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Dynamic Ways of Prospecting: Parts, Wholes, Experiential Futures, And Eating a Banana for the First Time

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**Abstract:** This paper explores the complex relationship between the parts and wholes of prospective narratives and the form and function of those narratives. Applying Goethean science and dynamic ways of seeing to storytelling in futures and transition design, the paper proposes a methodological approach to surfacing and disrupting fixed assumptions about the future with the intention of reanimating the narrative to create space for novelty to emerge. This reanimation is made possible because of the holographic nature and inherent systemicity of stories, which provides multi-scalar affordances through the wholes and the parts of the narrative. The paper delves into an experiential futures case study, *The Museum of Food*, to demonstrate the role that encounters with the future can play in disrupting future fixedness in playful but meaningful ways. By entangling reanimated prospective narratives with staged experiential encounters, participant audiences are provided with the incremental scaffolding, the prospective plot points, to reimagine and reauthor their own stories about the future, dismantling used and colonized futures in the process.

**Key words:** narrative, antenarrative, futures, experiential futures, storytelling, emplotment

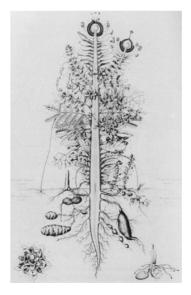
## Introduction

Johann Wolfgang von Goethe is best known for his poetry and dramatic writings, but his work also included scientific works, particularly in botany and color. While not as well known, "Goethe was able to achieve an unprecedented awakening of artistic consciousness within the domain of science" (Hoffmann, 2007, p. 7) through a "way of science, understood as a phenomenology of nature" (Seamon, 2005, p. 86). For Goethe, "the effort to understand a thing's meaning through prolonged empathetic looking and seeing grounded in direct experience" (Seamon & Zajonc, 1998, p. 3) required a particular form of attention he referred to as "exact sensorial imagination."

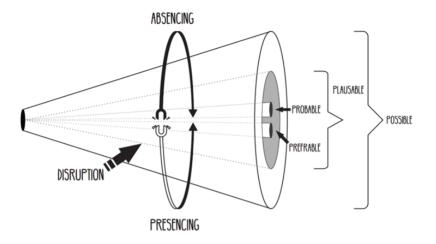
Henri Bortoft in his influential work *Wholeness of Nature*, explores exact sensorial imagination and the wholeness of nature as it is revealed through the parts. He proposes the cultivation of "imagination as an organ of perception" drawing on the active observation of a plant in which "Suddenly there is a movement, a dynamic movement, as you begin to see not the individual leaf but the dynamic movement. The plant is the dynamical movement. That is the reality..." (Scharmer, 1999). During his doctoral research in physics, Bortoft worked with David Bohm to better understand quantum mechanics and wholeness (Seamon, 2013). Critical to his thinking of Goethean science was the reframing of observation and scientific inquiry away from the study of the organism or phenomenon as a static object and instead cultivate the level of awareness to observe the dynamic coming into being of the object.

Goethe illustrates this point with his concept of the Urpflanze, an archetypal plant with the capability to "unlock the potential of any future form" (Jackson, 2013). Similar conceptual frameworks exist in futures and storytelling, most notably the futures cone in which the future becomes increasingly divergent as imagined time moves further from the present into the future (Voros, 2003). While the Urpflanze moves horizontally (see figure 1), and the futures cone moves vertically (see figure 2), both are visual conceptualizations of an anticipatory imagination.

#### Figure 1. Goethe's Urpflanze Proto-Plant



Source: Wikimedia Commons



#### Figure 2. The Futures Cone with Theory U Overlay

Source: (Cowart, 2019)

This underlying anticipatory awareness can be applied to storytelling as a particular form of imagination in which the emplotment of the story, so often perceived as a mechanistic cause and effect object, can instead be imagined actively and dynamically as an organism or phenomenological experience. Story is one of our oldest technologies to form and influence social cohesion, to communicate complex information, and to imagine otherwise (Boyd, 2010; Gottschall, 2012; Harari, 2014; Storr, 2020). Story is also our gateway to the future, the form of imagination that allows human beings to 'time travel' and access the not-now. Here the author suggests an alternative posture to futures thinking: an organic and holistic approach; incorporating and cultivating storytelling as an organ of prospection rather than perception.

Narratives about the future are often objectified as images (Fred, 1973), held up as static, problematic, rather than dynamic and constantly in a state of change and transformation. This static objectification can lead to used futures (Inayatullah, 2008) in which the image is borrowed or imposed from a different ethnotemporal (Margaret & Robert, 2005) context, or disowned futures in which the self disassociates from the actual preferred future (Inayatullah, 2005). Colonized futures are also ubiquitous, fetishized representations of futures that reinforce systems of power and are portrayed as inevitable.

Despite the sense of inevitability conveyed in these stories, the inherently fragmentary nature of anticipatory narratives is well established in storytelling theories on ante-narrative bets on the future and pre-emplotment (Boje, 2001, 2008) in which "Story is an account of incidents or events, but narrative comes after and adds 'plot' and 'coherence' to the story line. Story is therefore 'ante' to story and narrative is post-story... 'ante' combined with 'narrative' means earlier than narrative" (Boje, 2001, p. 1). This fragmentary and yet-to-be determined nature of anticipatory narratives is also evident in the nodal power of future narratives defined as "the degree to which a situation is open" (Bode & Dietrich, 2013, p. 47).

The critical need to avoid narrative 'foreclosure' on the future is a commonly expressed concern. Rather than perception as the observational posture, by highlighting the anticipatory nature of this coming into being and focusing in on the particular anticipatory temporal element of perception, *perception* can be reframed as *prospection*, an anticipatory form of perceiving the world. It is what Goethe called the "generative force." Thus, Goethean science and the concept of imagination as an organ of perception can be redefined as storytelling as an organ of prospection. This storytelling posture moves away from causality to relationality, away from cause and effect linkages in plot, in which the components of the story, or 'members,' "are not merely acting *on* each other (to form a coordinated mechanical system) but are deriving *from* each other, creating each other" (Hoffmann, 2007, p. 17).

Existing work has been done to synthesize futures thinking with elements of Goethean science and Bortoft's work on clarifying the Goethean approach to phenomenology through Otto Scharmer's *Theory U* framework and presencing (Senge et al., 2005). "Presencing is a combination of 'sensing' and 'presence,' meaning to sense deeply into the present moment to become aware of our highest future potential as it emerges" (Cowart, 2020, p. 98). This is the coming into being of the formal expression temporally, in which "The present moment is viewed as possessing a past facing and future facing side. The past facing

side is shaped by past patterns of behavior and assumptions based on experience" (Cowart, 2020, p. 98). *Theory U* is a framework to access and then action insights gained through presencing (Scharmer, 2009). Next, we turn to Goethe's approach to phenomenology.

## The Goethean Process

Although Goethe himself never clearly defined a process, numerous Goethean scholars have articulated variations on Goethe's phenomenological observational approach (Bortoft, 1996; Brook, 1998; Hoffman, 1998; Holdrege, 2005; Seamon, 1998; Wahl, n.d.). In a literature audit of Goethean scholars, Terry Irwin distills various approaches down to a 4 stage process (Irwin, 2008):

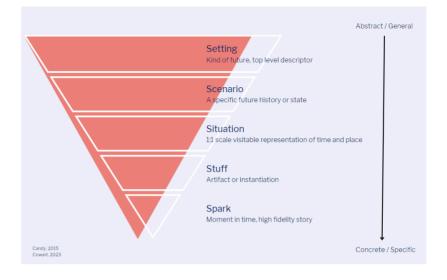
- O) The preparatory stage: in which curiosity ignites attention and begins the process of raising the level of awareness as a phenomenon is observed.
- Exact sense perception: in which the senses are engaged and an intensive process of observation occurs and the parts are scrutinized in order to discern wholeness. Totality is not wholeness, nor is the sum of the parts wholeness.
- 2) Exact Sensorial Imagination: in which the imagination is activated in order to observe the form of the whole as it dynamically comes into being. The observation is dynamic in that it encapsulates a temporal wholeness in which the past, present and future reside in unity versus distinct static snapshots in time.
- Seeing in Beholding: in which the observed expresses itself through gestures, in which the agency of becoming shifts from observer to the observed.
- 4) Being One with the Object: in which an awakening or extended consciousness emerges between the observer and the phenomenon, and the relationship between observer and observed harmonizes patterns and meaning of form fully express themselves.

In order to shift our level of awareness and imagine stories about the future that are in themselves rooted in wholeness and emergent properties, some variation of this process can be enacted and practiced over time, in essence 'flexing' or exercising storytelling as an organ of prospection as a form of relationality and interactivity. "There seems to be a relationship between the degree of interactivity that is offered by a FN [future narrative] on the one hand and its radicality on the other – if by radicality we mean the degree to which a FN does indeed *stage* openness, indeterminacy, potentiality, etc." (Bode & Dietrich, 2013, p. 52).

## A Case Example: The Museum of Food

In March of 2023, *The Museum of Food*, an experiential future, was staged at Carnegie Mellon University. Experiential futures is a discipline developed to address "the persistence of an experiential gulf in foresight work" (Candy & Dunagan, 2016, p. 26) in which an abstract future difficult to imagine is materialized and encountered by audiences in order to draw inferences and make evaluative judgements (Lee et al., 2021). A common method to develop experiential futures is the experiential futures ladder used to move from highlevel 'future of' abstraction to a high fidelity moment in time materialized and encountered by willing and consensual participants.<sup>1</sup> See figure 3.

<sup>&</sup>lt;sup>1</sup> Note there is a niche offshoot of experiential futures, Guerilla Futures, which merges the concept of experiential futures with guerilla marketing to confront *unsuspecting* participants with possible futures in unlikely contexts.



#### **Figure 3. Experiential Futures Ladder**

Source: (Cowart, 2023)

The intention of the *Museum of Food* project was to speculate on a future in which hyper-personalization of food nutrition and the desire for convenience leads to a 'cube food' future. The experiential future takes place in a world where cube food is so ubiquitous that the average person is unfamiliar with basic foods such as a grape, a piece of steak, a pickle, or any sort of common foodstuff obvious to the population of the present. Building on the conceit of a museum, these pieces of food were staged in large, sterile exhibition spaces. As well, the museum offered many educational sessions, including an introduction to *Lucky Charms*, and a history lesson on the dessert spoon. However, during the experiential future a workshop on identifying and eating fruit was staged. On this particular day in the future, the fruit participants learned to identify and consume properly was the banana.

What follows is a transcription of a chosen selection from the experiential future. After sharing the text and action descriptions, an analysis of the emergent future story and suggestions on theoretical importance is provided by considering the 4 stage process of Goethean phenomenological

observation and traces of the process present in the emergent actions of the participants during the enactment of this possible future.

#### Table 1. Museum of Food - How to Eat a Banana

[The facilitator asks for volunteers for the demonstration. 3 volunteers come forward.]

Facilitator: Thank you so much for joining us. Thank you so much for joining us today. Today, we will be learning a very, very, very special process. This is true. It is known as the banana.

[Facilitator pulls out a bunch of bananas.]

It is a fruit and they used to get it off these old wooden shelves. And these come in bunches of like five or six. Yeah, it comes in multiples. And you could buy them together and pay money for them and just take them home. That's the origin of finance. Have you ever seen or tasted a banana?

[Participants shake their head.]

Have any of you ever seen a banana before?

[Audience members call out 'no.']

Well, today's your lucky day, I guess. So today we will learn a very, very technical and special process. It's called 'How to Peel a Banana.'

[Participants look worried and unsure.]

It can be a little tricky. I could also warn you that when you, if you decide that you want to taste it and you want to eat it, it might be... it's a new experience. We're not used to having flavor and taste today. So it might be a little overwhelming. might feel a little slimy. It's all part of the process. Trigger warnings. I would avoid drinking water half an hour after eating the banana. It feels a little weird. Some people you know, they don't like it. They come and complain to the museum. We can't do anything about it beforehand.

[Participants nod gravely.]

Yeah. So back in the day, if they ever saw a banana on the shelf, they could always go and purchase in an exchange for money. Right? Today we don't have, we don't use money to buy food. We just go and show our hands.

[Facilitator gestures as if her hand is being scanned.]

That's how we do it today. But back in the day, you could give money in exchange for food. The only time you can never ever ever eat a banana, if it was taped up on the wall. It's called Art. So should we begin? Any questions? Does anyone have any questions today?

Participant 1 (pointing to the banana in the facilitator's hand): Yeah, what's the elaborate pattern?

Facilitator: Thank you for asking. I was gonna get to that. So, back in the day, what they used to believe is that the more pattern it had the more flavorful. And the more ready it was to eat. If it was green, you don't usually eat it. When its yellow then you eat it. If it gets too brown, they will not eat it again. So you have to find the perfect time when the banana was ready. It was a very very delicate process.

Participant 2: Is it safe to eat them?

Facilitator: Yeah, all the bananas that we have in the museum today are extremely safe to eat. Yeah, any other questions?

Audience member: How does the skin taste?

Facilitator: How does the skin taste? So back in the day they would not eat this outer layer that they call the skin they would just throw it away so there is no documentation on how to use it as far as we know. But it's great that you know that's called the skin you're one step ahead of me. There you go.

[Facilitator hands banana to participant 1. Participant 1 takes it gingerly, holding it back from their body.]

Participant 1: Do you need a tool to open it?

Facilitator: I will take you through the steps.

[Facilitator turns back to the rest of the bananas and holds them up.]

Facilitator: So this is called a bunch.

[Audience members ooh and ahh.]

Facilitator: They come in multiples. I'm going to do this process because it is a little difficult as well tricky to you know pick it apart.

[Facilitator begins to break up the bananas in the bunch.]

Audience Member: And what is their relation to each other?

Facilitator: They just feel like, bond together. They were found together at the store. I can only tell you how much is documented what we know of humankind back in the day.

[Facilitator hands out bananas to participants 2 and 3.]

Facilitator: Are we ready?

[Participants begin to smell and nibble at the bananas.]

Facilitator: Careful, careful. Please, please wait for instructions. You don't want to break the banana and have a slippery floor right? Our guests will slip and fall.

Participant 2: Sorry.

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Participant 1: I'm sorry.	
Facilitator: Caution. Like I said, safety first. Alright. So. Hold the banana upright.	
[Facilitator holds her banana upright. All 3 participants follow suit. Participant 2 holds the banana incorrectly. Facilitator emphasizes how she is holding it.]	
Participant 2: Uh	
Facilitator: Raise your right hand up and	
[She gestures with her right hand.]	
Facilitator: OK?	
Participant 2: I'm left handed.	
Facilitator: Oh. Want me to give you instructions for that way.	
[Facilitator reverses her grip on the banana. Shows Participant 1.]	
Facilitator: Can you mirror me?	
Participant 2: Yeah.	
Facilitator: Hold the top tip.	
[Facilitator demonstrates.]	
Facilitator: With your other hand just grab it.	
[Participants are confused.]	
Facilitator: Grab it like you're grabbing someone's neck.	
Participant 2: Oooh. Ok.	
[All participants successfully grip the banana.]	
Facilitator: Now with the back hand hold it tight. Can we break it? We're going to snap it.	
Participant 1: Right now?	
Facilitator: Yes.	
Participant 1: My God that's so barbaric.	
Facilitator: We're gonna snap it in three. Are you ready? One, two, three!	
[Participants 1 and 2 successfully snap the top off their bananas. Participant 3 accidentally rips their banana in half. Participant 2 points at Participant 3's banana in shock.]	
Participant 2: Can you still eat that one?	

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Facilitator: As you can see this is a very, very technical procedure. Yeah, no, you can't eat that one now. Like I said, it's a very sensitive process.

Participant 2: How about mine?

Facilitator: You did great. Really, you too. Does anyone want to taste it?

Participant 1: I'm a little scared.

Participant 2: I'm not sure.

Participant 3: Could I, like, try a little.

Facilitator: No, no, not yet! So now, you need to pull it apart. First, like he said, the skin.

[Facilitator demonstrates by peeling the banana.]

Facilitator: Come on. That's it. Follow me. You got this.

[Participants all slowly and hesitantly peel their bananas, following along with the Facilitator.]

Facilitator: Then, once you are done, you can take it home, you can eat it, you can share with other guests.

[Participant 2 holds up his fully peeled banana.]

Participant 2: Like this?

Facilitator: And yeah, that's it. Enjoy your banana.

Participant 1: Mine has weird strings on it.

Facilitator: Yeah I would not eat that.

[Participant 2 helps Participant 1 remove the banana strings.]

Participant 3: Are you sure you can eat this?

Facilitator: For sure.

Participant 2: How do you eat it?

[Facilitator breaks off a piece of their banana and puts it in her mouth.]

Facilitator: Just put it in your mouth.

[Participant 1 holds the banana in both hands and takes a bite out of the middle, like a sandwich.]

Participant 1: It's sweet!

# The Museum of Food: Storytelling as an Organ of Prospection

Mapping the Goethean science approach as articulated by Irwin, the following observations on *The Museum of Food* banana eating exhibit have been made:

- O) The preparatory stage: There is a freshness to the observed world of the future, a newness in relation to food and consumption. Between the present and the future world changes have occurred. The world and the initial experience is both familiar and strange simultaneously, inviting curiosity without debilitating fear. Enough of a storyworld and mediated experience is present to provide adequate context.
- Exact sense perception: Initially participants and audience work to sense and perceive the internal logic of the storyworld around them, a world still somewhat separate from their own in time and imagination. The senses are engaged, visual observation as well as sound, touch, smell and eventually taste. Participants begin to enter into the parts – dialogue, artifacts, emplotment of the historical future events.
- 2) Exact Sensorial Imagination: Participants begin to discern the future storyworld through the parts and the relationality that emerges from co-sensing into the emerging future. Participants increasingly engage in the storyworld or storyfield, expressing variations on the coming into being of the form of the future, emplotting variation through prospective anticipation of the whole. The hermeneutic nature of the storyworld starts to clarify, revealing the past, present and future and wholeness through the parts as materialized by participants, objects, and plot points entangled within and throughout the storyworld.
- 3) Seeing in Beholding: The essence of the future story being experienced becomes clear to participants as their sense of relationality to the future and confidence grows as they deepen into the future and welcome emergent variations. The future storyfield speaks back

to participants as the dynamical force of the anticipatory narrative takes on a "life of its own." By embracing variations, participants enter the dynamic flow of the story, reanimating the story through regenerative and restorative gestures. To participate is, by definition, to take part in something. Put slightly differently, to take on a part OF something. Participation, then, is to embody and take on the beingness of a part in order to sense and shape the expression of the dynamic whole. Extending this definition to an experiential future, the activation of the prospective storytelling field and the invitation to participate provides the conditions in which variation emerges and the parts perceive the whole.

4) Being One with the Object: The participants did not reach the stage of being one with the object – in this case, the phenomenon of the storyfield of the experiential future. In this final stage, the form of the object or phenomenon, here the future story, "becomes its own explanation" (Bortoft, 1996, p. 75). Perhaps, given more time to inhabit the world of the future, or providing replicable opportunities for participants to re-engage in the storyfield of the experiential future, this stage would have been achieved.

Imagination as an organ of perception "is done by using the sense to systematically come to know, or 'dwell' in, the different plant parts, and in so doing encounter the wholeness of which these are different expressions" (Kossoff, 2011, p. 80). Storytelling as an organ of prospection requires the audience or participant as both an observer and actor, as both sensing the field of the whole and active participant as a part, to dwell in the moment of the prospective time-space as it unfolds. Well crafted experiential futures allow participants to be parts of the whole and to dwell in the future in such a way as to facilitate emergence and variation of the whole, thereby undermining old and used stories about the future. Variable constraints on the success of participants to achieve a oneness with the phenomenological experience includes previous participant experience, vividness and strength of the storyworld, and duration, among others. Moving from a critical and academic lens to an action research posture, we can thus propose that the crafting of new and generative futures so important to imagining systems level transformation through approaches such as Transition Design, is an exercise in awareness, observation, and formalism. It is the form, the SHAPE of the story which is simply the contours of the whole, in which the greatest source of innovative and imaginative spirit lies. This co-creative storytelling as an organ of prospection becomes an act of restorying which enables this imaginative re-rendering and perception of various configurations and imbues the larger storyworld of the experiential future and primes participants with "the different metamorphoses that exist as potentialities" (Kossoff, 2011, p. 80).

## Conclusion

Futures thinking has long been concerned with cultivating multiplicity in its frameworks and methods, a multiplicity that more contemporarily has been critiqued and reframed as lacking plurality (Bisht, 2020). In Goethean science, this tension is not new. Bortoft contends that unity may be found in multiplicity, but that multiplicity cannot be derived from unity. Moving away from multiplicity to plurality in futures conception, seen through this sleight of hand, becomes a redundant exercise. The problem is not the instinctual foresight tendency towards multiplicity in futures without plurality, rather it is the reduction of multiplicity into unity, a reductivist shorthand that is applied both prospectively and retrospectively, which then cannot be recycled back into multiplicity. "This is the mechanical unity of a pile of bricks, and not the organic unity of life" and must be "understood intensively, not extensively" (Bortoft, 1996, pp. 84–85). We see this unity in processes of visioning and consensus storytelling where output is concentrated into a singular agreed upon path forward out of a multiplicity of future stories. Thus, "the polyphony of unmerged voices" must be sustained to avoid the reductionist monological masquerading as unity (Boje et al., 2021, p. 112). The "bricks" of the future are organized and constructed extensively, when they must be co-constructed organically and intensively.

Storytelling as an organ of prospection is a dynamic, participatory mode of engagement, a co-construction of the future through the shared field of a future narrative, held together through wholeness, adapting variations and offshoots of the future through modes of openness, improvisation, and experimentation through the parts or elements of the story. To tell new and generative stories about the future, we must first imagine other stories about the future.

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