

# Out of the mouths of babies (Seminar)

Growing *tendrel* humans through partial refusal of metrics  
and micronutrients during the Golden 1000 Days in Bhutan

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Global health programs tout the efficacy of nutrition interventions like Sprinkles and growth charts to optimize height during the “First 1000 Days,” treating infant growth as a proxy for future health and human capital.

But how effective are these technologies in practice when they hit the ground in the most mountainous country in the world, Bhutan? During 18 months of ethnographic research with health workers, mothers, and other feeding experts across five sites in Bhutan, Shivani Kaul and co-researchers found metrics and micronutrients as universalizing technologies generated partial refusals.

Some infants spit out Sprinkles, mothers often refused these sachets and stunting categories, and several health assistants refused to plot infant growth on WHO charts.

Rather than interpret case studies of partial refusals as ignorance or resistance, we observe they index a relational logic of tendrel (interdependent origination) – rooted in schismogenic, sacred land relations in the Himalayas.

Learning from these partial refusals can clarify how humans might grow otherwise in the Anthropocene.

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<https://vimeo.com/1176833294>

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## Introduction

**Camilla:** Welcome everybody who’s managed to make it here tonight.

I think we’re coming close to the end of term.

This is the second last of the Rag anthropology series tonight, and and we’re absolutely delighted to welcome a dear friend, Shivani call from Amsterdam has travelled over from Amsterdam with Eurostar, despite bomb threats in Brussels, giving her a very late night last night, has come here fresh, able to talk about some extraordinary research in Bhutan on the questions of mothers and babies in relation to health measures and health foods that are given for growth of young infants.

I should say a little more on who Shivani is.

Anthropologist in Amsterdam Institute of Social Science Research.

She’s taught anthropology and media studies in the Royal University of Bhutan and in the first MA degree in degrowth at Universitat Autonomat de Barcelona and so we’ve been talking and working with Shivani for a long time in terms of anthropology,

politics and you were involved with us with Roar for Matriarchy, which we did on International Women's Day at the British Museum, Roaring for Matriarchy with a whole bunch of goddesses that day.

So that's the thing that really bonds you.

But so I'm going to hand over to Shivani to see who is right.

The global health programs that are come to Bhutan or the mothers and babies of Bhutan.

What do they think?

## Seminar

**Shivani:** Thank you so much, Camilla and Chris, for inviting me to share some of this work, which has also been inspired a lot by the questions that RAG brings to the table, especially with origins of human evolution and in this case, I'm interested in the origins of human development in the life cycle from birth onwards, out of an interest in doing that differently, how to grow humans otherwise, and to learn specifically in a context that hasn't been colonized directly, but still deals with a lot of neocolonial implementation of global health programs and that's why I'm interested in nutrition.

You would think it's innocuous what babies eat. But I'm interested in not only the questions of origins in kind of a life cycle, But yeah, deeper questions of how we become human and how that can be protected, and specifically what food carries in that respect, how we can redo what human growth can be.

So Bhutan is an interesting context.

I hope you will also follow me in some of the stories I share.

So with that, I will start with just a note of acknowledgment.

Just a note of acknowledgment that not only has RAG inspired some of my questions, but a lot of my colleagues in Bhutan have inspired the theorizing in this piece.

Along with the women that we interviewed, along with the health workers that we observed, this work would not be possible without a host of people, a kind of motley crew, Over the years of field work, it's been now seven years I've been working on this PhD with former students, former colleagues, and also collaborators from Canada and Toronto.

But you'll not be able to hear from them tonight.

I just don't want to invoke the collaboration that makes this research possible.

Also to acknowledge that all science is collaborative, and theorization especially is best done collectively.

So I've learned immensely from this crew, and I'm happy to talk about that in more detail, co-laboring as a process later.

So I will give you a little roadmap of the story ahead, which will proceed in 10 steps and the first story is Not another story.

I hope to share just a vignette from fieldwork in 2023 to open up some of the frictions that I want to discuss with you, which will lead me to the background of global health, specifically the background of metrics in infant development and the use of micronutrients also in infant development I want to show you.

material as well.

I'll put this around some of the characters in the story.

You can just take a look at it to get familiar with the materials and then I'll talk about growthism as a fetishization of bioeconomic models of human growth in global health discourses as well as in global development discourses.

To then shift to anthropological debates about what it means to take agency politically and this idea of subjectivity and talk about the fifth step is what's particular about political history in highland Asia.

To bring it back to tendrils logic, which is in the title of the talk as well.

Tendrils is a causal theory of how things come into existence and I would argue that this is actually a key term to understand the imminent critique of mothers and babies refusing metrics and micronutrients through partial refusal and I'll bring us to some stories again of Brother R and Kan Koop, basically from the clinic and from mothers who are interacting with these nutrition programs.

before rounding out to a bigger question about how to grow humans differently, interdependently in relation to ecologies and other beings.

Opening up, hopefully, new questions.

So this is the 10 steps and with that, I'll start with a story from the field.

So to begin— sorry for this blurry image.

I think it's— clear in the paper but I I want to begin with an anecdote from 2023 a vignette from field work in the southwestern corner of Bhutan so imagine monsoon season rolling thunder and rain in a in a time that we wake up in uh dawn basically looking outside to check that the rain has not been pouring again in this region where we've been staying I'm staying with a field worker named for anonymization purposes, Ma'am T, who had been hosting us in this shrine of her three-room house in the foothills of Bhutan.

This is Ma'am T walking us out to one of the development project sites in this region, in the foothills in the southwestern corner of Bhutan.

Ma'am T is a field officer of the surrounding development project funded by an elder queen in this Mahayana Buddhist state.

Your nutrition interventions have been circulating among LOP-speaking households that until recently have been practicing shifting cultivation and hunting and after, basil, after hiking the folded landscape with us to interview different mothers, Ma'am Ti organized a ride to a nearby primary health center and we had heard good things about the Ministry of Health, health assistant posted there and his outreach activities measuring infant development through growth charts and distributing micronutrient powders that you see coming around the room, these sprinkles.

So after an early meal, we climb into a truck, we twist along the forest roads, and then a freshly topped, black topped highway, willing rain clouds and landslides to wait even if we were a day's drive from one of the wettest places on Earth during the monsoon season in what was then the hottest year in recorded history, then 2023.

After one hour rumbling, we arrive to the clinic that you see here.

We step into a small parking area and walk through the metal and glass doors of the clinic.

The health assistant that we've heard so much about, Brother R, arrives at 9:00 AM sharp, recognizable in a lab coat.

He nods and ushers us into chairs in a corner office for a conversation about nutrition interventions and at first he recounts for us a very familiar story.

The government had conducted— the government of Bhutan had conducted an at-home fortification pilot with micronutrient powder sachets in this unit and a nearby district hospital four years before in 2019 and the initial anthropometric results suggested that, quote, For babies who were taking it, sprinkles were extremely good for them.

This we had also read in national newspapers.

Infant height measurements increased during the regional pilot in this area of Bhutan and so the ministry scaled up sprinkles nationally to address scientists and policymaker concerns about treating malnutrition and growing human capital during the first thousand days of life from birth till conception till the second birthday of the child.

But then Brother R shared with us a very different story and this is the tension I want to hold in this talk.

He said there was a problem during the pilot.

It had generated debate among clinical practitioners in the region.

Many local babies were refusing food mixed with this novel biomedical technology.

They were, quote, not liking it at all, actually.

He continued, not only were the pilot results uneven, but still today, most mothers in the region were complaining, quote, If we do not add it, the baby eats well.

Once we add it, the baby doesn't eat, the baby vomits.

Rather R then walked us through the clinic rooms, gesturing to piles and piles of maternal and child registries and handbooks, in which he's expected to meticulously record anthropometry, but rarely can, given mounting data enumerating responsibilities and dwindling staff numbers.

This vignette I am sharing with you situates the frictions that emerge as a global scheme for child growth.

enacted through nutrition interventions targeting mothers and babies, that has been touted as universally effective, materially and semiotically travels through this region, extremely diverse territory for cultures, languages, and I can talk more about the context of Bhutan.

But this could be any part of the world that has immense diversity, all of the developmental schemes that come from a place of universal claims of efficacy, and then hit the ground.

a material reality, which is why I share with you the materials in the room today.

I want to demonstrate how state and civil society organizations circulate these techniques and materials intended to measure and grow humans, and then the frictions they generate in this most mountainous country on the planet, in the context of heavy precipitation, rugged terrain, fragile roads, changing climate, alongside very particular pallets and distinct feeding practices.

that complicate intervention implementation, since mothers don't also attend all scheduled antenatal appointments.

Meanwhile, health workers themselves faced mounting outreach activities made more challenging by labor shortages in clinics across Bhutan.

So I'm sharing with you in some ways a failure of a development and a global health scheme and I could really emphasize through sprinkles and infant growth charts the critique of capitalist maldevelopment I could highlight the damages done to Indigenous communities that Eve Tuck has been riding around very beautifully from the North American context.

But rather than repeating another single story of state inadequacy and patient resilience in this ethnographic account of global health, I'm also interested in opening up what drives those refusals.

What might happen if I tend to the health workers and mothers careful refusals to feed sprinkles and measure infants? Might it illustrate alternative logics of human development in an era of climate emergency.

Micronutrients animate a techno-utopian imaginary of interventions as a targeted magic bullet for complex global problems.

But Brother R testifies to the scientific debates that these technologies generated among Himalayan health and feeding experts and in the granularity of everyday practice, we observed how these metrics and micronutrients spark partial refusal of a bio-economic logic of human growth.

Brother R's story of babies refusing sprinkles was confirmed by mothers, health workers, and other experts we met as we followed nutrition interventions across five sites of Bhutan that you saw earlier.

We did this over 18 months of multi-scalar multimodal ethnography in 2019 to '20 and then again in 2023.

In these events of partial refusal, we discerned an alternative logic of human growth.

Tendril and this is often used here as a symbol of tendril in Bhutan, which I will unpack a little bit later in this talk as a logic of interdependent origination of all phenomena and in this context, the logic of human growth then is shaped by land relations to complex mountain ecologies and cosmologies, as well as in relationship to biomedical norms.

Tendril is a multivalent dongkha term often heard in Bhutan that refers to co-emergence of phenomena as dependent and relationally situated and in this vein, health workers often observe that human height emerges in particular ecologies and families, complicating a baby's categorization as stunted and motivating this partial refusal then of universalizing human growth charts.

It's also situated in a highland Asia region known for partial refusal of imperialist markets, and a very delicate relationship to India, Bhutan hasn't experienced the same colonial extraction as its southern neighbor and developed a distinctive post-growth approach to development.

So I also want to acknowledge that Bhutan has not been a utopia of any kind.

There's also been violent ethnic cleansing in the region and that this is something that remains a historical trauma for communities in the south where we did field work as well.

But this project is also focusing on the science of the people, how we can think about global health informing refusals, and precisely to understand how science might be done differently, in this case, by health workers, by mothers who are working empirically with a different model of human growth.

So I don't focus on some of the critiques of political state violence from the '90s, but I do focus on a longer history of highland Asia, refusal and fugitivity in the region and this is because I want to hold a difficult position in between romantic literatures in the region of the Himalayas and sometimes fossilizing tropes in the scholarship of Bhutan.

We want to argue instead that this folded landscape and its schismogenic and sacred ecologies afford a cultivation of a different kind of subjectivity, a different kind of human growth, one that unsettles an extractive and bioeconomic logic of human development.

So to begin with some background to understand why this powder is significant in the global health circles.

Sprinkles are single serve sachets that you saw coming around filled with multiple micronutrients.

These are powders you mix into semi-solid complementary food.

which then gets fortified and makes malnourished infants and future economies grow, at least according to nutritionists, clinicians, and policymakers who are concerned about anemia and stunting in Bhutan.

They prescribe sprinkles to women who then feed their babies to reduce anemia and increase child growth during the first thousand days, conception to the second birthday.

This is an epigenetic window of opportunity to intervene in global health of future generations to maximize human capital and this has been popularized through a series of publications in *The Lancet* in 2008.

So micronutrient powders are kind of at the heart of the first thousand days types of interventions, although that agenda is actually quite expansive and it includes interventions like land reform.

But instead, the diverse set of interventions has been boiled down to these targeted technologies.

This mobile material and its promissory narrative are actually rooted in a longer history from the 1990s in Canada, when UNICEF approached a physician in a Toronto hospital who then collaborated with Heinz Corporation to come up with a solution, a targeted solution for the persistent problem of anemia among global child populations and as a result of that formulation, micronutrient powder studies have scaled up across 43 countries with UNICEF backing and corporate support, with also variable adherence and some moderate effects on anemia, according to broader Cochrane review studies of this substance.

At the same time, I note that there's a critical nutritionist work suggesting that sprinkles also result in particular ecologies to contraindications like vomiting of babies and other types of diarrhea and this is related to malaria, endemic ecologies and this is a very interesting critique that we found also potentially relevant for the context of Bhutan for some of the sites where we may have seen refusal.

In Bhutan too, as I've shown you, sprinkles were Spreading, but not without controversy.

Now from micronutrients to metrics.

Alongside sprinkles, infant growth charts have also been circulating in South Asia.

They're considered, South Asia is considered an epicenter of the global malnutrition crisis.

But to track the change in the growth of infants as a result of implementing sprinkles, you have to invent a metric and that's where child anthropometry has been relying on these charts.

These are basically a result of a number of studies done in about six different countries.

In 2008, the World Health Organization published an updated version of these growth charts, arguing that this would be then the universal reference for growing, measuring the growth of all children.

This is called the multi-growth reference study.

Health workers now universally use this growth chart to categorize babies into biomedical categories of malnutrition, like stunted, underweight, and wasted.

But at the same time, again, critical scientists in South Asia have been questioning the validity of these charts for all regions of the world and asking whether more customized growth standards would be more relevant, particularly in South Asia.

Health workers in Bhutan too doubted these WHO charts, which don't account for geographically and historically situated trajectories of human growth in the Himalayas and their refusal to uncritically accept these growth charts suggest a tendrill logic of growth that values enough child height, but not necessarily always more and more.

The idea of constantly growing, needing to be taller, better, faster, stronger, embedded in the metrics as well as the micronutrients.

Why this interest in growth and growthism? This comes from one network called the Scaling Up Nutrition Group.

So I've been talking about the first thousand days of life, which is a scientific agenda, but it's taken up by political actors in particular ways.

So despite altruistic goals, we have probably heard that global health networks also sustain capitalist neocolonial relations through financial ties.

Some of these networks, particularly the Gates Foundation, mobilize around the first thousand days through the scaling up nutrition network.

Prescribing micronutrients and recording metrics of infant height during the first thousand days links biological growth with capital accumulation of a future national economy.

These metrics and micronutrients enact a logic of growthism dominant in global health and development today, feeding a kind of bioeconomic model or image of the human.

At the root of also colonial modernity, as anti-colonial philosopher of science Sylvia Winter has interestingly posited, it's also rooted in a secular version of the political image of the human.

Yet while sprinkles and gross charts have been entering clinical practice in Bhutan, we also note this careful refusal testifies to a longer history of alternatives in the Himalayas, and specifically alternatives to kind of a growthist expansion of accumulation.

For example, in 2016, Ministry of Health representatives attended a scaling up nutrition summit in Bangkok, Thailand.

But these representatives of the government of Bhutan ultimately refused to accept Gates Foundation nutrition financing, arguing that they would need more research to implement measures on their own and they did end up doing this later with UNICEF support.

So sprinkles that you see were funded through a different funding mechanism than scaling up nutrition and this is significant given that in Bhutan, signing up with, for example, the World Trade Organization is not a given.

The government has chosen very carefully which global development institutions to sign up with and this partial refusal is an example of how one can participate in and selectively refuse dependencies on financing that hold one's development beholden to someone's financial strings.

So despite bioeconomic tendencies, the diverse set of interventions first associated with the first thousand days, I also want to say, has a variety of interventions that one could use.

This agenda, when it's published in 2008, The Lancet series, is not only prescribing micronutrients and metrics, but very vast types of interventions that relate to ecology and to land ownership.

Why are these left out of the scaling up nutrition set of interventions, which are very narrow? And this has to do with institutional norms, political actors and this is where anthropology can be relevant.

How does a policy agenda, a scientific agenda, get implemented in practice in different national contexts? And this is where the Bhutanese setting of political and farming practitioners, different institutional practices give different outcomes across the global south.

So the empirical stories of infants, mothers, and health workers that we recount illustrate the possibilities of alternatives to this logic of growthism in global health and development.

This is relevant for anthropologists who have been debating for some time theoretically, in some ways, about the possibility of radical politics, what kind of subjectivities create revolution or resistance.

Anthropologists studying refusal, however, have reanimated questions about power in different ways than those interested in resistance and this is rooted in alternative modes of being human.

So it's a slightly different question, not only looking at resistance in the same mode of action, but looking at different kinds of action and this is coming out of kind of coming out of the mode of only critiquing neoliberal governmentality and looking instead to the alternatives inspired by critical indigenous studies, critical black studies in the North American context, in addition to critical Himalayan studies.

So looking at kind of the margins of state accumulation and what those margins can teach one another and that's a bit the goal theoretically in this this work.

Because anthropologists of refusal differentiate themselves from those tracing resistance.

They reformulate the discipline of anthropology by considering different kinds of political subjectivity, refusing liberal, possessive, and secular human subjects that are seeking recognition by the state of their development.

This is reflected in Zonko, for example, the difference between the word for resistance and the kind of calm abiding of Kamilen refusal, kind of calm non-acceptance.

You just continue to do as you have done without looking for the recognition by an aggressor and this is of relevance in a setting where there's a tendency to erase the agency and the political significance of mothers and babies to make relevant for a political discussion the subjectivity that is not individual necessarily and not cut off from land relation and this is because a very particular ecology gives rise to a very particular kind of subjectivity in highland Asia and this is a longer history of plight from state capture and recognition that are notable in the historical record from Burma, the work of Edmund Leach.

to the work of William Van Scandal and James Scott in Highland Asia, also further to the southeast region of Asia, arguing that Tibeto-Burmese term for Highlanders as Zomi, or the people of the upper regions, is a kind of area of state refusal and in the cases of partial refusal we present, health workers and mothers in Bhutan also seek in a similar way, not at the state level, but on an everyday and a micro practical level from they seek to delink from a bioeconomic logic of state recognition and accumulation.

So partial refusal in in this situation becomes a liberatory objective facilitate and I'm going to talk about this a bit in more detail with the case study from Kanko, one of the mothers we spoke to.

The refusal that we're talking about is in the name of something else for an alternative subjectivity, one that is inspired by setting limits to human desire, a practice cultivated within households that have co-evolved closely with multiple species and beings that must be fed and consecrated to ensure well-being.

So a way of relating to land and to other species specifically and not an essence, but a practice that one does that has to do with food and we've taken inspiration in this work, particularly from fellow social scientists in Bhutan, who've argued that this land relation, uninterrupted by regular state intervention and colonial accumulation, has generated a pluriverse of niche-specific indigenous norms, organizations, and innovations in Bhutan.

That's the work of Karma Ura, if anyone's familiar with the social historian of Bhutan and we would draw from this literature to argue that these partial refusals are actually enacting the interdependent logic of tendrils.

an alternative to the bioeconomic logic of state-centric global health and development interventions.

So to give you a kind of concrete explanation of tendrils in a nutritional setting, I have an image here of a publication by the head of nursing in Thimphu, the National Medical University.

the Dean of Nursing and Midwifery, Amdeki Pam, she published a paper on the golden thousand days in Bhutan, arguing that the first thousand days is actually a wonderful opportunity to do research on all the multiple factors that lead to child development and what I have found very striking is the horizontality of the causal relations that she posits, and also that the environment is a major branch of research and intervention.

which is missing in a lot of the Lancet publications, which I'm not showing here, but the horizontality and the contrast to verticality of causal relations in Lancet publications suggest a very different logic of how to think about human development in co-relationship with ecologies.

In that sense, this logic of tendrils invites consideration of not only what babies are eating or not eating, But thinking also about, for example, clean water access and that's one of the factors that shows up here.

Access and utilization of safe drinking water.

What kind of flows are made possible through the body? Not only what kind of substance has to be added continuously to make it bigger and stronger and faster and smarter, et cetera.

But there's a kind of porousness of the body that's developing through a tendrils causal theory of human development.

Tendrils in Bhutan has multiple meanings.

So it can refer to this theory of interdependent origination of phenomena.

That's a Buddhist causal premise that shapes how people conceptualize and treat illness and that shows up in medical practice in Bhutan, specifically in Sawa Rigpa, which is a different model of medicine practiced alongside biomedicine in Bhutan.

The implications of tendrils are philosophically that humans are fluid and it's also anti-essentialist, very horizontal in the kind of relations that generate humans.

So the example I give you here is to grow babies.

You would not only feed more nutrients, you would also address the ecology in which babies are growing.

So thinking about toxic exposures, land dispossession, clean water, this would also be required in intervening in child growth.

So tendrils entities resemble what feminist philosophers have called partial connections.

But what's interesting in a Buddhist setting, a kind of materialist explanation of human development, is that not all relations are generative or liberating.

The soteriology or the objective in a Buddhist causal setting is the liberation of all sentient beings, especially in a Mahayana context.

That means that you are not always better because you're situated in relationships.

You keep track of which ones are extractive.

which ones are generative for liberation from toxicity and in this case, for example, industrial slaughterhouses are not a great relationship to cultivate.

In the Bhutanese context, in a Buddhist ontology, these generate something called *lenchak*.

That's the other side of tendrils.

Interdependent origination means that you are also sometimes caught up in toxic extractive practices as a species and your goal should be to cut from those and that's where I would argue the attention to toxicity comes from in a kind of Bhutanese orientation to nutrition looks as much as toxic exposures as it does to only adding more and more nutrition.

So the political and ontological implications of tendrils is that delinking from particularly ecologically extractive relations can liberate humans, from *Lenchak*.

So the cases of global health refusal that we unfold from Bhutan illustrate this partial connection to and delinking from the reductionist logic that generates lens check or dependency on multinational corporations or intergovernmental organizations.

So now to bring you back to some instances of partial refusal from the field to kind of open up what I'm talking about, to also think about how it might be relevant for us sitting in this room.

I'll start with a story from the southwestern corner of Bhutan again, Brother R. on partially refusing metrical work.

He confessed to us that he sometimes didn't plot child anthropometrics.

He told us, quite frankly, that you don't have enough time and I have a quote about this in a second to show you, but I wanted to first illustrate the anthropometric board we're talking about.

I haven't brought this with me because it's quite large, and I wasn't willing to steal it from the clinic.

If anybody has ever tried holding down a baby on one of these boards, it's quite a task, firstly and secondly, it's very uncertain.

It's not very precise and it's part of the reason why UNICEF has been for decades trying to develop alternative metrics or better boards to hold down babies.

Remarkably difficult tasks to do and to imagine doing that on top of all of the recording, all of the outreach activities that the state requires increasingly to do because of global health pressures, nearly impossible task.

So we found very moving that Brother R was frank with us.

We also found it philosophically very telling.

With a new emphasis on early nutrition in Thimpu policy circles came this task for the state of measuring infant height and weight repeatedly as an outcome, an example of growing metrification among global health practitioners that then trickles down into rural clinics.

But infant anthropometry is made legible for only the biopolitical interests of the ministry that is Only if you plot the numbers.

What if you don't plot the numbers? And that's what we found fascinating, that there were examples across sites of health workers telling us they just simply can't do it, and they don't always do it well.

So the numbers that they record, it casts questions about the kind of quality of data, not to cast dispersions on their intentions, but to ask what kind of data are we collecting, under what conditions do we force workers to collect numbers, with what kind of metrics? And this is because the state is in a rush to generate numbers, right? To show off to different funders how they're doing and this is because there's a desire for state recognition of each household's child development, especially if it's done habitually.

But to quote Brother R, Sometimes your eyes just go here and there because you're in such a rush with a line of mothers and babies waiting for you to take their metrics, record all of the, measurements in a handbook and then to transfer it to another handbook and then to eventually put it in a computer.

So much time is wasted.

In this case, sometimes or many times, we don't plot the graph, actually, which is a very, very, very important thing we are supposed to do.

Only upon plotting the graph whether a child falls a normal, stunting, or overweight.

You have to do the plot, actually.

But who has the time to plot? So much work.

In this case, things are compromised.

If we have enough staff, actually, we can do it slowly.

One can do the other work and this puts an attention to how much labor is put into coming up with the numbers to prove recognition to the state of child growth and also the fragility of that labor.

If you don't have enough workers on the ground.

But not only did we find partial refusal of the metrics, we also found a deeper critique of the ontology of these growth charts as being universally relevant and valid.

Brother R was deeply critical about the value of those growth charts.

It's part of the reason why he was willing to let go of the plotting and this is a kind of anti-colonial boundary work that we found also in material registry.

I'll show you in a second, in a second, the next slide, an example of this showing up on a growth chart.

But we met health workers who were quite critical of these universal trajectories of height in favor of more ecologically situated tendrils of growth.

Plotting anthropometric measurements and drawing these lines enable health workers to categorize the infants into stunted and normal and the WHO indeed had developed this growth reference in the 2000s as a screening tool to do just that, to check the nutrition status of all children and replace a previous version that had come under critique.

But these curves traveled from Geneva to Bhutan only recently, in 2018.

So you have a generation of health workers who are quite critical because they know that it's a recently introduced metric and it has its limits.

Brother R, like other workers we had met in clinics, questioned the imposition of these growth charts in an ecologically diverse context like Bhutan and specifically, he pointed out that each region, even within the country, is different and on one hand, while the chart might be based on the WHO measurements or other countries, where people might be tall, unlike our Bhutanese.

So he concluded that you can't always generalize everything.

If you really develop based on our Bhutanese context, maybe I think most will come.

Those who are coming now underweight and stunted, let's not talk about underweight.

So he's really specifically focusing on height.

Those who are classified as stunted may fall under normal if you develop in our scenario.

So that is always debatable and what I find interesting is that debates in evolutionary biology suggest that the obsession with height is relatively recent, not only in medicine, but in the history of humans, that above 162 centimeters is not necessarily what is characteristic of robustness of the human form, and that longevity is inversely related to height.

So if your growth is measured by height, you might precisely be losing growth of longevity, how long one can live and this is a kind of open controversy in science that I put on the table that might be driving also the partial refusal that we see on the ground in Bhutan.

To give you another example, from one mother's handbook of her child's growth, a mother who personally confided in me that she'd rejected the categorization of stunting for her daughter.

This is an example of what we would argue are material traces of partial refusal through these spotty plot lines of maternal and child handbooks, mothers that we met from different regions.

In this example, the blue inked line is connecting infant measurements as dots, curving up towards the normal level.

So rather than trying to categorize this child as hunted, the health worker is trying to materially trace a different plot, quite literally.

Also because the mother was quite critical of her child being labeled as unhealthy, that wasn't consistent with her own measurements and these instances of partial refusal are unsurprising given that several health workers that we met from an older generation especially conveyed a very different scientific norm of growth.

Quote, Before in our time, they told us, everybody was short.

We hardly saw tall people.

We used to find that normal.

We would say, he's too tall then.

It's reversed now and this is because long life was the metric of health and spiritual merit generation, not necessarily height and what's been created now is a stigmatization of short height people and a fetishization for eating more and becoming taller very quickly.

among young people in Bhutan, playing out very recently in the last 15, 10 years.

So now just to wrap up with Khongkop and stories from mothers who report children refusing micronutrients.

Khangkop here is sitting with us in a ECCD center.

It's an early childhood care center in southwestern Bhutan.

She's sitting here with her daughter in a Yeah, in an interview, we're having a nice conversation.

But she's quite stern and we're struck by how much strength.

There's a lot of experience that she has at already 28 years.

She's raised six younger siblings.

There's a lot of life history that she's sharing with us and it's a kind of method I would encourage you, if you've ever done fieldwork, to do to really get to know the life course and life history of a mother that you interview.

In this case, she's sharing with us the difficulty with her two-year-old daughter here, Yeshe, who is wriggling in her lap.

She's getting up.

She's constantly moving and is also refusing sprinkles.

She gave us specifically.

This quote.

To explain what was going on because it wasn't the case for both of her children.

Come hope shared that among both of her children, one, they eat it once or twice, then again, they refuse and then when she tried it herself to understand why there is this resistance among or some kind of refusal that it's not consistent.

She notices that it smells like blood and she also communicates that she's received the message from the SIRS, the health workers, that it's supposed to have all the vitamins.

This is why you've got to make sure you take it and you have to continue working it on your children.

But she says, if we keep giving, some do eat if we kind of force it.

But my daughter, she refuses it.

As for my son, he won't eat food if I don't add the sprinkles daily.

So it created this unevenness within the same household.

You're only supposed to give sprinkles twice a week.

Her son refused to eat any food without it.

So you have someone in the same family.

So it's not a genetic issue and this is also linking to a critique among critical nutritionists and a recent annual review on the microbiome of infant guts, suggesting that when you add micronutrient powders as sachets you saw coming around, they have a remarkable amount of iron in them and that iron changes the intestinal balance of microflora in your gut, potentially increasing the pathogenicity of the species that are prevalent.

Could this be a way to understand why one gut is unable to hold down the food and another gut cannot stop eating it? one way to understand, again, the ecological specificity of human development and how these interventions don't quite understand how to do that differently.

Well, what Kan Kap herself was really interested in was limiting access to this food.

She was not interested in getting as much calories or nutrients into her baby.

She was trying to avoid exposure to a different kind of food and that's specifically commodity form foods that she could not easily afford, because we're talking about a context in which she was relying, the only cash income was from her husband's construction labor, and she otherwise was mostly a horticulturalist producing food for the children's consumption.

She was instead interested in cultivating limits, both in the palette of her children, but also in the axis, so she would be careful not to expose them to these kinds of objects which were sitting in front of us in the early childhood care center.

So precisely a site of exposure where she was told to to develop her child through daily schooling and we noticed that this interest in cultivating a taste for one's local production.

So in this case, millet was actually the food that she was interested in exposing her child to and preventing access to sugar in particular.

This was a pattern we observed in Tang, Mencheri, and Kanglung, three of the rural sites of the five that we did field work in.

Almost two-thirds of the mothers in this sample altogether told us, and this is 43 mothers, told us that they grew most of their own food or buy only some items from nearby households.

So not a lot of market integration, although some.

Rather than conceiving of a world of limited good, these mothers were trying to cultivate humans that could desire and have pleasure from growing what they were able to nourish.

So there's a reciprocity between the land, what it can give, and then your own desire for it.

But that has to be cultivated.

It's not naturalized and this is a position of kind of interdependence, again, a tendril, but that has to be cultivated.

It's not naturalized.

It's not essentialized.

It's something that one practices over the life course.

rather than an economic logic of desire, of always more and more and when we spoke to mothers about metrics, we also heard that they struggled to raise the money and time needed to show up for these metrical appointments.

This is in the National Hospital, another anthropometric board, quite comical to watch.

People trying to stretch the limbs of a child to measure it and health workers don't identify with this task necessarily either and likewise, mothers struggle to show up.

That's something that's harder to communicate in one image.

Going through the rain, through the mountains, to make it to this clinic eight times during your pregnancy is not easy and then to continue doing that for the monthly weighings and measurements of your child.

They struggled to get the time and the money to reach the clinic or hospital and often did not complete those eight antenatal care visits, now expected by the Ministry of Health and like KAMKOP, almost every mother we interviewed reported accepting sprinkles only to find their infants refusing it.

So we're finding quite a consistent, yeah, delicate relationship to these interventions.

We heard this pattern of partial refusal and interdependence sufficiency across sites.

Not all of the mothers, but it was quite rare those who did tell us that sprinkles seemed to be working well for their children.

Those instances did occur, though.

So to round out, to grow tendril humans is something that can be done.

It's not something I'm suggesting is natural to Bhutan, it was an active site of struggle.

that mothers were in charge of, quite particularly in the household, how to cultivate a human subjectivity that has relationship and pleasure from what one grows and there was a particular act that made that kind of growth critical human subjectivity possible, and that was feeding other beings.

It seems simple, but to quote Kankot, Whatever it is as adults or babies, if we don't do this, wherever and whatever we eat, if we don't make this offering, any kind of offering to another, an alterity, then we get stomach aches, headaches, diarrhea, and

all and when we go to ask about it to the Sips, they say it was because of the spirits of the dead.

Even household members say the same.

Older generations also say that, and we can also tell, like if we try to eat and drink without doing this, we can see for ourselves. But if we throw a small amount out like an offering before eating or drinking anything, we see that we don't get sick much.

It's a very empirical observation and she's contributing.

It is the same for babies.

If we give babies breast milk after doing this offering, we see that they don't get sick often.

She's talking about making an offering of breast milk actually for being so you express a little bit before feeding the child.

We don't do it like when the baby cries and we're in a hurry to breastfeed and then forget to do this, the baby might get sick and vomit and that's why even if the baby is crying a lot, we shouldn't forget to do this before feeding breast milk.

This is an attention to the needs of others, a type of feeding, whatever is accumulated for sharing and this is an illustration of a kind of everyday practice that's done repeatedly across the life course.

So it's not that people are born this way.

It has to be done.

It has to be practiced to grow tendril humans in this schismogenic, sacred way over time, over the life course, and the efficacy of that action for well-being not only of the individual, but the collective in that sense.

So it raises, for us at least, a set of questions.

In summary, we've been arguing that biomedical technologies of micronutrient powders and infant anthropometry enact this growth, this logic of global health and development that have had uneven results across Bhutan.

But partial refusal of these interventions indicate both schismogenic and sacred dimensions of refusal as distinct from resistance and alternative logic altogether of interdependence that is characterized by a different image of the human and in order to make those claims, we've drawn on these ethnographic results, but also this partly quantitative work that I am preparing for a ministry report elsewhere.

So contrasting the experience of health workers, mothers, and infants with kind of global discourses about growth.

So following these frictions that arise when political and scientific actors translate interventions in Bhutan, we amplify the shift, we hope, to anti-imperialist social theory and anthropology of policy, how it plays out in the Himalayas, away from romanticizing or demonizing stories, and more to deliberation on hierarchies and how these play out in health and nutrition at everyday practices.

So rather than taking sprinkles and metrics, their mobility for granted, we are unfolding these materials and techniques and all their messiness, all their everyday realities, kind of empirical practice that anthropology is so good at highlighting now.

In this process, we're interested in amplifying tendrils to illustrate how global health and development might be done differently with ecologies and beings in mind, not only health systems or individual human bodies and that raises a number of questions for us.

Also, metabolically, critical nutrition studies, thinking about the broader changes in consumption and feeding.

I would ask each of us to consider what are we feeding when we eat? What beings, including the microbial ecosystems within us, but also the larger beings in whose name we eat.

So what kind of economies are growing, what kind of nation states are fed, what kind of corporations? These are also beings to think about that are fetishized, of course, in the name of economic growth, the state, the corporation, war.

Are these also not deities of a kind that are at this time sacrificed to in the name of a particular type of growth? But how might we also feed each other differently? How might nourishment be organized differently? Something to consider, especially in a time of great accumulation and its destruction through the war at the moment and that's where we're at.

I'm really grateful to think through some of this stuff, share it with you, and you're very welcome to reach out if you have any questions or thoughts going forward.

## Audience questions

**Audience member #1:** What is Solo Rigpa?

**Shivani:** It's translated as the art of healing or Tibetan traditional medicine.

Yes.

**Audience member #1:** Is it the plants or has it got some other kind of dimension to it like energies or into the plant?

**Shivani:** It's a complex mix.

It's usually defined as, if you look at it materially, there's a lot of powder.

Yeah, so minerals, plants, different formulations, which are then given as a type of, it looks like a pill if I talk about the materials, but there is also healing used with needles, with physicality, like physical manipulation of the body.

It depends on the pathology that's treated, but it tends to be invoking different anatomies than than biomedical medicine.

So yeah, some of it can involve energy.

**Audience member #1:** The relevance of Tibetan medicine, Chinese medicine, and some.

**Camilla:** Local.

Can we tell Zoom what's, sorry, yeah, all these questions.

Zoom, did you hear the questions? Repeat would be useful, please.

Say what's being said.

Yes.

That sum up.

**Shivani:** We had a question about Sowa Rigpa to clarify what it means, and I followed up, there was another question about the materials.

Does it involve energy?

**Audience member #1:** Yes, what is it? I've never heard, so I'm just interested.

**Shivani:** Yeah, so RIGPA translated from, at least in this case, in Tibetan.

It's also practiced in parts of China.

It's practiced in this case by the state in Bhutan.

It's alongside allopathic, what we would consider medicine in a European context.

It is also side-by-side practice, Tibetan medicine and that involves different kinds of materials.

So some of it looks like pills comes from plants and minerals, but it can also be needle.

It can be a manipulative physical massage.

They're different treatments for different anatomies.

It's a different sense of the body.

Yeah.

also funded by the State in the time.

**Camilla:** Chris.

**Chris:** That must be one of the most high level talks we've had. Way above my head some of it.

One of the most lovely things was to support the end when it was time where the mother was saying, if we make an offering or giving our baby the milk or the other food, an offer to the spirit, to the dead or whatever.

Usually our baby ingested properly and we just give it.

Just there's some food without remembering to do the offering without having time.

I think the problems that is that is obviously such a common tradition right around the world that you just you just you have to before you're eating a meal, you need to say grace at the very least.

But I mean, over here, but I mean, make an offering that otherwise you're taking without giving and I was just wondering how you How do you explain it and also how much you, is it, I'm probably way behind where you are, but I mean, is it true? I mean, are the statistics which show that actually if you don't make an offering, the baby's going to get ill? And if it is true, I bet it probably is.

I think you're suggesting that it must be cut in some way, not psychologically, but really true.

How do you explain it? I may be missing the point, but I mean, it just seems to me that it must likely, for various emotional, psychological, cultural, traditional reasons, you should make an offering.

I mean, I don't know.

**Shivani:** That's, yeah, you touch on some of the most tricky questions to address and I also want to say there are other questions that potentially transfer that answer to.

So what I hear is like the question of what are the causal mechanisms, right? Like at the heart of the question is.

What's working? What in that case, if she's observed, are we?

**Camilla:** Just meant to ask that question or are social anthropologists meant to understand what people believe the system is?

**Shivani:** Yeah.

**Camilla:** Which is that?

**Shivani:** And what I want to hold onto in Kangko's quote, and also what I hear very often in the Bhutanese setting in a response to that kind of question, which is not wrong or bad.

I'm supposed to be asking that myself as an anthropologist, is what works.

That's a different line and it's a pragmatist line philosophically also.

Rather than asking what exists or what are the causal mechanisms to be pinned down, Instead, to ask also very concretely, very empirically, what worked? What doesn't work, or what good to what end? What is it bad for to to feed? What is it good for? That's also an empirical question, but it's of a different nature.

It has more attention to the specificity of a case and likewise, it resists travel or generalization in some ways to ask the question, what worked in that particular setting? So there are problems.

It's not to say that that's the only question we should be answering, but it's a different line of.

gathering evidence and this is also where in medicine, case studies are quite fascinating.

It's an area where biomedicine is actually quite strong.

There's a lot of empirical work that demonstrates the exceptions to all of the generalized rules in medicine that we're told must be true and that's why there's a protocol that's standardized for everything and yet you have so many case studies that are published in medical literature and likewise, in some ways, a pragmatist agenda would attend to instead what worked in these particular cases, and you'd have different kind of results of knowledge in that sense.

At least in the kind of anti-colonial approach to knowledge, I also think about that as being a critique of only the knowledge in order to pin down a vision that has been also the legacy of anthropological work, like how to, must it be a witch or not et cetera.

Or is the question more useful, well, what did it do? And in this case, the feeding of beings, what it does, what I observe, I also personally experience, I don't know if you've had this experience in ever feeding any kind of alterity, is that I'm, as you're pointing out, emotionally, I'm bonded to that being.

Like I have an experience personally of liberation to be able to let go of things that is in a way, Beyond me, it also destabilizes the egocentrism of consumption.

I become aware of the collective that is being fed, even if it's imaginary, that's not the relevant question, whether or not that being exists in the name of the Maria, in the name of Jesus, in the name of the Nepo the Ogyantolian protector deity, any number of, in the name of the national economy, the number of things that we sacrifice to.

To give it name is already, to me, effective and it may not be relevant to ask whether that has a physical entity, or does it exist on a parallel plane? Maybe that's not my question to answer, but I also think that's an interesting line.

We can hold both, I think.

**Camilla:** Right.

**Shivani:** Do you want to go first and then, buddy? You go first.

**Speaker 4:** I just I related to that, which is to do with the what is the life expectancy and child mortality rate, because it used to be very in the 90s.

I mean, the child mortality rate was one in five and the life expectancy was 45.

I wonder if it's.

**Camilla:** So Zoom, did you hear the question? It was about child mortality rates, how they might have changed and also life expectancy.

It used to be very low.

Absolutely.

But that, of course, is affected by child mortality.

**Shivani:** That's it.

Yeah.

**Camilla:** Yeah.

**Shivani:** That's a great question.

Some of the earliest medical publications, in fact, on Bhutan, are on the very high mortality rates and that's something that seems to be haunting.

A lot of the clinical workers I interviewed about maternity and child health, we don't have any more PPH, purple hemorrhaging.

Don't worry, don't worry, it's getting much better.

So there's been a dramatic increase in longevity because of the infant mortality issues declining rapidly.

Also maternal mortality declining rapidly.

But the low longevity is as a result of that very high infant mortality earlier.

What I had heard, and this is also like something to think about when it's not infanticide, but Yeah, if you make it past a certain age and then you live for a very long time, there are lots of at least anecdotal cases of people living for a very long time that I'm interested in.

There's a lot of interest in like techniques for increasing lifespan, that there's a lot of knowledge around practices to increase one's lifespan and that's a focus that I heard from other people.

I didn't think about it, so I haven't really done more into longevity practices besides as an alternative norm of growth.

It's something that I still have to work with.

**Speaker 4:** Just anecdotally, my mother was there as well.

People were shocked.

They've never met anyone so old in general.

I mean, I'm sure there's monks up there in the monasteries that might be older, but in general, people...

I didn't live that long.

I didn't live that long.

**Shivani:** That's fascinating.

That's the 90s.

I didn't have that experience.

**Speaker 4:** 93 years.

It really was like anything older than 50 was really, really old.

**Shivani:** Oh, wow.

We can tell them on Zoom that, yeah.

Can you tell me your name?

**Speaker 4:** Oh, Zoe.

**Shivani:** Zoe.

Zoe was sharing that in the 90s, a lot of the people that they met didn't have necessarily longevity past the 50s.

It was unusual.

I wonder, because I don't have that experience when I go now, nor is that common in the particular communities where I worked, which is outside of the capital.

**Speaker 4:** This was in the higher I don't know if there's any difference between the regions, but in high altitudes.

**Shivani:** In Karo, right?

**Speaker 4:** Yeah.

So there may be some difference, I don't know, because of the climate or something, harsh climate.

**Shivani:** Yeah, I wonder.

That's fascinating.

No, it's a good question, and I'm still, yeah, it's a kind of line to pursue after this work, really thinking about growthism and height, and then its alternatives.

I'm still thinking about longevity.

**Camilla:** I mean, this is so interesting.

I didn't realise that there actually is some inverse relationship between longevity and height, and that very tall people will live significantly fewer years than shorter people.

That's extraordinary like epidemiologic.

**Shivani:** So it's always population based and not necessarily.

**Audience member #3:** But Valia, you compliments for such careful and fascinating work.

I love the presentation.

Secondly, I want to echo what Chris said about this cross-cultural phenomenon of offerings.

I just want to mention quickly in Bulgarian culture at celebrations, for example, at Christian celebrations, Christmas and Easter, and also at celebrations resembling Day of the Dead.

So celebrations where you go to the cemetery, you acknowledge the memory of those who have passed and you eat and drink certain food and drinks, you always offer.

You pour it on the ground or you put it on the grave, either for the dead.

That's wine, that's also boiled wheat and then at Christmas and Easter, before you begin to eat the celebratory foods, you set aside some for the house and it stays up on the shelf.

All year long until next Easter or next Christmas.

Have a piece of bread right there.

That's for the house.

**Camilla:** To feed the house.

**Audience member #3:** Yes.

**Camilla:** Wow.

**Audience member #3:** Which is fascinating that different forms of offering food and drink can be found across cultures to entities and then— Oh, yeah and then finally, I have a question.

You mentioned at the start that this work is partly inspired by the work of the radical anthropology group.

But for me, it's not obvious or apparent how.

So I would be curious for you to share where is this inspiration weaving in your research?

**Shivani:** That's it.

I'm really moved by the practice that you shared also.

We're sharing a practice from Bulgaria.

Yeah.

Where in order to, yeah, is it an annual ritual? You give offerings in a place to commemorate the dead? The Day of the Dead.

The Day of the Dead, in a graveyard itself.

But in the same practice, you also feed the house.

It sounds like it's the same event.

**Audience member #3:** It's not the same as that.

**Shivani:** So there are certain holidays that are commemorated.

**Audience member #3:** And then there's also the major Christian holidays of Easter and Christmas where you set aside food for the house.

**Shivani:** Okay.

Oh, so it's separate.

Okay, different calendars in a way.

Different perhaps cosmologies.

Maybe.

Maybe.

That's fascinating.

**Audience member #3:** They all intermix Pagan and Christmas.

**Shivani:** Yeah, that's what I also find very striking in the Himalayas that there's a layer of, you can call it, I don't want to say necessarily Buddhist appropriation, but there's a layer of meaning given in this case through the Buddha who also is interested in liberating other sentient beings, which can also be local deities.

That's one way that there's a kind of Buddhist layer cast on animus practice in the Himalayas and I wonder if in a Christian setting that there's a relationship between the beings and Christ, I would be curious, or Mary or...

if there's an attempt to kind of interrelate the cosmology through the feedings.

Wow.

To be true.

**Camilla:** Another question.

But why does rag influence this?

**Shivani:** Yeah, well, I don't talk about it in this paper, but my, so this is based on dissertation field work and there it's much clearer that targeting logic the intervention I've shared with you, the sprinkles, It's inspired by a very particular causal model that is targeting this logic of erasing context, erasing the body, erasing ecology and that's inspired also by militaristic language.

A lot of the metaphors used in the language of global health and development is directly and indirectly coming from imperialist logics of intervention, which are about targeting the body as a side of efficiency, of growth, and eventually accumulation for the state and the alternative to that logic would be returning either to language or to intervention, any action, the context, to return to life, to flesh, all of the politics in our interventions, in our science and that's something that I think we were talking about it today also with Chris, the alternative to an imperialist logic of- intervention is not just in science or in linguistics, finding a more lively historical relationship to the word, but also in action and policy, how to return to the specificity and the critique of the state in our politics and that is something that I think the image of the human in rag, it has very clear and that's something that is inspiring for the role of anthropologists to think about how humans have been organizing against settling and accumulating for the purposes of control and empire, and then expansion, how to actually learn from in this case indigenous peoples, how to learn from these practices of circulating, accumulation, and feeding for me is one trick.

I mean, I don't put it forward in this talk, but in my broader dissertation work, the contrast is between this logic of targeting and the logic of tendril, really thinking about returning the body and theory to the table and also learning from Indigenous science and that.

More to be said, and there's probably more that you identify that either.

I'll say something in a minute.

Is that Lika?

**Chris:** In this integration and division between traditional medicine, where the midwife stands or the equivalent, whether he's covering only the pregnancy and the early child.

I know he has been like in Western medicine and being disempowered by the male people.

**Shivani:** Great question.

Okay.

Luca has shared a great question about midwifery, how that falls with respect to allopathic or let's say traditional Tibetan medicine or other practices.

To what extent has an alternative to a biomedical paradigm been erased when it comes to birth and reproduction? So the landscape is complex.

So I shared about Sawa Rigpa and allopathy being funded by the state.

But there are practitioners outside of the state that are actually more relevant depending on where you sit with respect to urbanization pretty much.

So the further out from cities, the further out from roads, the more I see other practitioners and I write about this as a kind of syncretism because they're not often one or the other.

including tangkop.

She talks about going first to your local practitioner, and that's also because they it's much more expensive to go to the hospital, obviously, right? So local practitioners are of 2.

There's multiple kinds, but I would kind of categorize them into 2 tracks.

One are the kind of Buddhist practice.

So Sip, she called an astrologer.

They would do a diagnostic looking at your Mo.

Mo is your date of birth.

It would be a chart, basically set up your relationship, the body to the stars, find a way to do that, the planets and that's something that you need an expert in reading your Mo to read the divination.

That's one track and then there are other Buddhist practitioners around that.

So a monk, this is for me, one kind of cosmology alternative to Tibetan medical practice and allopathy.

But then there's another and that area is in the household and it's something that Quintang Chodan, she's actually an author.

She's one of the first English writers in Bhutan, a feminist author, incredible writer, who's also a sociologist of food, as one does in Bhutan.

She has multiple hats and she's written a really amazing book about also the role of food in healing and the elder practitioners in the house who would advise you on what to eat first if you're sick.

because there are prescriptions for what you can and cannot eat that has to do with poison, it has to do with what is good for the, you don't use the microbiome language,

but I find that very helpful to think about what is modulated when you eat, what's changed, what conditions are also disrupted, dysbiosis.

So that would be for me another area of practice and that is quite prevalent when you're pregnant.

This is probably the first go-to.

It's like you ask an auntie, you ask your mother, you ask your grandparents what to eat because there are many norms around pregnancy and birth which conflict with the medical advice given by the health worker.

That's another— I'm not sharing about that here, but it's a really great question because there's a lot of tension between the track in the house and the track in the hospital and what's wonderful is that a lot of the medical practitioners also come from a family that has this kind of elder advice, but they know that it's going to be tense and they're often allowances, again, a kind of tendrill logic, how to work with a biomedical model while also honoring customary recipes and it's another paper I've been writing about.

One nurse I met, especially in the hospital, who was making recipes that combined both using a very old type of barley wheat mix that has been in use since the 14<sup>th</sup> century, there's a recipe for this baby food and she included that in a biomedical recipe for feeding babies.

So yeah, there's a mix of practices and sometimes they actually are combined.

They're not only antagonistic in some cases, they combine.

But in giving birth, when I spoke to— just the last thing is when I spoke to SOA Rigpa practitioners in the traditional medicine hospital in Thimpu, I asked about birth and delivery, and they're like, oh, no, we don't touch that and it's often men who practice Tibetan medicine, the jungshos, menpas.

Not only are men, but the way he articulated to me why reproduction was not their thing is that it's emergency kind of care, and that the division of labor between these 2 state sponsored sciences that goes to the biomedical model.

So they try not to intervene.

**Camilla:** Can we bring you come?

**Shivani:** Oh, yeah.

**Camilla:** So the camera and the micro, but just make sure it's all recorded.

Oh, yeah.

Cause they're giving us so many precious, available things.

Sorry.

Maybe I'll put in a little bit about the things that were coming up and I said somebody on Zoom, Nancy.

Yeah, Lancey, you didn't let Someone asked about.

Yes, thank you.

I was just so I was thinking of the babies on the boards and thinking, whoa, born rebels, born anarchists, and I was thinking of art of not being governed, and James and Scott and the Zomi populations.

Obviously it's so it feels like there is.

Yeah, refusal that is not is just carrying on without carrying on with life without taking notice of anybody trying to do anything to you or coerce you or make you part of a state.

I was also, I'm really sorry that I didn't hassle Ingrid Lewis to come to listen to this talk.

I should have told her about it.

It's hard to get sometimes, Ingrid being Jerome's wife, who, of course, has worked very much with women in Barca, women in Congo, Brasville.

in relation to birth practice, helping set up mobile clinics.

So we're hearing the stories of these women struggling every month on through the monsoon rains and the difficult mountains terrain.

Ingrid's premises bring the clinics to where they can help women of the in the forest.

But of course, Ingrid is very educated by Benjele women, all about growth practices of Eganjwa, which belong to Benjele and she would have so much to say about the interaction of supposed global health programs with indigenous knowledge and of course, the Benjele are not people who at all, not at all.

But other things to say are about the perspectives of these WHO programmes, obviously very influenced by very Western, assuming West is kind of normal and the rest of the global world and yet evolutionary perspectives are going to be teaching us that what goes on between mothers and babies, you let them get on with it, is deep time part of our evolution.

I was interested in on the sprinkles.

I wasn't quite getting it.

Is it that the child, the infant directly ingests that? Or does the mother take in micronutrients to breastfeed? Are they both those ways? Or can Because I wasn't sure which way you're talking.

**Shivani:** Mothers accept it from the clinical workers, but only to feed to the baby.

**Camilla:** It's directly for the infants.

**Shivani:** Yeah.

There's a proposal to introduce it also to mothers.

**Camilla:** Also to mothers.

But it's thinking.

Breastfeeding length of time, how long are mothers doing the breastfeeding? Is that variable in different areas or?

**Shivani:** Absolutely.

**Camilla:** Very much.

Yeah.

**Shivani:** There's, in the first thousand days, an obsession and also around extended breastfeeding to get it to six months.

In Bhutan, the national average is five and almost six months.

So it's quite high, and it's the highest in South Asia, which is already quite high and there are regional disparities hidden in that between Western Bhutan, which is more like 30, and Eastern Bhutan, where it's closer to 70.

So most women, at least in their reporting, are breastfeeding extensively in Bhutan, and some cases, When we interviewed women in different regions, it went up to three years, but obviously not exclusively.

**Camilla:** So some places it is going to three years.

Yes.

Yes.

Which would be very normal kind of length of time for some natural fertility populations.

Yeah and how, yes and then how the interaction of solid foods and then the intake of micronutrients goes with that.

So it's obviously a real actual interest kind of in terms of the interaction, this evolutionary kind of heritage of humans.

Yeah, what else is I kind of trying to say on that? Yeah, this is such a beautifully grounded such an opening out to such a big range of questions about these, power structures and impositions coming from the corporations, who obviously you can think of some deadly corporations that have made huge profits and killings of mother and infant feeding.

It's terrifying to think of.

But to have such beautiful empirical examples and fieldwork testimony from Cancop and Brother R And so it was a just a beautiful interaction of levels going on there and just to really say that, but I'm so sad that Ingrid, hopefully I'll tell her to watch this and listen to this and make sure you get in touch with her and show you the stuff on the Gondra.

Judith.

**Audience member #4:** I just wondered how old the children were that you were following, how long you went on following them.

**Shivani:** This interaction, it depended on the person.

So there were two rounds of fieldwork, two rounds of fieldwork, 2019, 2020, but 2023, I didn't follow up on that same group.

So I didn't follow up very long.

No, no.

I will possibly go back in the next year, but it was not intended as a longitudinal study, more to do a cross-sectional work, yeah.

**Audience member #4:** Well, how old literally is your upper boundary at the age of the children? I mean, are you literally looking at pregnancy and babies or are they three years old or five years old, the children, when you stop looking at them.

**Shivani:** Somewhere, so I didn't measure children directly.

I interviewed mothers, but the mothers that I interviewed sometimes had children who were three or four or older, but usually the intake required at least either being pregnant actively or had a child who was in the range up to two, the window.

But some of them had older children, so they were sharing from previous experiences.

Yeah.

**Audience member #1:** Yes.

So I'm just wondering whether you actually think that this program of sprinkles should be terminated or changed in some way and I'm just thinking, I've got two grandchildren, they're both number three and if my daughter had to give them, well, obviously it doesn't taste very nice to them twice a week that would be a dreadful intervention from the state.

So I'm just wondering, are there plans to make it more palatable or finish it all together? is there enough protests going on over the country to say we don't want this?

**Shivani:** That's a really great question.

I will share it.

Could you tell me your name? Shirley.

Shirley asked a question about sprinkles.

Are they continuing? What should be done? What do I think? And also, what do people think about their future in Bhutan? Are there protests? In a context of partial refusal, you can imagine this is in one way how people are managing to negotiate with the state, to literally not show up either for the visits or when they do accept it to not give it to their babies.

But what is so fascinating about your question, in a way you've intuited the government is actually stopping.

the rollout of sprinkles.

What I heard informally on the ground from health workers, those who were more in the know and closer to policymakers in Thimpu told me that sprinkles were to be axed.

That was in 2023.

I don't know if that's the case.

I haven't been back in in two years and now three years.

But it's a it's a good question about whether or not the complaints were actually getting fed back.

When I I was hearing actually national reports, very glowing reviews from that local pilot in 2019.

But it depends on a bit the government in power and right now it's a new government from the one I was under at that time.

It's a long and complex situation.

So that's the condition on the ground right now.

It's quite possible that they've stopped implementing sprinkles, one and two, personally, what I discussed also with my co-researchers who were subject to this logic is why is it required for all children as opposed to as a diagnostic? Why not consider which mothers or which babies look like they would like, they would invite, and with their consent, request it? And to make that available for them is a very different situation than saying this must be applied to all people and you must force it, which is what we were hearing in Thimphu and interestingly, it was quite sad because we went to some areas where they had no access to sprinkles and mothers really wanted it.

In Kanglung, Ritsangdung village, which is outside of the college campus where I used to work, and we were doing interviews both with lecturers and with the women who were horticulturalists and farming in that area.

The women in the village who were farming were almost punished by the health workers because it was considered a benefit of the state that that local political leader did not deserve.

There was a spat between the health workers in the clinic and the first elected woman in that village community and she was punished, so to speak, by being refused a lot of clinical gifts from the state.

But women wanted and were telling us in interviews, oh, we've heard about that, but haven't been able to get them yet.

So this is the other side of not giving consent, but also not giving the opportunity to some others who do want access to it and I would, yeah, it would be much nicer more broadly.

I think the policy relationship I'm encouraging is slightly anarcho-feminist, right? Like for communities to decide for themselves what they would like to have access to.

Yeah.

**Chris:** I said this, but the sprinkles, micronutrients vitamins in a certain portion, a certain amount standardized right across the country, and you either get them or you don't.

**Shivani:** Yeah, they're prescribed.

They're supposed to be universally prescribed in Bhutan.

But that wasn't the case when I went from site to site, either because of distribution issues, sometimes political tiffs.

It was not always even the access.

**Chris:** Horrible things taste of blood.

Is that right?

**Shivani:** It smells like, for kangkop, it smells like blood and if you think of, for me, I did experiments with it then with friends.

We ate it together.

I also ate it.

Julian, I think you haven't tried it.

My partner is here.

He's suffered through me like obsessing about iron and his stuff.

But that's how I understand the blood smell.

You also smell your blood.

Yeah.

This strong heme smell is also striking.

I mean, if you're looking for it, and one can imagine when you go back to your infancy.

Imagine a food, a small proportion, right? When you begin complementary feeding, it's not a large quantity and into that, you mix quite a lot of sprinkles.

So the proportion is much higher than for an adult when you mix into a larger portion.

So it's more striking and especially like Brother R, I didn't give you the quote, but he's also speculating.

Every time we met a health worker, we asked for their theory for why babies are refusing and why it has this offensiveness.

But he said it is, you Yeah, quite possibly the low portion, which results in a high dosage of the iron and that could also be disturbing the gut and quite a few of the mothers were reporting diarrhea among children.

So not only vomiting in some instances and then stopping eating because babies were associating feeding with this unpleasant experience, which is in contrast to the breast milk, this would have been then the first food given.

Not a pleasant experience.

So then you think all food bad, potentially going forward, and there's a refusal of any kind of food.

So it could be, and this is where I've been reading more into annual reviews of nutrition that are finally looking at the infant gut, what's going on when you distribute nutrition interventions very early in a developing baby, and that can disrupt especially the kind of good bacteria that you have and iron especially, it feeds a very particular species of the gut and that's something that hasn't been regulated well with iron supplements more broadly.

So not only micronutrients have this issue and this is part of the reason why a critical hold of nutritionists are arguing One needs to be very careful with how you distribute iron in particular to babies and for me, this is also more broadly where iron as a substance, also thinking of early cosmetic rituals, but to today, the obsession with growth.

Yeah.

**Camilla:** I think the babies must be getting a bit of that.

**Shivani:** And what is a more beautiful method of administering healing potentially to the body than to ingest it and force it into babies at a time when they're not ready? potentially.

Yeah.

Goodness, that's been, you've been waiting with the question.

**Camilla:** Please, yeah.

**Audience member #5:** I just, something you said, which I found really interesting is, like refusal as a liberation, like refusal striving for something new and it made me think of boycott divestment sanctions and the way that protesting has been limited to just kind of being able to refuse things um and I was wondering if you thought like refusal was really something liberated or it's something that we're now kind of restricted to do so it's not in the same line with questions something that we're restricted to do um by kind of more stringent governments.

**Shivani:** That's a really great connection by Chris I'm really happy that you open up this bigger question.

Also, we have a could you say your name?

**Audience member #5:** Deli.

**Shivani:** Deli asks a great question about refusal more broadly.

Also thinking about boycott, divestment and sanction movements as a kind of refusal and whether is that a limiting way? Is that the kind of the question? Yeah, I was thinking of action.

**Audience member #5:** It's like doing anything you can.

That's yeah, if that's all you, if that is something liberating.

Or if it's something that we're restricted.

**Shivani:** That's a really good question.

So whether it's a liberating thing, refusal by BDS, for example, as opposed to something we're restricted because we can't do other things.

That's a really great question and I don't talk about it in greater details.

I'm really happy you open the box.

So the literature on refusal, what I'm trying to open up or invite us to think about is when you decide to cut, for example, refusing one thing is often not only about rejecting one thing, but also about accepting something else.

When you disconnect from one thing, the question if one becomes conscious of the political significance of that moment is what is the alternative that you're connecting to? And to be honest, there are instances of refusal that are also looking for liberation of a very small group of people.

I mean, those who refuse to, let's say, participate in vaccination.

I'm not saying that that's all bad.

There's all kinds of complex logics there.

But there are people who, out of ethno-nationalism, also refuse participation in certain actions.

So that's also an ontological position.

It's like I'm asking for us to become aware of what we connect or what we feed when we kind of stop one practice and in BDS, what I find interesting and potentially really revolutionary in thinking about action when it's not just look, it's not recognized if it's not perhaps very visible or physical.

But when you choose not to, let's say, for example, eat something, you might organize food elsewhere.

So if you choose not to um stay with let's say booking.com if you don't consume in that way you might find instead a homestay you might find other networks that you do feed and in that sense you you become I in my case I become more conscious of what I what beings I what communities I feed and are allowed to grow and that's as important as thinking about what I refuse fully and that's the sense of partiality to it it's it's always I I mean, I cannot end my relationship to the world and that's a deeper kind of ontological statement I'm making, drawing from feminist philosophy, thinking of Marilyn Strather and Donna Haraway, that there is actually no way to completely cut from another.

But the question is, and that's where Marxist literatures on delinking are interesting, where am I reconnecting to? And becoming more conscious of that also makes it more pleasurable, makes it possible to continue doing that because it's not always easy to say no.

for example, to a screen of so many things that we feed without having the possibility to think about what we could alternatively feed and to become more conscious of that, I think it drives more collectives, it drives more joy, potentially, and not just like a narrow conception of that political significance.

**Camilla:** Does that help?

**Audience member #3:** I didn't hear it though, instead of a feminist scholar talking about the impact from the world.

**Shivani:** Oh, partial connections, feminist philosophers of science and anthropologists.

Yeah, Marilyn Strathern.

Say again? Strathern.

**Audience member #3:** Marilyn.

**Shivani:** Marilyn Strathern.

**Camilla:** Marilyn Strathern.

**Audience member #3:** Okay.

**Shivani:** Yeah and Donna Haraway as well.

**Camilla:** Yeah.

Yeah, as a couple of examples.

Yeah.

We should also perhaps link a little bit back to RAG on the whole idea that symbolic culture itself came out of saying no and being able to create a collective, and that is a refusal characterized here like Chris has had to go, but it's like by strike action, but that's still, it's a collective no, which then creates all this other linkage of community and yes in so many different creative ways.

So I think that's, and I'm also thinking at the moment exactly of Palestine action hunger strikers saying, know how limiting was that for them and they're being detained even without charge saying no to ingesting food so her whole hunger strike ethic which has been extraordinarily powerful um and will at the very least put governments imposing their whole regime on top of those peace activists um make them

look very stupid very embarrassed very And as if they're these activists following a path like the suffragettes being force fed virtually.

So there are so many creative ways to consider it.

Thank you so much, Sujani.

I think I hope that this is all your response has been recorded there.

It was a beautiful, beautiful response.

Have we got any questions online? People online have been a little quiet, I don't know, but I hope you've been able to hear everything.

Shivani's made sure of that, which is really great and anybody here, or can we can we decide to move to the pub, adjourn to the pub and really say thank you so much to Shivani for this beautiful, beautiful talk, which have had an audience 10 times as big, but I think those bigger is not always better.

Taller is not always greater.

No, it's not.

It's the best connection.

I think it was a very strong, high quality.

Ian Watts is agreeing with that.

I think lots of people online here.

**Shivani:** Thank you, Jelani.

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