Jong-un and Donald Trump

using a degree modifier that encoded a greater intensity (*jwal > mas*), he also used an explicit comparative construction with the size of his button as the figure and the size of Trump's button as the ground (and thereby stacked his on top of Trump's). Trump's button may be much bigger than the average button, as it were, but Kim's button is much, much bigger than Trump's. See Figure I.1.

Finally, and quite chillingly, whereas Trump is described as threatening to kill a plurality of people ('I will kill you [plural]'), and hence perhaps the whole of North Korea, Kim is portrayed as far more moderate and precise, insofar as he was only threatening to kill Trump, and only in response to Trump's provocation.

As will be shown, the intensifier *mas* can modify a wide range of word classes: not just adverbs and adjectives, as per examples (3) and (4), but also noun phrases, verb phrases, and other indefinite quantities. It immediately precedes the constituent it modifies, and indicates there is a large amount (however indefinite) or a high degree (however vague) of the dimension specified by that constituent: the distance of a journey, the size of a button. As should also be clear, *mas* frequently occurs in utterances that describe (and create) affect-laden situations, themselves anchored in cultural values and reflective of social relations. Such values and relations not only link speakers to addressees, they can also link

people to animals (through modes of care), and indigenous people to foreign despots (through modes of critique).

As intimated by the contrast between *mas* and *jwal* in example (4), for each function *mas* serves, there is a range of other words in Q'eqchi' that play very similar roles, but tend to be used less frequently (at least nowadays), tend to have more specialized functions, and often have particularly revealing histories. For example, whereas *mas* entered Q'eqchi' from Spanish in the late 1800s (where it originally meant 'more' as opposed to 'very'), *jwal* has also undergone significant transformation. Indeed, somewhat ironically in the context of example (4), it derives from an inalienable possession that meant '(male) leader', and only in the last century or so did it come to mean 'very, very'.

The purpose of Part II is to analyze the structure, function, and history of such forms, and thereby offer what might best be called *a genealogy of intensity*. That is – and with a nod towards Nietzsche – an account of the grammatical structure, discursive function, and linguistic history of such forms, so far as this sheds light on social relations and cultural values (themselves always already in transformation), with particular attention to the ways such relations and values mediate modes of affect, ontology, and power.

Chapter 5 will focus on the system of degree operators in Q'eqchi', and thus compare and contrast the wide range of present-day forms that indicate greater and lesser degrees of intensity (qua magnitude). Chapter 6 will focus on the particularly rich history of one of these forms, *mas* (very/much), which derives from the Spanish comparative form *más* (more), and the way its multiple functions have long been misanalyzed by linguists and lay-speakers. Chapter 7 will analyze the complex history of comparative constructions in Q'eqchi', from colonial times until the present. Finally, in preparation for Part III, Chapter 8 focuses on the multiple functions of the form *chik* (longer, else, other, also) which, somewhat paradoxically, serves most of the same functions as Spanish *más* aside from its comparative function. The conclusion of

this chapter will return to women and their chickens, focusing on the uncanny relation between *two*, *too*, and *taboo*.

As will be seen, intensifiers don't just index or encode intensity (as sign to object). Following Peirce (1955a) and James (1985), they also channel and transduce it, often as the ultimate, energetic, and affective interpretants of sign–object relations. Intensification does not just turn on modulating the degree of a specific dimension. In line with Whitehead (1920) and Bergson (1913), it may involve bringing into play more and more dimensions (including more and more subtle distinctions within a single dimension), as well as stoking greater resonances, furthered durations, and deeper ingressions.

Temporality, Modality, Replenishment

Part III offers an analysis of *thresholds*: particular moments (along a timeline) when the truth of a statement changes from true to false (or vice versa), with various gradations in between; and particular degrees (along a dimension) where the relative intensity of some condition makes an otherwise acceptable action unacceptable (or vice versa), with various gradations in between. Temporal operators like 'still' and 'no longer' turn on such thresholds, as do modal operators like 'too' and 'enough'. Indeed, judgments like 'no longer clean enough to drink' or 'already too late to act', which link social practices and ecological processes, interrelate both kinds of thresholds in somewhat complicated ways.

To introduce readers to the phenomenon at issue, the following examples show some common functions of such threshold-sensitive forms.

(5) naab'al   in–tz'ol–om,
     many   E1S–study–NOM
     'I have (completed) many studies.

     ab'an   moko   tz'aqal   ta   naab'al
     but   NEG   sufficient   IRR   many
     But not sufficiently many.'

The speaker is a middle-aged man who teaches elementary school in a village on the outskirts of Chamelco, in Alta Verapaz. He is explaining why he does not try to obtain a higher-paying job teaching in a larger city. As may be seen, his explanation turns on the fact that, while he has completed many (*naab'al*) studies, he has not completed sufficiently (*tz'aqal*) many. Note, in particular, the contrast between an intensifier like *naab'al* (many, much, a lot), which indicates a large, but indefinite, quantity; and a threshold-sensitive operator like *tz'aqal* (sufficient, enough), which indicates that the degree of some dimension – however high or low – is or is not sufficient for some activity or undertaking. Just as something may be very cheap, but not cheap *enough* (for someone to buy, given their budget), something else, while very light, may nevertheless be *too* heavy (for someone to lift, given their strength). In particular, while the man has already taken 'many' courses (relative to some comparative ground, however subjective), he has not taken 'enough' courses to be able to obtain such a position (given the Guatemalan schooling system, and the standards it maintains). As will be seen, the Q'eqchi' word for 'enough' (*tz'aqal*) is closely related to the word for price (*tz'aq*), a relation that is not without bitter repercussions here: for the man would continue his studies to obtain such a position, if only he could afford to. Such semiotic resources, then, play a key role not just in representing and regimenting, but also lamenting and circumventing, boundaries and barriers.

We now move from notions like 'too much' and 'not enough', to relatively temporal operators like 'still' (*toj*) and relatively modal operators like 'can' (*ruuk*).

(6) toj   wan–Ø–Ø   sa'   k'iche'
     still exist–PRES–A3S PREP   forest
     'There still are (tepezquintle) in the forest.

     wan–k=eb'   li   kristyan
     exist–PRES=A3P   DM   people
     There are people . . .

> naab'al   li   halaw   nek–Ø–e'x–pub'tesi,
> many   DM   tepezquintle   PRES–A3S–E3P–shoot
> many are the tepezquintle they shoot.

entonces,   na–Ø–ru   t–Ø–aa–low
thus   PRES–A3S–able   FUT–A3S–E2S–eat/taste
So it is possible that you will eat them (or taste their meat).'

This example shows a woman talking about tepezquintle, also known as the lowland paca, a large rodent found in many parts of Guatemala, whose meat is said to be delicious. After stating that there *still* exist tepezquintle, as well as people who hunt them, she uses these facts to justify the claim that it is *possible* that the addressee will eat them (and thereby experience what they taste like). The relatively explicit propositions that the woman puts forth might be summarized as follows:

(i)   there are (still) tepezquintle;
(ii) there are people who hunt them (indeed, who kill many of them);
(iii) thus, you can taste tepezquintle meat.

As relatively tacit, background assumptions, serving as a kind of infrastructure for her reasoning, the woman seems to take for granted the following kinds of propositions:

(a) if you taste tepezquintle meat, there are hunters of tepezquintle
    (that is, there being successful hunters of T is a condition for you
    to taste T);
(b) if there are hunters of tepezquintle, there are tepezquintle
    (that is, there being T is a condition for there to be successful
    hunters of T).

As may be seen, the auxiliary premises (i–ii), in conjunction with such backgrounded conditions (a–b), justify the main claim (iii): it is *possible* for the addressee to taste tepezquintle meat. Loosely speaking, such a modalized claim has the following truth conditions: there exist
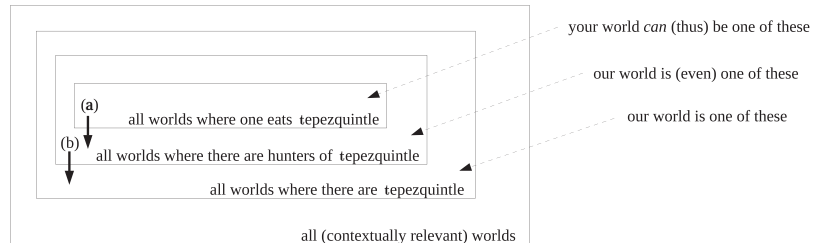
Figure I.2 All the worlds where one can taste tepezquintle meat

one or more worlds, compatible with certain restrictions that exist in the world of narration (here the speech event), in which the addressee's tasting of tepezquintle meat is true. In particular, if there weren't tepezquintle, such that claim (i) were false, there wouldn't be successful hunters of tepezquintle, given condition (b). And if there weren't successful hunters of tepezquintle, such that claim (ii) were false, the addressee wouldn't have the opportunity to taste tepezquintle, given condition (a). See Figure I.2.

As may be seen, the modalized utterance in the last line of this example has two verbal predicates, *ruuk* 'can' and *lowok* 'to try/eat', each of which is independently inflected. In particular, the first predicate is marked with present-tense and third-person affixes; whereas the second predicate is marked with future-tense and second-person affixes. Loosely speaking, the first predicate indicates that, conditions being what they are (in this world), something is possible. And the second predicate indicates what that possibility is: the addressee tasting tepezquintle sometime in the future (given those conditions). The modality in question is not deontic (having to do with norms or laws), nor dynamic (having to do with the addressee's personal abilities), but broadly circumstantial: having to do with external conditions, and the sorts of events they make possible. Extending Gibson (1979), not just things and their qualities, but also worlds and their conditions, are affordances: circumstances that don't so much determine, as enable

and constrain, actions and outcomes (thereby mediating predictions and plans, hopes and fears, and much else besides).

Finally, as may be seen in the opening line of this example, the first claim – there are tepezquintle – is modified by *toj*, or 'still'. As will be shown, just as this operator presupposes that claim (i) was true before the speech event, and continuously so up until the speech event, it invites the inference that this claim will not be true for long, such that the second claim (ii) won't be true for long, such that the third claim (iii) won't be true for long. That is, while the ecological conditions are such that the addressee can still taste tepezquintle, they probably won't be that way in the near future. (So, if the addressee really wants to taste tepezquintle, he should hurry.) Such an operator smuggles in not only presuppositions about the past, but also predictions about the future given knowledge about the present; and such presumptions and predictions reveal not just the beliefs and values, but also the identities and affects, of the participants.

One goal of Part III is to analyze the semantics and pragmatics of such operators, and thereby offer an account of *phase transitions in satisfaction conditions*: moments in time, or degrees along dimensions, whereby worlds transform in relevant – and often radical – ways: what was possible becomes impossible; what was desirable becomes unacceptable; what was useless becomes useful; what was true becomes false; what was forbidden becomes permissible; what was vital becomes extinct. As will be seen, such operators are essential to understanding not just temporality and modality, and thus the nature and culture of time and world, but also ecology and potentiality, affordances and determinism, imagination and existence, labor and price, affect and mood, renewal and replenishment.

To capture this mediation, the chapters in Part III treat intensity, and various thresholds of intensity, through the lens of temporality and modality. Chapter 9 introduces the Q'eqchi' institution of replacement (*eeqaj*), a set of practices and beliefs which determine when various

kinds of entities and agents *must* be replaced, as well as what kinds of entities and agents *may* substitute for them, and thereby serve as their replacements. It uses this institution as a means to articulate various modes of temporality that underlie social practices and material processes: temporality as repetition (and interruption); temporality as irreversibility (and reversibility); temporality as reckoning (and regimentation); temporality as roots and fruits; and temporality as cosmology and worldview. And it highlights the important role that thresholds play in mediating such practices and processes. The three chapters that follow pursue different facets of this mediation. Chapter 10 focuses on temporal categories in Q'eqchi' that are somewhat similar to English adverbs like *still* and *not yet*. Chapter 11 focuses on modal categories like possibility and necessity. Finally, Chapter 12 focuses on various constructions that are closely coupled to such temporal profiles and possible worlds – somewhat similar to the English words *too*, *under-*, and *over-*, as well as *sufficient* and *enough*, not to mention concepts like *scarcity* and *excess*. As will be seen, such operators – and the thresholds they depend on – not only undergird processes of reciprocation and degradation in village life, they also mediate political economy and technoscience in the face of ecological crises and economic upheaval.

From Small Potatoes to Unlivable Extremes

To conclude this introduction, let me offer a somewhat extended example of some of the modes of analysis that this monograph will offer, one that begins with the utterly trivial and ends with the globally consequential. While firmly rooted in a certain moment of the English language and a certain segment of American culture, it takes inspiration for its analysis from the Mayan categories and concerns just described, all the while porting the consequences of such categories and concerns to the world, and the wording and worlding of worlds and words, at large.

Growing up in the Bay Area I often went to the Santa Cruz Beach Board Walk. The signature ride of this amusement park was an all wooden roller coaster known as the 'Big Dipper'. To ride this roller coaster you had to be as tall as a wooden cutout of a pelican, with an adjacent sign that said something like: 'you must be at least *this* tall to ride the Giant Dipper'. For a short kid with tall friends, this height requirement was a particularly burdensome threshold, as I was the only one in my circle who didn't meet it. Setting aside for the moment the psychodynamics of desire, anxiety, and inadequacy, let's turn to the role this sign played in a certain mode of signification.

This sign constituted an important ground for a certain kind of speech event: a child, placed under the beak of the pelican, while a parent, friend, and/or ticket-taker issued a judgment, however implicit or unspoken, such as *tall enough* or *not tall enough*, thereby enabling the child to go on the ride (or not), assuming he or she also had enough tickets (and hence parents with enough money to have bought them in the first place). Such judgments could even be fleshed out with other grammatical categories that indicated temporal movements towards admittance: from a somewhat hopeful *almost tall enough*, though a more neutral *not yet tall enough*, to a most unmerciful *still too short*. (While I doubt anyone ever said this utterance regarding others, I had several opportunities over the years, post-rejections from the ride, to think it about myself.)

While the entirety of such a process is too complicated to capture with a simple diagram or description, here are some key steps along the way. There is the embodiment of a height threshold, or standard for acceptability: the wooden cutout of the pelican whose beak exemplifies the height in question. There is the adjacent sign that not only makes this embodiment clear, but also indicates the rule itself, while offering instructions regarding how to know if one meets the criterion stipulated by the rule, itself only known in relation to the ruler: you must be *this* tall to ride the Big Dipper. There is the action of following

such a sign by actually standing next to the pelican such that one's meeting of the threshold, or not, becomes perfectly clear and manifestly public. There is the action of observing the child–pelican height relation, in relation to the stipulated rule, and then issuing a judgment: *tall enough*, *not tall enough*, *not yet tall enough*, *still too short*, and so forth. There are all the actions and affects that follow from such judgments: getting in line, paying the ticket-taker, taking the ride; turning away (or being turned away), feeling happy or sad, nervous or disappointed, being soothed by teachers, or teased by classmates, and so forth. (Not to mention new senses of self, of one's characteristics and capacities, as well as an attendant sense of one's own developmental clock and the movement of time per se, and of course questions as to the justice or rationale of the rule itself, and imaginings of ways to cheat, or otherwise route around it.) Finally, back to the beginning, there was a set of judgments (by engineers, lawyers, and owners) as to a proper height standard given their assumptions about risks to riders (trauma, bodily injury, death) and/or risks to owners (lawsuits, bad press, low attendance), themselves grounded in relatively shared assumptions regarding government regulations, legal proceedings, and, of course, causal processes – such as the physics of roller coasters and the vulnerability of children's bodies.

For present purposes, we can focus on an intermediate judgment like *he is not yet tall enough to ride*, which stands more or less in the middle of all the foregoing issues, being both mediated by them (as roots) and mediating of them (as fruits). Setting aside the obvious fact that it involves a pronoun (*he*) and present tense, such that its meaning is dependent on context in a relatively straightforward fashion, we may turn to two of its more interesting operators, one relatively temporal (*not yet*) and the other relatively modal (*enough*).

Loosely speaking, the operator *not yet* takes two arguments: a proposition (here, the rest of the clause, however elided: *he is tall enough to*

ride); and a reference time (here, the speech event, or time of utterance). The presence of such an operator presupposes that the proposition is false before the reference time; it asserts that the proposition continues to be false at the reference time; and it defeasibly implies that the proposition will be true (soon) after the reference time. Closely related operators (like *still* and *no longer*) invert such relations and/or restage such conditions. For example, to say that someone was *still alive when the police arrived* is to: (i) presuppose they were alive before the arrival of the police; (ii) assert they were alive at the time of the arrival (and continuously so in between); and (iii) imply that they were dead soon after (thereby licensing still (!) future inferences of possible actions, outcomes and motivations, however weak, nefarious, accusative, fleeting, or well-founded).

The operator *enough* arguably takes four arguments: a nonfinite clause indicating a salient action or event (here, to ride the Big Dipper): a quality or dimension (here, tallness or height); a standard degree or threshold associated with such a dimension for the action in question (here, the height one *must* be to ride); and a set of norms, rules, or facts that link action, degree, and dimension (here, the rules of the amusement park, which specify an acceptable range of heights, themselves understood as legitimate and/or binding). If a phrase like *tall enough* (to ride) indicates that one meets a threshold, and so is within the range of acceptability (but on the low side), a phrase like *too tall* (to ride) indicates that one exceeds a threshold, and so is outside the range of acceptability (and on the high side), and so may not (or cannot) undertake the action in question (given the rules or laws so defined).

Treating these two operators (*not yet* and *enough*) together, such an utterance presupposes that one did not meet the height requirement (and so could not go on the ride) prior to the reference time. It asserts that one does not meet the height requirement (and so cannot go on

the ride) at the reference time. (In particular, there exists no world, qua possible near future, accessible to this world – so far as the rules of this world are followed – in which a proposition like 'he rides the Big Dipper' will be true.) And it implies that one will meet the height requirement in the (more distal) future, and so *will be able* to go on the ride at such a time.

In so doing, such an utterance thereby takes for granted (re-enforces, and/or makes known) particular rules and restrictions, dimensions and thresholds, permitted and prohibited actions, normal and marked developmental processes, safe and unsafe situations, possible or impossible futures, marked and unmarked children, gatekeepers and interest groups, sadists (ready with the ridicule) and sympathizers (willing to overlook tiptoes).

To be sure, being permitted or prohibited from riding a roller coaster (even one as exhilarating and storied as the Big Dipper) is pretty small potatoes. I linger on its details not just because it so compactly illustrates the relation between intensity, temporality, and modality (not to mention the coupling of language, culture, and environment, or the nature of grounds, tensors, and thresholds); but also because it so readily generalizes to a wide range of phenomena that have such important stakes.

Here is a sample headline from the *New York Times* (April 5, 2020) that illustrates many of the same issues in a radically different setting: "Italy *underestimated the outbreak*, then became one of the first countries to order a national lockdown to contain it. A month later, officials warn it is *still too soon to reopen*." Similarly, what counts as *too close for comfort* (given the possibilities of contagion in the context of a virus like COVID-19); and who decides whether we are *not yet in an unlivable extreme* (given the ravages of global warming).

Setting aside such seemingly overwhelming issues for the moment, the processes in question are much more pervasive, and thereby pertain

not just to the *Anthropocene*, but to just about *every scene*. Agents, entities, and events are constantly being graded by an enormous range of gatekeepers: their intensities, or degrees, of specific dimensions and capacities are assayed and assessed. As a function of where they sit relative to certain standards or thresholds (and when), various possible futures for those agents or entities are opened or foreclosed, delayed or hastened. Such assessments are grounded in various rules and rationales, interests and instincts, assumptions and values; and they are regimented by other agents, including infrastructures, environments, and other organisms. And such practices thereby usher in a range of repercussions, while solidifying a range of presuppositions, however unintended, illogical, destructive, or unjust.

As assayers of intensity and purveyors of patterns, such gatekeepers include not just ticket-takers, but also traps and tests, filters and sieves, natural and artificial selection, immune systems and flu masks, enclosures and attachments, laws and logic gates, prices and prohibitions, algorithms and parasites, thermometers and face scans, criminal profiles and commodity advertisements. They are thus both ordered and ordering agents: imposed on by orders from one or more worlds, if only their understanding of a stock's price or an afterlife, they attempt to impose order on their own and others' worlds.

Affect and Intensity, Matter and Energy

But before we begin, a few words of warning. In contrast to moves made by scholars working at the headwaters of the affective turn (see, in particular, Massumi's [1995] incredibly fun and influential essay), we will not conflate intensity with affect (for it includes so much more in its scope); and we will not reduce intensity – or affect for that matter – to effect (for it is so often the causal agent par excellence).[3] It is so much

more than 'strength and duration'; and it is no less present in language and cognition than it is in affect and motion. Intensity, and affect while we're at it, is allo-gnomic, not autonomic.

As should be clear from the foregoing discussion, intensity is particularly important because it scopes over, and often slips under, just about everything. It is not something ontologically bound like a substance or quality, thing or qualia. (Though it can be made so, or at least be made to seem so; languages, and their speakers, are certainly deft enough to do so.) It is, rather, a *potentially projected potentiality* – itself multidimensional and metarelational – of anything. It is therefore radically indifferent to the usual distinctions: entity or event, value or quantity, affect or sign, cause or effect, place or time, subject or object, intuition or analysis, prehension or apprehension, relation or relatum, nature or culture, collectivity or world. Indeed, intensity is often projected onto (and/or ingresses into) potentiality per se: that's not *very likely* to have happened; she's *more capable* than he is; this behavior is *slightly more permissible* (or *slightly less reprehensible*) than that; it *would be virtually impossible* to pull off; *if only* they *weren't so* oblivious); and so forth.

While intensity sometimes appears as a nonquantified degree of a particular dimension (e.g., that is *very* hot), it usually only emerges in complex connections between changing degrees of disparate dimensions. Indeed, even in the simplest cases, the intensity (or degree) of one dimension is typically coupled to, and thereby affecting of, the intensity of another dimension.

For example, the tension in a stretched-out wire and the pitch produced by that wire when plucked (not to mention all the channeling and channeled tensions in the hand and ear, guitar and air). The degree to which he's drunk and the extent to which he staggers (or swaggers). The narrowness of one's escape and the depth of one's relief.

More generally, changes in the intensity of one or more dimensions across space and/or over time are affecting of (and affected by) changes in the intensity of one or more other dimensions. Indeed, changes in intensity don't just occur over time (as a kind of independent variable), the intensive – and tensored – movement of matter and energy (not to mention that of entropy and information, meaning and value) simultaneously reconfigures space-time (as a dependent variable); thereby rechanneling the matter and energy that originally channeled it. And on it goes . . .

For example, the coupling of electric and magnetic fields in electromagnetic radiation; and hence the propagation of light across space and time; and, reciprocally, transformations in space-time – not to mention the depth of our knowledge about space-time itself, and the possibility of other worlds – through the movement (and capture) of such photons. Closer to home, perhaps, yet distinctly connected, and in the tradition of Stern (1985), a parent's evinced attunement to a child's exuberance (including their attempts to discipline – or tune – what they 'see' as underdevelopment or overexuberance); and the child's reciprocal attunement – if only their resistance – to what the parent evinces. (For nothing connects disparate scales, or rescales disparate connections – from the cosmos to the nursery – quite like intensity.)

(Needless to say, all this is opposed to the idea – once quaint, but now cultish – that affect, materiality, experience, and the like are somehow beyond semiotics, or prior to semiosis. They are no more, and no less, beyond it than anything else in the world.)

Indeed, as will be seen in the chapters that follow, insofar as our imaginaries and theories of such coupled intensities are intensely coupled to the coupled intensities so imagined and theorized, our analysis of them – and intuitions about them – quickly become intensely complex (and complexly intense).

So we will do our best to ramp up slowly.

Notes to Introduction

1 On the notion of natural history, see Bacon's *New Organon*, the essays in Silverstein and Urban (1996), and the scholarship of Harold Conklin.

2 For more about speakers of Q'eqchi' (and their language, history, and culture), see Wilson (1972), Stewart (1980), Berinstein (1985), Wilk (1991), Wilson (1995), Kahn (2006), Grandia (2012), Kistler (2014), and Kockelman (2010a, 2016a, 2020b). My own approach to language, culture, and cognition among the Maya is in the tradition of Lucy (1992), Haviland (1977), Hanks (1990), and Norman McQuown.

3 For an account of affect, in a pragmatist tradition, that resonates with this book's approach to intensity, see Kockelman (2013, 2016a). On other approaches to affect, see the wonderful essay by Urban and Urban (2020), and other chapters in the same volume (Pritzker, Fenigsen, and Wilce 2020).