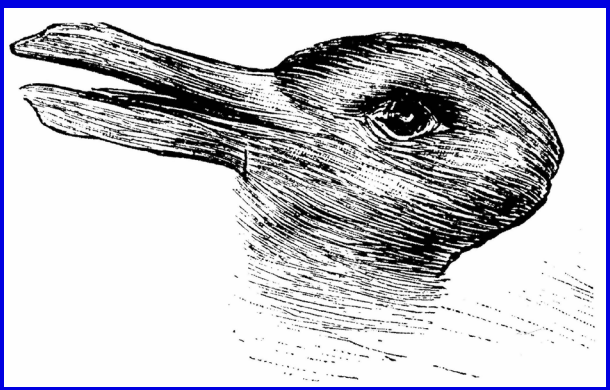
Language and the World

Essays New and Old

Richard L. Epstein



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Advanced Reasoning Forum

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Mistakes in the text are now due to me.

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Preface

Language and the world. A big subject. The structure of languages, metaphysics, knowing and wondering, things and mass and process, how to reason well, thought, ethics. All these and more are involved in understanding how we encounter the world with our languages.

The first three essays, "The World as the Flow of All", "Language and the World", and "Language-Thought-Meaning", set out the overall perspective. The other essays extend, or contradict, or support the ideas in these first three, leading to a large view of how we talk and understand, and how that affects how we live.

In part, this work is an exploration of the idea that language shapes how we encounter the world. I do not attempt to trace the history of "Whorf's Thesis", the use and misuse of that term, and the many ideas of what it's thought to be, for that is ably done by John Leavitt in *Linguistic Relativities* (Cambridge, 2011) and Penny Lee in *The Whorf Theory Complex* (John Benjamins Publishing Company, 1996).

This book is an exploration in essays by me and others as we try to understand, and to understand how we understand, an exploration leading, I hope, to less certainty and more wonder.

DEDICATED TO

Juan Francisco "Pancho" Rizzo

Eduardo S. "Eddie" Ribeiro

with gratitude for their criticism,
encouragement, and friendship
that helped shape this book.

A man too old to fend for himself prays:

> . . . I cannot go up to the mountains in the west to you,
> deer; I cannot kill you and bring you home . . .
> You, water, I can never dip you up and fetch you home
> again . . .
> You who are wood, you wood, I cannot carry you home
> on my shoulder.

This is not the speech of one who has plucked the fruits of nature by brute force; it is the speech of a friend.

Dorothy Lee, "Linguistic Reflection of Wintu Thought"

Even a great magician cannot pull a rabbit out of a hat if there is not already a rabbit in the hat.

from the film *The Red Shoes*, 1948

History of the Essays

ESSAYS NEW

Richard L. Epstein (1947–)

"The World as the Flow of All"

An earlier version of this essay appeared in *ETC.: A Review of General Semantics*, vol. 73, no. 3, pp. 213–232, 2016 (published in 2018).

Note on the composition of this essay

This essay grew out of my trying to explain to friends the ideas from a preprint *The Internal Structure of Predicates and Names with an Analysis of Reasoning about Process* (2010). The many discussions I had with Don Brown, Fred Kroon, Melissa Axelrod, Arnold Mazotti, and Esperanza Buitrago helped shape what I have said, and I am grateful to them.

I'm grateful also to João Marcos, who at the Universidade do Natal, Brazil, in February 2011 gave me my first opportunity to give a talk, in Portuguese, about this work, and to Petrucio Viana and Renata de Freitas who invited me to give a talk in English about this work at the XVI Encontro Brasileiro de Logica in Petropolis, Rio de Janiero, Brazil, in May 2011, and to Ivan da Costa Marques who arranged for me to give the "same" talk in Portuguese there. Since then I presented this material in talks at the Philosophy Department of the Universidade Federal de Minas Gerais and at the Department of Linguistics at the University of New Mexico, and I am grateful to the participants whose comments led me to revise this.

For the conception of the world as flow I was much influenced by translating the stories in *The BARK of DOG*.

"Language and the World"

Written in 2020 for this volume. Some of this is derived from the previously published version of "The World as the Flow of All". The template analogy comes from my book *Propositional Logics*. I am grateful to Chris Sinha for his suggestions for improving this essay and his encouragement for my work in this book.

"Language-Thought-Meaning"

Written November 2013–October 2014 and revised slightly since.

"Why Event-Talk Is a Problem"

This was written in May–July 2019 to explain to colleagues the issues

I previously discussed only in relation to formal logic ("Events in the Metaphysics of Predicate Logic" in *Reasoning and Formal Logic*, Advanced Reasoning Forum, 2015) and in relation to issues of cause and effect ("Reasoning about Cause and Effect" in *Cause and Effect, Conditionals, Explanations*, Advanced Reasoning Forum, 2011).

"On the Genesis of the Concept of Object in Children"
Written in 2010 and revised slightly since.

"A New Turing Test"
This first appeared in the ARF Blog in July 2019.

"The Thing-Basis of Western Philosophy"
Written in 2020 for this volume, based in part on an earlier version of "The World as the Flow of All".

"The Metaphysical Basis of Logic: Masses and Things"
First written in 2014 and revised since.

"Languages and Logics"
Written in 2020 for this volume.

ESSAYS OLD

I have reproduced the use of single and double quotation marks and placement of punctuation relative to those as they appear in the original papers. I have kept the formatting of the text and the references as in the originals. Figures are placed as closely as possible to their placement in the originals.

Dorothy Demetracopoulou Lee

"Conceptual Implications of an Indian Language"
Philosophy of Science, vol. 5, no. 1, 1938, pp. 89–102.

"Categories of the Generic and the Particular in Wintu‘ "
American Anthropologist, vol. 46, no. 3, 1944, pp. 362–369.

"Linguistic Reflection of Wintu Thought"
International Journal of American Linguistics, vol. 10, 1944, pp. 181– 187. The version here is from *Freedom and Culture*, a collection of essays by Lee, edited by C. Moustakas and D. Smillie with the approval of Lee, Prentice-Hall, 1959, reprinted Waveland Press, 1987, pp. 105–112.

"Symbolization and Value"

Originally published in *Symbols and Values, an Initial Study*, Thirteenth Symposium of the Conference on Science, Philosophy, and Religion, 1954. The version reprinted here is from *Freedom and Culture*, Prentice-Hall, Inc., 1959, pp. 78–88.

Benjamin LeeWhorf

"Grammatical Categories"

Published posthumously in *Language*, vol. 21, no. 1, 1945, pp. 1–11, with the following editorial note:

> This paper was written late in 1937 at the request of Franz Boas, then editor of the International Journal of American Linguistics. The manuscript was found in the Boas collection by C. F. Voegelin and Z. S. Harris. The author died on July 26, 1941. BB

I guess that "BB" refers to Bernard Bloch, editor of *Language* at that time. No indication is given of who edited it for publication. The original is listed in "Index to the Franz Boas Collection of Materials for American Linguistics" by Voegelin and Harris (*Language*, vol. 21, no. 3), but neither the curators of that collection at the American Philosophical Society nor the curators of the Whorf collection at Yale can find it.

I have replaced words and phrases in all capitals with italics in conformity with the works Whorf published in his lifetime.

"Science and Linguistics"

Technology Review (Massachusetts Institute of Technology), vol. 42, pp. 229–231 and pp. 247–248, no. 6 (April 1940).

"The Relation of Habitual Thought and Behavior to Language"

In *Language, Culture, and Personality: Essays in Memory of Edward Sapir*, Sapir Memorial Publication Fund, 1941, pp. 75–93. Reprinted in *ETC*., 1944, from which this reprint is done.

"Languages and Logic"

Technology Review (Massachusetts Institute of Technology), vol. 43 (April, 1941), pp. 250–252, 266, 268, 270, 272.

These four papers were reprinted in *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf,* edited by John B. Carroll, The MIT Press, 1956. Carroll made the following changes in his versions: he introduced single quotation marks

where the original used only double ones, adding them in a seemingly random pattern; he used all capital letters for what in the original appeared as lower case italics; he added and deleted connectives and words; he changed punctuation; he changed the text describing some of the figures; and he re-arranged the first figure in "Science and Linguistics" to make it unintelligible.

M. Dale Kinkade

"Salish Evidence against the Universality of 'Noun' and 'Verb' "

Lingua, vol. 60 (1983), pp. 25–40. Reprinted by permission of the publishers of *Lingua*.

Friedrich Nietzsche

" 'Reason' in Philosophy"

Originally published as "Die 'Vernunft' in der Philosophie" in Nietzsche, *Götzen-Dämmerung*, 1888. This version appeared as a chapter in *Twilight of the Idols*, translated by Walter Kaufman in *The Portable Nietzsche*, Viking Press, 1954, pp. 479–484.

Benson Mates

"Metaphysics and Linguistic Relativity"

This is from pp. 246–250 of *The Philosophy of Leibniz: Metaphysics and Language*, Oxford University Press, 1986.

Essays New

Richard L. Epstein

Richard L. Epstein (1947–) received his Ph.D. in mathematics from the University of California, Berkeley in 1973. He began studies in philosophy as a postdoctoral fellow at Victoria University of Wellington, New Zealand (1976–1978). His mentors in philosophy were George Hughes and Benson Mates.

He has published books on mathematical logic, formal logic, logic as the art of reasoning well, and linguistics. He has translated and edited for publication the stories in *The BARK of DOG*. He is now Head of the Advanced Reasoning Forum and director of The BARK of DOG Foundation in Socorro, New Mexico.

The World as The Flow of All

The world is made up of things: rocks, tables, dogs, people, stars. Of this we are sure, for we have words for all these and many more.

We know of process and change, too. But we know of them only through things. For example, suppose I show you an apple. It's round, red, shiny. I take a bite of it. It's changed—no longer round, no longer red and shiny where I bit into it. I take another bite. The apple has changed some more. I take another bite, and another, and the apple has changed a lot. I give the core to my donkey. The apple is all gone.

The apple changed. But is that the apple I started with? If one apple changed, it wasn't what I first showed you, it wasn't what I bit into the second time, it wasn't the core. It must have been something beyond all those, somehow beyond any particular time, something that persists through all "its" changes. Talking of change we find ourselves talking about things beyond any particular time.

Change, we feel, is not real like things are real, like rocks, tables, dogs, people, stars, the sun. The sun? Everything we know about that fiery ball tells us that the sun is a process: nothing endures in it, not shape, not form, not even molecules—only process. A rock, too, is process, changing, never stable, though we don't notice the changes. The difference isn't that the sun is a process and the rock is a thing; the difference is the scale of time over which we note "changes".

Our focus in our language is on the world as made up of things, on stability in the flow of our experience. Still, we have some sense in our lives of flow, of flux, of change, of process. And we have some hints of that in our language.

Suppose you're in my living room with me, and I look out the window and say,

It's raining.

Yes, that's true. But what's raining? There's no "it": the weather isn't raining. The weather is rainy; the weather doesn't do anything. The word "it" is a dummy, there because in English every verb requires a subject. I could have said just,

Raining.

You would have understood me. It's clear I'm talking about now, which is all the "is" in the original sentence tells us. And it's clear

I'm talking about there, outside the window, though in English we don't require any word or phrase to mark that.

On a winter day I might say "Snowing", and you'd understand me. That's complete, clearly true or false, though it doesn't look like a sentence in English. Or I could say, "Sun-ing" or "Breeze-ing", which are odd, but once you've got the hang of my talking this way, you'd understand me.

If we were at my friend's apartment in the city, I might look out the window and say,

Running.

You'd understand me. It sounds odd because I haven't said who or what is running. That seems essential when we talk English because verbs are descriptions of what's happening to or because of a thing. Yet running is running, whether it's one person, a dog chasing a cat, or lots of people in a marathon. I don't describe all when I say "Running", but we never describe all. What I've said is true or false, enough to communicate.

Looking out my window at the patio I could say "Barking" and you'd understand me. On another day looking at my dogs I could say, "Sleeping". These are process words, and used this way they begin to become part of a way to describe process without a focus on things.

After a rain, as I look out at the patio I might say, "Mud". Mud isn't a thing. We don't say "There are three muds out there." We say, "There's some mud" because mud is a mass. Water, gold, snow are masses, too. We know they're part of what the world is made up of, different from things. Every part of mud is mud, while there's no part of an apple that is an apple. Processes are like that, too. Every part of raining is raining—there's no smallest part of raining, for a single drop of water is not raining.

Starting to see the world as process-mass, I look out the window and say, "Dog-ing". You'd understand, though it seems incomplete. One dog or many dogs? What's the dog doing? We need a verb and an indication of singular or plural when we talk in English. Yet if I say, "There's a dog", the verb is just "is". The dog is there, it exists there, that's all. "Dog-ing", understood as about there and now, does that as well, though it doesn't say whether there's one or many, whether alive or dead, whether big or small. Much is left out, but much is left out of our description "There's a dog."

I could turn, and looking around the room say, "Table-ing". You'd understand. An odd way to talk, but true. Or pointing to the next room I could say, "Woman-ing". Odd, too, incomplete, but true. Or I could say "Brown-ing" while pointing in the direction of my old dog Birta. That would be true. Brown is not a color that attaches itself to a thing; "brown-ing" is a description that applies in the flux at that time and place. We are beginning to see the world as made up of processes.

Processes? To say that is to slip back into thing-talk. This process, that process, one process, two processes, a fast process, a blue process. No. To see process in the world there are not processes, just process, the flow of all. Words like "raining", "sun-ing", "running", "dog-ing", "mud-ing" describe the flux at a time and place. They don't pick out separate parts of the flow any more than "Pacific Ocean" and "Baltic Sea" pick out parts separate and distinct from the water that covers the earth.

To say that Zoe is woman-ing is to talk of Zoe as a process-mass, continuing through time not as a supratemporal object but as a way. But Zoe is not a process-mass, for that is to treat her as a thing again, just a different kind of thing. There are no processes, no masses. There is only the flow of all that we describe in various ways, one of which is "Zoe-ing". Still, I'll use the terms "mass-process language" and "mass-process word" because the parts of English that lead us to this other view are words we use in English for processes and masses.

To talk of the world as the flow of all we can borrow and modify some words from English like "raining", "sun-ing", "running", "dog-ing", "mud-ing", "woman-ing". We add "-ing" to remind us of our new way of talking, of seeing. When we specify a context for these words, each is true or false.

We can say "Dog-ing running brown-ing", and that would be true if you had pointed to my dog Birta running in the hills. Better is to use "+ " to indicate that the descriptions are mixed together and not simply applying at a time and place. So pointing to Birta it would be correct to say "Running + dog-ing + brown-ing", while "Running dog-ing brown-ing" without the "+" might be true if there were seventeen white dogs in a room where there is a cockroach running across a brown table (I have to resort to English for my examples).

In "dog-ing + brown-ing" there is no subject or predicate. An equivalent description is "brown-ing + dog-ing". The words "dog-ing" and "brown-ing" have equal status: there is no individual thing that is

meant as the subject and no comment on "it" as a predicate. There (pointing) is dog-ing and brown-ing mixed together.

We can mark a description for time and place, like "Raining (yesterday, here)" or "(Running + dog-ing + browning) (today, there)", where the markers are made clear by context. Any of the mass-process words can be marked for time. This suggests that each is a verb. But how can there be verbs without nouns? We could use time marking just for entire sentences, as in "Yesterday ((dog-ing + running) and (raining))". Or we could use only comparisons for temporal ordering, as in "(bark-ing + dog-ing) before (rabbit-ing + run-ing)". In these no part is marked for time, so we have no temptation to classify a part of the expression as a verb.

We can describe more fully by saying:

Not–Raining (here, now)

(Rabbit-ing + Running) (there, now) *and*
(Dog-ing + Chasing) (there, now)

Coyote-ing (yesterday, there) *or* Dog-ing (yesterday, there)

All the ways we join sentences in English with the connectives "not", "or", "and", "if . . . then . . ." we can use in talking of the world as the flow of all, for those require only that the sentences are (considered to be) true or false, not that they are about things.

In English we get tongue-tied trying to talk of sameness and difference. Is (are?) the apple then and the apple now the same? How can two things be the same? Can there be sameness and difference without talk of things? A visitor to my ranch saw a couple dogs in the corral yesterday. She's standing next to me today and wonders whether those were the same as the dogs that are here in front of us. Is dog-ing then and there the same as dog-ing here and now? We can formulate that question in mass-process talk by asking whether the following is true:

Dog-ing (yesterday, corral) $\approx$ Dog-ing (here, now)

The symbol "≈" is not meant for identity of things but similarity, indicating equivalent descriptions.

We can assert similarity without talk of time and location, too:

(Canine-ing + Domestic-ing) $\approx$ Dog-ing

This is not a universal statement that at any place and time "(Canine-ing + Domestic-ing)" describes the same as "Dog-ing". Rather ,

the concept, the category, the genus if you will of "Canine-ing + Domestic-ing" is the same (similar to) that of "Dog-ing".

More generally, we can say that dog-ing is part of animal-ing. But that's misleading because for there to be a part, there must be a whole, and animal-ing, just as mud-ing, is not a whole, not a thing. Rather, the conception of dog-ing is *subordinate to* that of canine-ing, so long as we don't think of concepts as things but rather as concept-ing, as I describe in "Language-Thought-Meaning" in this volume. Abbreviating "subordinate to" as "sub", we have that the following are true:

Tree-ing sub Plant-ing

Reading sub Thinking

Pegasus-ing sub Horse-ing

And the following are false:

Cat-ing sub Dog-ing

Barking sub Meowing

We have a simple grammar: base words, conjunctions of base words, base words of specific times and places, sentence connectives, a subordination relation, and a similarity relation.

In the accompanying essay "Language and the World" and essays by others in this volume, we'll see that there are many languages that have the structure and conceptions of this artificial mass-process language: no nouns, no verbs, no partitioning of the world but only describing the flow of all. Those essays explore how this matters to philosophy, to linguistics, to anthropology, to ethics—to our way in the world.

Dedicated to the memory of Suely Porto Alves
in the flow of all, the flow of love

Language and the World

Introduction

There are two kinds of languages: thing languages and mass-process languages.

In a thing language, the grammar leads speakers to look first for stability in the world: the world is made up of things, individual things that persist in time. Words that can be used to pick out that stability are nouns. Descriptions of the individual things in time are verbs. There may be words for mass and process in such a language, but they are

secondary, and the grammar forces their use into the syntactic role of nouns and verbs, leading speakers to think of them in some way as things and as descriptions of things in time.

In a mass-process language, the grammar leads speakers to encounter the world as the flow of all. There is no idea of change, for there is nothing to change, there are only differing descriptions of the flow. Every base word can serve as a description and as a modifier. Each can be marked for time, or whole assertions can be marked for time, or assertions can be compared for time as before or after. If stability can be found it is only with secondary grammatical constructions. There are no nouns and verbs, for there are no words for individual things and no descriptions of things in time.

There is good reason for a noun-verb distinction in thing languages. There is good reason for no noun-verb distinction in mass-process languages. This is what I will show in this paper, along with how linguists and anthropologists do or do not take account of such very different grammars.

Thing languages

Languages such as English, German, and French are *thing languages*: the grammar of these directs their speakers to look first for stability in the world as made up of things. For example, in English there are lots of words for kinds of things. We have “dog”, “apple”, “rock”, “chair”. We talk of an apple or the apple: the singular with the article indicates we are meaning to talk about an individual thing. We talk of all the apples on the table, indicating with the plural our intention to get someone to pay attention to many individual things of that kind.

We describe things. I take an apple; it’s red, round, shiny, firm. I bite into it and put it on the table. It’s no longer round, and where I bit it’s an off-white color. I leave it on the table for a couple days, and it is no longer red and firm: it’s mushy and brown. We say the apple changed. But what changed? Our grammar insists that we are talking about one thing that has gone through changes—the apple. So the apple is a thing that is supratemporal: it persists in time through its changes. We describe the changes with words and phrases like “was red”, “is mushy”, “softened”, “changed color”. The grammar of English directs us first to look for stability in terms of things and then to talk of how those things go through changes

We say that a word or phrase for a thing we mean to be talking

about is the *subject phrase* of a sentence. In "The apple turned mushy" the subject phrase is "The apple". We might say that the subject of the sentence is the apple itself. The comment we make about the subject is called the *predicate phrase* of the sentence. In "The apple turned mushy" the predicate phrase is "turned mushy". But unlike the subject of the sentence, there is no thing outside the sentence in the world that is the predicate. Some say there must be something outside the sentence that is the predicate: in this example the predicate is the property or abstract thing correlated to "turned mushy".[1] This is an example of how strongly the thing-view of English directs people to find things for our expressions. It can't be only a part of language that is a predicate, but just as the subject of the sentence is a thing, so, too, the predicate is some thing "out there", distinct from our talking. To be clear and avoid this controversy, I'll use *subject* and *predicate* for parts of a particular utterance.[2]

The subject of an utterance is for that particular utterance. But generalizing, we talk about *nouns*, being the words, not the particular utterances, that are used in giving a subject. Thus in the example above, "apple" is a noun, modified by "the" to create the subject of the sentence. In "Dogs bark", the noun is "dog", modified by the suffix "s" to make the subject of the sentence. In "The person I met last week on the plaza was hungry", the subject is "The person I met last week on the plaza", where "person" is a noun; but also "plaza" is a noun because it can be used as a subject by itself, as in "The plaza is rectangular".

What, then, is the subject of "Mud is brown"? In analogy with "This chair is brown", we say that it is "Mud" and call the word "mud" a noun. Yet "mud" is not a word that is meant to direct our attention to one or several individual things. Mud is a mass: every part of mud is mud, and there is no smallest part of mud. But the thing-focus of our language has determined our grammar, and hence we say that "mud" is a noun and "is brown" is the predicate in the sentence.

What is the subject of "Running is good for your health"? Following the pattern we've seen with thing-talk, we say that "Running" is the subject, and then "running" is a noun—even though it can as well be used for a predicate, as in "Spot is running". Yet "Running" does not direct us to some part of the world or our experience that is a thing, not an individual thing. Running is more like mud: every part of

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1 Compare the quotes by Radu J. Bogdan on p. 52 below.

2 Though I say "utterance", I mean to include signs in sign languages and inscriptions in written languages in the discussions that follow.

running is running, and there is no smallest part of running. We treat the word in our grammar as we treat "mud": we talk of some mud and some running, not a mud or a running. Yet running is quite different from mud in that it is not a mass: it is process, for "running" is a word linked to a word that describes changes in things in time, "run". Still, our grammar forces us to use "running" and "mud" as subjects as we do "apple" and "dog".

What is the subject of "Justice is desirable"? On the pattern of thing-talk, it is "Justice", and then "is desirable" is the predicate. We are led to think of justice as if it were a thing. But then is it real or abstract, an idea or a way of being in the world? We are led to these odd questions by the thing-focus in our language because we use "mud", "running", "justice" as nouns following the pattern we have for nouns that we use to pick out individual things.

The predicate of a sentence in English is marked for time. In "The apple was round", the predicate is "was round", and the part that marks time is "was", which is "to be" conjugated to the past tense. In "The apple turned mushy" the predicate is "turned mushy", and the part which is marked for time is "turned", which is the past tense of "to turn". The part of a predicate that marks for time, that indicates the when of the description or how the thing is, or changed, or will be, we call a *verb*. Verbs embedded in predicates, and process words like "running" that come from verbs, are how we talk of process and change in English. They are as fundamental as nouns, for in English we must mark every sentence for time, the "when" of the description. This is how we place supratemporal things into our world of experience.

But in "Dogs bark" what is the mark for time? The verb "to bark" is marked not for the present, past, or future but for all time or an indication of capability, as in "All dogs have the ability to bark". There can be omnitemporal marking for a verb.

Words for individual things like "Birta" or "this dog" cannot be marked for time. To mark them for time would be to see them not as stable but as process. We would have no stability, no thing that continues through its changes, but only another description, like "turned brown".

The classifications we denote with "subject", "predicate", "noun", and "verb" are clear enough in our use of English as well as in German and Romance languages. They are not some arcane talk of grammarians or linguists but come to us from the thing-focus of our language.

We can all recognize them even if we have never been taught grammar in school.

Mass-process languages

There are also *mass-process* languages: the grammar of these directs their speakers to encounter the world first as the flow of all, describing but not partitioning. Since few people who are likely to read this paper speak a mass-process language, I have described in "The World as the Flow of All" an artificial mass-process language.[3]

In that artificial language, it is not simply that there is no noun-verb distinction and no subject-predicate distinction. There is good reason why there should not be such distinctions, at least in the sense of those notions given for thing languages.

Curious, some say, but there could be no human language that does not focus primarily on things with a noun-verb distinction.

They're wrong.

I can't hope to convince you of that, for another way of encountering the world is not a matter of argument. Rather, I'll quote people who have described ordinary languages as having a very similar basis as the artificial mass-process language in the hope that you can see how people can communicate without a thing-focus.

Some mass-process languages

Wintu

In the 1930s and subsequently, Dorothy Demetracopoulou Lee studied Wintu, a Native American language of a tribe living in California along the upper reaches of the Sacramento, McCloud, and Pitt rivers. The language is now extinct. Here are extracts from some of her essays.[4]

> There is evidence that the Wintu Indians recognize or perceive first of all humanity, human-being-ness, and only secondarily the delimited person. They make no distinction between singular and plural, and a cardinal number is never used with this generic, primary form of the word. They individuate, however, making a particular out of the original generic form of the word; out of *nop*—deermeat or venison—

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[3] I develop this in *Reasoning and the World as the Flow of All* into a formal language and methods of reasoning that are as rigorous as we have for reasoning about things.

[4] Page numbers in *italics* are to the pages of the essay reprinted in this volume.

> they derive *nopum*—(a) deer; out of *se*—handness, hand—they derive *semum*—finger. Yet here also, unless the Wintu chooses to use a separate word meaning one or several or giving the definite number, there is nothing to show whether the word refers to a singular or plural; *nopum* may be one or many individual deer; *semum* may be one or several fingers.
>
> "Symbolization and Value", 1954, pp. *160*

> To the Wintu, the given is not a series of particulars, to be classed into universals. The given is unpartitioned mass; a part of this the Wintu delimits into a particular individual. The particular then exists, not in nature, but in the consciousness of the speaker. What to us is a class, a plurality of particulars, is to him a mass or a quality or an attribute. These concepts are one for the Wintu; the word *red*, for example, is the same as for *redness* or *red-mass*. Plurality, on the other hand, is not derived from the singular and is of slight interest to him. He has no nominal plural form, and when he does use a plural word, such as *men,* he uses a root which is completely different from the singular word; *man* is wita but *men* is gis.
>
> "Linguistic Reflection of Wintu Thought", 1944, p. *148*

> To the Wintu, generic concepts are primary and the particular is derivative. I use the term *generic* rather than *universal* advisedly. To the Wintu, the given is not a succession of particulars, to be conceptualized and classified under universals. Rather, it is immediate apprehension of qualitatively differentiated being. For the Wintu speaker, the phrase *there-is-fog,* with a separate word for the subject and the predicate, is only a grammatical alternative for his other expressions, *it-fogs*. He prefers an expression such as *it-roes* to *roe exists, it darks* to *it-is dark*; he will say *she-soups* instead of *she-makes soup*. *Round* is derived from *to-be-round, thunder* from *to-thunder, nest* from *to-build-a-nest*. Actor and result are one with the act. Substance is one with existence; it cannot be said to be particular, as it is conceived of in European thought. Substances, as for example roe, fog, deer, are originally differentiated but since they are not delimited, the particular is a secondary concept.
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> "Categories of the Generic and the Particular in Wintu", 1944, p. *139*

Salishan languages

Salishan is a family of Native American languages of the Pacific Northwest of North America. In "Salish Evidence against the Universality of 'Noun' and 'Verb' ", M. Dale Kinkade says:

> . . . they are predicates in the Salishan languages rather than either nouns or verbs. They are rather like gerunds in English, which are both noun and verb at the same time. Any such simple form may be translated into English either as a simple noun or an equational sentence with a dummy 'it' as subject, with the whole indicating a state rather than an entity. It is difficult for speakers of English to conceive of forms such as *p'oxút* as complete sentences because English requires a subject and predicate in every sentence, but there is no logical reason why one cannot perceive of 'father' (and other nouns) as a state such as 'being a father' (cf. Kuipers 1968). Words such as 'father', 'deer', 'shoe' may even be given imperative inflections in Salish, in which case they mean 'be a X!'
>
> Even names are predicative, although they usually occur as complements or adjuncts rather than as main predicates. But they *may* occur as main predicates. pp. *249–250*
>
> It is readily demonstrable that any full word may constitute the main predicate of a Salishan sentence. p. *248*

Mayan

Mayans are native to the Yucatán peninsula in Mexico, Belize, Guatemala, Honduras, and El Salvador. Michael D. Coe in "Breaking the Maya Code" says:

> As English-speakers, we take it for granted that one can speak of, say "four birds" or "twenty-five books," but this kind of numerical construction is impossible in the Mayan languages—between the number and the thing counted there has to be a *numerical classifier*, describing the class to which the object, animal, plant, or thing belongs. We have a glimmering of this sort of construction when we talk of "two flocks of geese" or "a pride of lions," but this is pale stuff compared to the richness of the Mayan classifiers. Colonial Yucatec dictionaries list dozens of these, but only a handful are still in use in today's Yucatán, yet even these have to be interposed even when the number itself might be in Spanish. If I see three horses in a pasture, I would count them as *ox-ytul tzimin* (*ox*, "three"; *-tul*, classifier for animate things; *tsimin*, "horse" or "tapir"). However, if there were three stones in the same pasture, I would have to say "*ox-p'el tunich* (*ox*, "three"; *-p'el*, classifier for inanimate things; *tunich*, "stone"). p. 53

In English, too, we cannot attach a number word directly to a mass word or a process word or a universal word; to say "three muds", or "four runnings", or "two justices" is ungrammatical. We have to

add a *classifier* to count: a cup of water, a patch of mud, a piece of meat.[5] For process and "abstract" words, we use very general classifiers—an instance of running, an instance of justice—as if these were events. If there is no obvious classifier, where we do not conceive of the mass as having or possibly having parts, we talk of the mass or process as a thing: "the weather changed", "the fog is lifting". But weather is not a thing, not an individual, though the grammar directs us to think that way.

Stephen C. Levinson in "Relativity in Spatial Conception and Description" talks of "the Mayan (Tzeltal-speaking) Indians of Tenejapa" in Mexico.

> Why does Tzeltal force the speaker into such an arbitrarily detailed geometry of the figure? One answer may be, as just hinted, that the main function of the locative expressions is to provide a means of successful reference. In that case, Tzeltal emphasizes an alternative strategy for achieving successful reference—English does it by telling you where to look, Tzeltal by telling you what to look for. (The Tzeltal locative construction provides equally good answers to 'Where?' questions as to 'How does it look?' questions.) However, another intriguing suggestion has been made by John Lucy [1992B; 73ff] on the basis of work on the related language Yucatec Maya. Like Tzeltal, Yucatec has a developed set of numeral classifiers. The motivation, Lucy claims, is that nominals in Yucatec fail, by themselves, to individuate entities. It is only by collocation with a numeral classifier or some other shape-discriminating phrase that such nouns can come to designate countable entities. This thesis, carried to its logical extreme, would amount to the claim that all nominals in Yucatec are essentially *mass* nouns and that the language makes no ontological commitment to *entities* as opposed to materials, essence or "stuff " at all. In order to individuate entities, a numeral classifier or some predicate is required to impose individuation on the material, metaphorically in much the way that a cookie-cutter cuts up undifferentiated dough.*[see the footnote on the next page]
>
> If the thesis held even partially for Tzeltal, it would help to explain the Tzeltal insistence on specifying the geometrical nature of the figure. Consider, for example, the fact that the Tzeltal nominal *lo'bal* could be glossed 'banana stuff,' because it refers equally to all the parts of the natural kind: to the fruits, to a single fruit, to clusters

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5 In "Linguistic Reflection of Wintu Thought" in this volume Dorothy Lee describes a similar feature of Wintu "particularizing forms".

of fruit, to the trunk of the banana tree, to the leaves of the tree, and so on. Now, given a nominal of such a nature, the kind of geometric and shape information encoded in the stative locative predicates we have examined is not as redundant with the information contained within the subject noun as first might seem. Consider the examples in (3).[6]

(3) a. *jipil ta laso lo'bal*
hanging AT rope banana
'the banana(-fruits) are hanging from the rope'

b. *k'atal ta s-ba s-k'iyojbil kaipej te lo'bale*
lying-across AT its-top its-drying coffee the banana
'the banana(-trunks) are situated across the top of the coffee-drying patio'

c. *palal lo'bal ta xujk na*
attached-in-bunches banana AT its-side house
'the banana(-bunches) are against the inside side-wall of the house'

The figure in these three examples is designated by the nominal *lo'bal*. In each case, the 'banana-stuff ' to which it refers gets formed up, as it were, by the positional predicate which indicates the nature of the individuated entities involved. Thus, Lucy's conjecture would go rather a long way to explain why it is that Tzeltal and languages like it have such a wealth of locative (and other) predicates, making such fine discriminations between shapes and dispositions of the figure.

pp. 185–186

* Lucy [1992B] found, for example, that in experimental tasks his Yucatec informants sort entities not primarily according to shape, color, or other surface property, but rather according to the stuff out of which things are made.

Navajo

Navajo is a language spoken by the Diné people who live mostly in central and northwest New Mexico and northern Arizona in the United States. Here is what Gary Witherspoon says in *Language and Art in the Navajo Universe*:

. . . the astonishing degree to which the Navajo language is dominated by verbs. There seem to be few, if any, nouns that are not either passive forms of verbs or derived from verbal forms. Particles, prefixes, and postpositions are used primarily as verbal modifiers.

6 Levinson says that Tzeltal has only one preposition, which he translates in these examples as "AT".

> The dominance of verbs in Navajo also corresponds to the Navajo emphasis on a world in motion. . . . the principal verb in the Navajo language is the verb "to go" and not the verb "to be", which is the principal in so many other languages but is of relatively minor importance in Navajo. This seems to indicate a cosmos composed of processes and events, as opposed to a cosmos of facts and things.
>
> pp. 48–49

> [Harry] Hoijer [1951] concludes . . . that Navajo verb categories "center very largely about the reporting of events, or better, 'eventings.' These eventings are divided into neuters, eventings solidified, as it were, into states by the withdrawal of motion."
>
> p. 52

Rik Pinxten, Ingrid van Dooren, and Frank Harvey in *The Anthropology of Space* say:

> Navajos seem to stress both process rather than substance and cohesion rather than segmentability of reality. p. 3

> A basic characteristic of the Navajo world view, inherent in all particular phenomena it distinguishes, is the fundamentally dynamic or active nature of the world and anything in it. This feature is indeed fundamental and difficult to grasp, at least in the conceptual framework of the Westerner. It can be illustrated best through its practical, visible consequences. For example, with the static Western view it proved easy and dependable to divide space into segments, to structure the world according to types of objects, units, even atoms, all of which enjoy a certain "objective" status. The segmenting or "slicing" of reality (or at least the continuous stream of phenomenal reality) into chunklike, static units is possible in an easy, intellectually unsophisticated way, only within a static world; only within a world of objects, so to speak. The Navajo world, on the other hand, is essentially dynamic, and in consequence is much less suited for the kind of segmenting required by this part/whole logic which we consider "natural," as it were. pp. 15–16

> The notion of "being" or "existing" is similarly a dynamic concept. In contrast to the Western static and segmentable reality represented in the distinction between "being" and "becoming" or "growing," the Navajo view of "being" implies an essentially dynamic perspective. In this way, "existing" should be understood as a continuous manifestation (or "manifesting"), a series of events, rather than states or situational persistences through time. p. 18

Maori

Maori is the language of the native people of New Zealand. In the textbook, *Maori Language: Understanding the Grammar* David Karena-Holmes tries to describe Maori grammar in terms of English grammatical categories:

> In Maori there are no words which are used exclusively as adjectives. The word 'big' may be exclusively an adjective in English, but the Maori word ***nui*** is used as a common noun (*te* ***nui*** — 'the greatness'), as an adjective ('big' or 'great' — as in *te* ***tangata nui***) or as a verb, with the sense of 'to be big or great'. p. 25
>
> But sentences, complete without any verb, may be constructed in Maori simply by using two or more noun phrases in sequence, as illustrated by the examples:
>
> *Ko* ***Tamahae*** ***ahau.***
> Tamahae I ('I am Tamahae.')
>
> *Ko* ***tenei*** *te* ***pukapuka*** *a* ***Tamahae.***
> This the book of Tamahae
> ('This is Tamahae's book.')
>
> It should be noted that the English translations of these sentences require the use of the words 'am' and 'is' respectively (parts of the verb 'to be') for which there are no corresponding words in Maori. The meaning of each of these Maori sentences, however, is fully and unambiguously communicated in the Maori constructions. pp. 31–32
>
> Because the sense of 'being' (in some state or other) is expressed in Maori by using words such as ***pai*** and ***nui*** as verbs, a case could be made for classifying such words as VERBS OF BEING rather than adjectives. That is, the base words ***pai*** may be considered to convey the verb sense of 'to be good or fine', rather than the adjective sense of 'good or fine', and *nui* may be taken to mean 'to be big' rather than 'big'. p. 26

Chinese

There are at least three main languages called "Chinese": Mandarin, Wu, and Cantonese. There is also Classical Chinese prior to the Han Dynasty. Authors are not always specific about which of these they are considering, though all are written using (mostly) the same characters or "graphs".[7]

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[7] As Chad Hansen says in *A Daoist Theory of Chinese Thought*:

> The linguistic diversity of China poses a terminological problem. The ordinary criteria for applying both *word* and *language* in English