May bulutong ang flower ko (My flower has chickenpox): Anthropomorphizing illness in the case of Sitio Lamut, Brgy. Beckel, La Trinidad

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Introduction

"May bulutong 'yan kaya ganyan itsura, may spot spot" (It is ill with a pox, that's why it looks like that, spotty) these precise words said by Jake (31 years old), a flower farmer, in Sitio Lamut, attracted my attention. Every day, Jake and the farmers in the area had to deal with a variety of plant illnesses, the majority of which were infestations caused by insects and other pests that ate their flowers and eventually killed their plants. In Sitio Lamut, some of the illnesses that flowers might develop are named after human illnesses.

Such ascription of human characteristics—such as falling ill—to non-human entities like the fowers can be called or may be referred to as anthropomorphism, the projection of human characteristics onto a non-human entity.¹ This study probes into the anthropomorphization of flowers to unveil the dynamic relations of flower farmers in Sitio Lamut with their crops.

This study was conducted as a component of the UP Anthropology Field School 2022. The setting was La Trinidad, Benguet, where agriculture constitutes the main source of income and occupies 43.03 percent of the land area. While vegetables remain the main crop in the province, one alternative that has developed as a more profitable crop is cut flowers. Chrysanthemum is the most produced ornamental crop compared to other types of cut flowers over a thirteen-year period.² This was especially noticeable in Sitio Lamut during



Fig. 1. Radus popularly known as Chrysanthemum

Every day for my fieldwork, I trekked down the steep entrance to the flower farms in Lamut to observe the farmers doing their work. Although it looked tedious, the location was perfect for the greenhouses on the farm, since the position of the water reservoir above (see Fig. 3) allows water to be pumped to the greenhouses without the use of an electric motor.

As I entered the greenhouse, a gardener offered me the chance to plant seedlings and prune buds.

I divided my time between participant observation and conducting semi-structured interviews. Since my interview questions called for intimate and personal responses, I had to assess my prospective interviewee and spend more time



Fig. 2. Inside a greenhouse in Sitio Lamut



Fig. 3. A man-made water reservoir above the greenhouses

developing rapport. The study participants were adults over 30 years of age, flower farmers, and identified using a snowball sampling technique. Additionally, all individuals who were contacted for interviews provided written or verbal informed consent after being told of the purpose of the study.

According to Gabriella³, for anthropomorphism to occur, human traits must be perceived as being in a dialogic relationship with a nonhuman interlocutor. This suggests that anthropomorphism is a useful lens for examining relationships between humans and non-humans.⁴ Furthermore, my initial observation is characterized by affection and attachment rather than simple ownership.^{5,6} Such relations have been greatly studied for human-animal interactions, particularly with companion animals, and less is known about whether such is applicable to commercial crops such as cut flowers.

Nicholas Epley et al. argue that what drives the use of human schemas as a point of reference for non-human agents is that this knowledge "is more accessible and more detailed than knowledge about non-human entities."⁷ They add, such anthropomorphism is largely determined by the operation of three major factors: the accessibility and applicability of prior knowledge (elicited agent knowledge), the motivation to explain and understand the behavior of other agents (effectance motivation), and the willingness to establish social connections (social motivation). I discovered that in fact, the gardineros of Sitio Lamut showcased such behavior with their flowers, particularly the *radus* flowers.

As will be shown in the section below on "Illness," in the case of flower farmers, their highly accessible knowledge structure is their self, particularly their bodily experience. The most consistent feature in anthropomorphizing illness as far as elicited agent knowledge is concerned is their perceived similarity.

Meanwhile, effectance and social connections are demonstrated in the section on "Social Life." Epley et. al explains effectance as involving the motivation to interact effectively with non-human agents (or perceived agents) and operating in the service of enhancing one's ability to explain complex stimuli in the present and to predict the behavior of these stimuli in the future. Social connections are satisfed by anthropomorphism by allowing perceived humanlike connections and relationships with nonhuman agents.⁸

Illness

In the medical field the terms "disease" and "illness" are often used interchangeably. According to Ellen Idler⁹, in the dominant biomedical paradigm, "sociological analysis" is usually not applied in the study of diseases. Diseases are frequently conceptualized in biological and medical terms as pathological abnormalities in the human body. Following Idler, this paper uses illness to highlight the "human experience of the disease," capturing the "social phenomenon with both an objective and subjective reality."¹⁰

Bulutong (pox)

In the radus flower, pale yellow to dark patches in the leaves are indicative of the plant illness known as rust or, as referred to by several flower farmers in Lamut, *bulutong* (see Fig. 4). The term bulutong is derived from bulutong tubig (chicken pox), a human illness that exhibits blotches and/or bumps on the skin at the early stage of its development. As observed by the flower farmers, these same symptoms appear in flowers.

There is a local belief in the Sitio Lamut gardens that if the gardener deviated from his regular spraying schedule, the flowers might grow *bulutong*.

To avoid *bulutong*, the farmers must not stray from their usual routine of spraying. A gardinero told me that after the gardinero-in-charge vanished for a week, all the plants in a greenhouse nearby contracted bulutong. The gardinero went on to say that it is not ideal for the plant to be infrequently visited because it will probably have a bulutong infestation. *Bulutong* is irreversible. The treatment can only inhibit the growth of the spot after it has acquired one. The spots will remain, or, as the gardeners say, "Scar *na yan hanggang sa i*-harvest," (It will remain scarred until harvest). Additionally, farmers believe that poor hygiene can cause bulutong in both people and plants. According to a local gardener, if you regularly groom yourself, take a bath, and clean yourself, you will not have skin issues like *bulutong* (chickenpox). Similarly, the radus plant must also take baths, which is why they are watered more frequently than sprayed. In this sense, the gardinero's anthropomorphism manifests in their care and concern over the flower becoming ill.

Lagnat (fever)

If watered after being exposed to extreme heat, the flowers wilt and sag, a condition known to gardineros as *lagnat* or 'fever' (see Fig. 5). They appropriate the idea based on their lived experience of lagnat and the cause of it: "*Kami nga kapag umuwi galing sa garden na mainit tapos naligo agad diba lalagnatin din, halaman pa kaya!*" (We get 'fever' when we immediately take a bath after a hot day in the garden, plants are the same!). The gardineros water their plants either early in the morning or late in the afternoon. They often refrain from administering water when there is direct sunlight. The flower may, however, occasionally develop lagnat if gardineros water it after failing to check the sun. Another reason why flowers might acquire lagnat is



Fig. 4. Radus leaves infested with bulutong or rust



Remnants of spray in the leaves of a radus



Fig. 5. Radus seedlings diagnosed with bulutong (left), lagnat (middle), and pasa (right)



Fig. 6. Radus seedlings diagnosed with *pasa* or *lippak*

lack of water, for example if the newly planted seedlings are only shallowly buried.

Pasa (bruising)

Pasa is the opposite of lagnat in flowers. Overwatering is linked to pasa in the radus plant because it frequently results in black streaks on the stem and leaves. *Similyas*, or seedlings, are particularly susceptible to pasa because of their small size and proximity to the soil (see Fig. 6). The pasa in the seedlings is also referred to by the locals as "*lippak*". Once a seedling contracts pasa, it is no longer considered suitable for *sabong* or transplantation into the flower field. Their notion of "*sakit sa loob*," which maintains that there is no chance of a recovery from the illness because it is infected from within, might lead someone to immediately discard the seedling plant with pasa.

Pasma (hot and cold syndrome)

In his book *Revisiting Usog, Pasma, Kulam,* Michael Tan talked about how Filipinos have a close relationship with nature which reflects on how we interpret health and illness.¹¹ He contends that the concepts of equilibrium and harmony are developed from the belief that health and illness are attributed to a balance of natural forces, such as hot and cold. For instance, a sudden change from a hot to a cold environment (or vice versa) causes "exposure illness," or *pasma* in the Filipino language.¹² When either a hot or cold stimulus is seen as predominating, the illness begins to accumulate.¹³ The gardinero observed that the plant would be disrupted and lose its stiffness when in abrupt contact with *lamig* (cold) water. The confrontation with cold water—being in La Trinidad with fairly cold temperature—when watering the plants caused pasma because the interior of the greenhouse is already fairly warm.

There is no recognized medical title for pasma, which is regarded as a folk sickness in the Philippines. As it is characterized by tremors and numbness after exposure to cold water or air¹⁴, it is typically common in those who work closely with their hands—like the gardineros.

Social life

Aside from their shared Kankana-ey ancestry, flower farmers in Sitio Lamut are generational farmers. Some flower farms in Sitio Lamut are family operated. In connection, while family members work as gardineros on their farms, they occasionally work in other flower farms using the *"arawan* system"—being paid by the day. Their flowers also have their own kinship network, and their interactions with them reveal certain behaviors and local notions.

Classification of kin

The first bud that forms in the radus flower is the *nanay* (mother), while succeeding buds are the *anak* (offspring). The buds (*anak*) occasionally all appear at the same time. Since it will prevent the growth of the succeeding buds and result in a flower that is larger than the others, once all the buds—*nanay* and mga *anak*—have bloomed, the *nanay* (see Fig. 7) is typically removed.

How long the flowers are exposed to light and to how much have an impact on their capacity to grow, among other things. However, However, a bothersome condition called *saringit* will start to appear from June until August when days are longer than nights. In the "family" of radus flowers, which typically consists of four to five flowers on a single stem, they are the undesirable buds—the saringit. Some gardeners referred to the saringit as "*anak ng anak*" (the offspring of the child) because they believed it was the third generation of the flower bud.

Implying morals and valuation

Normally, radus flowers are ready for harvest in three (3) months, but if they grow for over six (6) months before blooming, the gardineros call this condition "bulakbol." The radus plant that is *bulakabol* is taller and longer than average because it keeps expanding even though it is dormant. A gardinero once remarked, "*ayan malaki na kasi kaya natututo na lumayas*" (They are older now and have learned to just go out whenever they please). Being a bulakbol in the Philippine household is typically associated with young teenagers who frequently leave home for extended periods of time before coming home, some do not even return.

Tampo and the need for care

The gardineros said that the flowers in the greenhouse want to boast about their blossoms to the farmers and feel depressed in their absence. Flowers also fear for their lives when a gardener is not around, since they require caretakers to attend to their needs or else they would perish. Furthermore, according to a gardinero, flowers experience the same joy they do after a bountiful harvest, as though they are happy to be sold and appreciated. The gardineros also say that if they neglected their flowers, they would not thrive because they would 'feel abandoned.' As Pauline (47 years old) once observed:

"Kung minsan, pag pinagsasalitaan mo ng hindi maganda, parang magtatampo ba sila, parang ganun, parang papanget" (If you speak badly of flowers, they will resent it, and it will alter how they develop, mainly for the worse.)



Fig. 7. The center bud or *nanay* after removing from the plant

When I asked why she thought the flowers would feel dreadful if you spoke badly about them, she replied, "Because I would feel the same way."

Pregnancy or birth pains

"Nanganak na ba radus mo?" (has your radus given birth yet?) the gardineros would joke with their fellow gardineros, inquiring about the state of the flowers' blossoms. Similar to pregnant women, the radus plant go through vulnerability and stress during "pregnancy." Infections like bulutong frequently manifest themselves at this time. This view of the reproduction process demonstrates how plants are gendered. The femininity of flowers is also indicated by terms like "mother plant."

Rolando would also refer to his plants as "babies," saying that taking care of flowers is a lot like taking care of a newborn; you have to watch their development, give them water, and provide them with care. "... [K]ung gusto mo magtanim ng bulaklak, kung paano ka mag-alaga ng bata na baby mas ganun din, mas higit pa...kung magtanim ka ng bulaklak dapat araw-araw pinapasyalan mo, parang bata din yan." (If you want to plant flowers, you have to take care of them like how you take care of children, sometimes even moreso. If you plant flowers, you should dote on them every day just like with children.)

Flowers' medicine, Farmers' sickness Nakakahawa

Their belief in contagion or *nakakahawang sakit*, influences how they care for their plants. Depending on whether the spray is being used as a curative or preventive measure, they use various administration techniques. Farm inputs are color-coded green, yellow, blue, and red according to increasing potency to the user. Farmers will change to a more potent label if the product they are using appears to be ineffective. For curative purposes, they employ stronger sprays that are highly effective on plants. This practice stems from the belief that a stronger medication is required once the treatment has moved past the preventive stage. However, the sprays are toxic to gardineros, moving on to the curative stage poses a risk to the health of gardineros.

Sprays and their effects on farmers

A *gardinero* named Julia (31 years old) demonstrated how the sprays—a mixture of insecticides, pesticides, and other farm inputs—are made and placed in the 20-liter containers carried by farmers on their backs. They stay away from the greenhouse after the farmer completed spraying since it emits unpleasant smells. Even a local farmer claimed that is is the primary cause of lung cancer.

Julia said that the smell of the spray made her feel nauseous and sick. Some farmers also said that contact with the spray made their skin itch. While riding Ariel's (35 years old) tricycle on the way to the office of the barangay, he told me about the day he developed allergies from the greenhouse. Ariel used to be a flower farmer before he decided to try his hand at driving a tricycle three years ago. Ariel had a serious allergic reaction in 2019 and told me that the flowers and sprays were to blame. *"Yung radus kasi, kahit walang sprays, may amoy na nakakahilo"* (Even without applying sprays, the scent that the radus plant releases would make you feel dizzy.)

He needed medical help because he had serious rashes all over his body and face. The doctor advised him not to return to the flower farm as it might re-trigger the allergy. Though he told me he missed gardening after three years, he balanced working as a flower farmer and tricycle driver except that he would not undertake any task that requires touching the flowers; all of his farm work consists of soil preparation.

Sakit and aesthetics

Farmers in Sitio Lamut are aware of the fact that the utilitarian value of flowers is based on their aesthetic value. *"Kailangan maganda para mabili sa merkado"* (Flowers must be beautiful in order to sell in the market), according to the gardineros.

They refuse to use organic inputs because organic inputs are not ineffective in preventing plant

diseases, particularly those that have a negative impact on the appearance of the flowers. Moreover, unlike vegetables, flowers are not consumed as food, which makes the use of organic input unnecessary. I was informed by the gardineros that they last used organic inputs around ten years ago.

The reliance on sprays emerges from the conviction that *labas na sakit* (illnesses on the outside), might do greater harm to their flowers' value, which depends entirely on their aesthetic worth. They choose to use commercially purchased farm inputs rather than homemade organic ones because they feel sure that the flowers would bloom well. For instance, pasa is regarded as a *loob na sakit* (an illness on the inside). While plants typically die from it, it does not totally impact how the plant would appear. Bulutong is another *labas na sakit* since the disease manifests outside and is an evesore for both farmers and consumers. Flowers that have been infected with bulutong typically fetch lower prices when they are sold in the market since the majority of farmers remove them during dosena, or the packaging of the flowers for export. Flowers that manage to survive the *pasa*, on the other hand, are often sold for much less.

Conclusion

Farmers in Sitio Lamut use words referring to human illnesses to describe their flowers due to perceived morphological similarities, such as the spots of *bulutong* and the black streaks on pasa, consistent with the lived experience of the flower farmers.

Instilling emotions in flowers, such as tampo (displeasure), which is caused by the flower farmers infrequent visitation, justifies the use of a routinized spraving strategy, which they religiously administer twice a week and regular visits to the garden. This avoids 'enraging' the flowers and eventually causing them to become ill. In turn, the ambiguity surrounding the disease of the flower and the desire to control the illness (in order to fetch a better market price) may be related to their anthropomorphization.

The flower farmers refer to their flowers as "babies" who need the most care because they are fragile. They also speak of how flowers act like rebellious teenagers or bulakbols, at times. These human-like connections and relationships with the flowers constitute the flower farmers' knowledge of the complex behavior of flowers in the present and their demeanor in the future.

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Endnotes

- Lorraine Daston, "How Nature Became the Other: Anthropomorphism 1. and Anthropocentrism in Early Modern Natural Philosophy". SOSC, vol 18 (1995).
- Celia M. Reyes, Sonny N. Domingo, Adrian D. Agbon, and Ma. Divina C. Olaguera (2017) : "Climate-sensitive decisions and use of climate 2. information: Insights from selected La Trinidad and Atok, Benguet agricultural producers", PIDS Discussion Paper Series, No. 2017-47 (2017).
- Gabriella Airenti, "The Development of Anthropomorphism in 3. Interaction: Intersubjectivity, Imagination, and Theory of Mind", Front Psychol (2018).
- 4. Véronique Servais. "Anthropomorphism in Human–Animal
- Interactions: A Pragmatist View. Front Psychol (2018). Sara Kiesler, Sau-lai Lee, and Adam D.I. Kramer, "Relationship effects in psychological explanations of nonhuman behaviour", Anthrozoös 5. 19 (2007) 335–352. Margaret Fidler, Paul Light, and Alan Costall, "Describing Dog Behavior
- 6. Psychologically: Pet Owners Versus Non-Owners", Anthrozoös, 9:4, (1996), 196-200.
- Nicholas Epley, Adam Waytz, and John T Cacioppo, "On seeing human: A three-factor theory of anthropomorphism", Psychological Review, 114(4), (2007), 864–886. Epley et al., "On seeing human: A three-factor theory of 7.
- 8.
- Liptey et al, "Un seeing human: A three-factor theory of anthropomorphism" Ellen Idler, "Definitions of health and illness and medical sociology". Soc Sci Med Med Psychol Med Sociol (Great Britain: Pergamon Press Ltd, 1979) 9
- Ltd, 1979)
 Idler, "Definitions of health and illness and medical sociology".
 Michael L. Tan, "Revisiting usog, pasma, kulam" (Quezon City: University Press, 2008)
 Michael L. Tan, "Revisiting usog, pasma, kulam"
 Peter James B. Abad, Michael L. Tan, Melissa Mae P. Baluyot, Aprela O. Villa, Cov. Luz Talgian, Ma. Elouisa Reves, Biza Concordia
- Angela Q. Villa, Gay Luz Talapian, Ma. Elouisa Reyes, Riza Concordia Suarez, Aster Lynn D. Sur, Vanessa Dyan R. Aldemita, Carmencita David Padilla, and Mercy Ygona Laurino, "Cultural beliefs on disease causation in the Philippines: challenge and implications in genetic counseling" J Community Genet, (2014)14. Segen Medical Dictionary, (2011).