Writing as Crystallization: Innovation Beyond Linearity and Speed

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Abstract
This paper is concerned with innovation and inspired by crystallization as a methodological and textual practice. It does not solely claim crystallization as a framework for researching innovation, but in its multi-faceted perspectives and vocabulary seeks to do crystallization, that is, to represent and perform innovation. This endeavor is necessarily multi-temporal in the sense that the parts are not assembled to produce a linear argument or narrative. They do not come together nicely in the end, and yet they perform an antidote to manageable, hurried innovation. As such, it should be read as a counter to the idea that innovation can be forced forward, and equally as an invitation to take time and make space for ideas, thoughts, and problems to meander and for inspiration to come from unexpected sources, in innovation efforts and in research. Some readers may be inspired to write and add more partial perspectives, thus contributing to ongoing knowledge creation about “innovation” and “writing” and the abundance of ways in which the two can combine.

Keywords
innovation; crystallization; novelty; temporality; writing
**Introduction**

This introductory section provides the aim and rationale for the composition of the paper. First, I introduce “innovation” and problematize a conception of innovation as linear phases that can be managed and accelerated. I then put forward the idea of qualitative research and in particular writing as “crystallization” and argue why it assists problematization. Finally, I explain “tiny texts” as a writing practice and explain how and why I produce tiny texts. These three parts that make up the introductory section about innovation, crystallization, and tiny texts are intended as a framework for a critical-constructive comment on the role of innovation research that is so easily politicized “in these times of efficiency hysteria,” as one reviewer of an earlier version of this paper aptly remarked.

The paper is a written exploration into ways of playing with ideas about innovation as light fractured through a prism. As such, it should be read as a counter to the idea that innovation can be forced forward, and equally as an invitation to take time and make space for ideas, thoughts, and problems to meander and for inspiration to come from unexpected sources. It is a text that seeks to make explicit that academic language (like all other language) is a constitutive force that creates particular views of reality and the self and thus seeks to illustrate that “there is no such thing as ‘getting it right,’ only ‘getting it’ differently contoured and nuanced” (Richardson & St. Pierre, 2008, p. 478). When we take seriously the idea that writing is constitutive, writing is world-making (Wegener, 2023b). So, what should they look like, the worlds we want to make? Accordingly, the question that has guided my writing is:

How can the notion of crystallization assist the writing of a multifaceted text about innovation that exemplifies what it is saying?

**Innovation**

Since my doctoral studies (Wegener, 2013), I have had a double interest in studying innovation as an empirical and conceptual phenomenon within elderly care education and at the same time experimenting with ways of writing about it. Through interviews and field studies with care workers, managers, teachers, and students, I have traced change imperatives and initiatives, and asked about the concept of innovation: what does innovation mean to them and, if they participate in specific change activities, would they describe them as innovation? I have found that innovation takes on three very different meanings: as a mindset (a generic approach to life and work); as an activity (top-down initiated innovation projects or bottom-up creativity that turned out well); and as a commodification of care (new technology, service catalogues, and checklists) (Wegener, 2012). Oftentimes these meanings occur in combination, in collision, and they are always in flux. In various research projects, I have found that the field of elderly care education is permeated with
innovation imperatives and innovation policies, and that innovation is a “floating signifier” open to many interpretations and useful for various agendas (Wegener, 2021; Wegener & Aakjaer, 2016a).

Zooming out, innovation in elderly care education is a more or less constant concern among politicians and practitioners in the field (Anvik et al., 2020). Innovation – often in the form of “innovative thinking” – is also identified by UNESCO, the OECD, and other policy and stakeholder organizations as denoting competences required for a sustainable future of the knowledge society – also called “21st century skills” or “Education 4.0” (González-Salamanca et al., 2020). For sure, as my participants in elderly care education teach me, innovation is not one thing. Complexity is found on the conceptual level, too. A meta study found more than 100 definitions of innovation (Morad et al., 2021).

One strategy I have found to be prominent in conceptual research, policy papers, and teaching material is to acknowledge complexity and then rush to pin innovation processes down into linear phases to make innovation workable in practice and analyzable in research (Wegener, 2016). It is alluring (and often requested by organizations and funding agencies) to produce phases and flowcharts and to suggest what innovation is and which processes and competences are needed to keep up the pace so as to get more innovation, more quickly. The corporate imperative “innovate or die” has occupied the public sector and society at large and captures the urgency and manageability associated with innovation.

The tendency to deal with innovation on the basis of linear temporality resembles the linearity in which an academic text is supposed to be structured: “problem definition-analysis-conclusion” is linear writing; “emerge-diffuse-implement” is linear innovation. Both processes are supposedly plannable, observable, and the output evaluable: A conclusion. An innovation. To illustrate why this is problematic, we can turn to the German philosopher Rosa’s concept of acceleration, which explains the never-enough logic of speed in Western societies (Rosa, 2013). Acceleration also applies nicely to academic work and in particular to academic writing, the success of which is overly associated with findings and societal impact. The academic imperative of “publish or perish” mimics the corporate imperative “innovate or die.” Here is an alternative.

Crystallization

The idea of post-qualitative inquiry as “crystallization” is a reply to triangulation as methodological validation (Richardson & St. Pierre, 2008). Crystallization also represents a messy, multi-genre and experimental approach to writing that serves me well in my intention always to say what I want to say in a way that would exemplify it, as composer and music theorist John Cage (2011/1961) has inspired me to do. I have written about this elsewhere (Wegener, 2014, 2022, 2023b), but a short detour here illustrates well what this text seeks to do, so please bear with me:
Cage composed the famous piece 4′33″ which instructs the performer not to play his or her instrument for the duration of 4 minutes and 33 seconds. On YouTube, we can watch (and hear) a pianist not hitting a key or a conductor guiding an entire symphony orchestra not putting bow to string or mouthpiece to lips. It is a silent piece in three movements, and it is not quiet. The piece 4′33″ consists of the sounds that the environment and the listeners make. There is coughing, wind whistling in the roof structure, audience whispering increasingly perplexed, even some getting up and leaving in anger. Is it part of the performance? Cage does not tell us that we make categories all the time; he does not instruct us to reconsider the category “music.” He makes us do the work. What I continually learn from Cage is that the form, the arrangement, the way a message is conveyed, is always part of it. Nothing new in that, I admit. And yet, in academia it is indeed possible (and in some communities even conclusive) to write about innovation in a form that suggests no innovation whatsoever. We all know that form is part of the message, however, this fact only hits us hard when that form is different from those we are familiar with. When we get what we expect, we tend to think of it as “natural;” when we get confused, we pay attention – like Cage’s audience.

As I assume is obvious by now, I am particularly interested in composing a text that does not solely claim crystallization as a framework for my research on innovation, but in its multi-faceted perspectives and vocabulary seeks to do crystallization, that is, to represent and perform innovation. This endeavor is necessarily multi-temporal in the sense that the parts are not assembled to produce a linear argument or narrative. They do not come together nicely in the end, and yet they perform an antidote to manageable, hurried innovation.

Above, I have outlined central themes of my research on innovation to explain why I find crystallization an apt approach. Writing-as-crystallization allows different genres and modalities into a single text and thus claims multiplicity by illustrating it (Ellingson, 2009). That is, the difference in genres, points of view or foci implies that none of the parts claims to be “the only way to represent findings” (Ellingson, 2009, p. 33). Each part of the text represents both a perspective and a comment to the effect that this could be understood and written otherwise. The fact that different genres are juxtaposed illustrates the constructed nature of the entire research endeavor – that all texts are conglomerations of choices and always already partial and incomplete.

My experiments with forms of writing beyond linear logics were sparked by fieldwork on innovation in elderly care education during my doctoral training (Wegener, 2013), where I experienced the need to produce accounts that paid homage to the

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1 https://www.youtube.com/watch?v=rDgHUj8sJaQ
2 https://www.youtube.com/watch?v=AWVUp12XPpU
“floating” nature of innovation, the contradictions, and multiple points of view I encountered in the field. I also played with the intertwining of my personal experiences and social realities because I found that my ambivalence, excitement, and confusion towards innovation – as a practice, as a rhetoric and as my topic of research – were gateways to insights into innovation in the field. I called it “turning innovation inside out” (Wegener, 2013), and I am not done.

Tiny texts

I still wanted to complicate this ongoing intertwining of researcher-I, empirical practice, and so-called body-of-literature (as if there is just one body, growing fatter and fatter) in writing and found that I could make short, self-contained texts that separately or together resonated with participants in the field, colleagues, and even journal reviewers and editors. I got the term “tiny text” from Anne Lamott’s (1995) wonderful advice book Word by Word: Some Instructions on Writing and Life and her practice of the daily decision to write just a “tiny text” to make the writing endeavor more manageable and less scary. Moreover, I keep returning to Nathalie Goldberg’s (1986) Writing Down the Bones: Freeing the Writer Within, a collection of short chapters which has inspired my own condensed writing immensely. Yet these are not academic texts – wherever the boundaries of that term may be drawn – and I keep trying out formats and aesthetics that will pass as academic. For several years I exchanged tiny texts and pursued the power of composition with a colleague/friend, and some of this writing turned into a book of tiny text exchanges (Meier & Wegener, 2017a) and a paper about writing with resonance (Meier & Wegener, 2017b). Later I found that I could sole-author papers with a similar effect by juxtaposing tiny texts without transitions – inviting the reader in as a co-creator of meanings in each new reading (Wegener, 2022).

An assembly of academic tiny texts resembles Phillips and Kara’s (2021) description of the academic essay, which in their terms is a freer, more creative form of writing, exploring, and playing with ideas:

The essayist eschews the certainties, predictability and linearity of formal academic writing. The essay is characterised less by signposts than unexpected changes of direction. With reference to Adorno and others, they emphasize essayistic writing as experimental, as when the writer turns the object this way and that, attacks it from different angles, and [...] puts into words what the object allows to be seen under the conditions established in the course of writing. (Philips & Kara, 2021, p. 56)

As a literary form, the essay is a form of inquiry. In other words, writing as crystallization does not seek to signify as precisely as possible the signified, but is itself part of the signified, a writing that is producing reality and broadening the ways in which reality can be experienced. It is text that places the stress “on something happening
rather on something made” (Benson & Connors, 2022, p. 21), disclosing (parts of) its own becoming. Accordingly, the following seven tiny texts are not texts about what innovation is, but an attempt to produce different knowledge and produce knowledge differently. Readers may be inspired to write and add more partial perspectives, thus contributing to ongoing knowledge creation about “innovation” and “writing” and the abundance of ways in which the two can combine.

**Crystallization: Seven tiny texts**

Now to the seven “tiny texts” (Lamott, 1995), not to be read as a linear argument, but each suggesting a perspective on and a way of writing about innovation. Then follows a discussion section, written with an aspiration to learn from writing as crystallization.

**Steering group meeting**

The meeting is to be held in our new innovation hub, in the Ideation room. I have parked in my old neighborhood, in the free parking lot in front of the building where I had my first office before we moved into the barracks and then into the former factory with a rustic vibe where I pay Q-park to go to work. I stroll at a leisurely pace between the low campus buildings; I’m ahead of time. In the lobby I meet my colleagues and the head of the steering group; they are ahead of time. We look to the high ceiling – four floors in this case, and a lot of glass. The external collaborators arrive; they are ahead of time. We look at the glass ceiling and talk about “densification.” The head of the steering group says that we must do without some square meters: we are starting a densification process where people will have to move a bit closer together in the offices. It’s better to do without square meters than staff, he says, and we nod. OK, I just learned a new word, says one of the external collaborators: densification. We are the only people in the lobby: this is not where the densification process is supposed to take place. There is no one at reception, but we can see a sign reading “Ideation” pointing out to the corridor on the first floor, and together we ascend the wide staircase. “Ideation” has a group set-up with black tables that, put together two by two, are hexagonal. We arrange them into a long table that meanders in and out. There are sourdough buns and some very large cinnamon rolls baked in a dish, coffee pots and cheese on a tall, light-colored wooden trolley. The coffee is good – I’m pleased I didn’t take my morning coffee and cheese bun on the drive as I usually do. My sandal is stuck in a piece of Sticky Tack, and while I stand barefoot and free my sandal we talk about all the exciting things you can do in such a space – along two walls there are shelving units filled with small plastic figures; it says “Objects” in black handwriting on a whiteboard edged with lambskin; there are posters with mind maps and a coat stand with six top hats in different colors. “Have you tried de Bono’s thinking hats?” I ask the manager of the  

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3 To this, my English proofreader commented: “There’s no grammatical problem here, but is it correct – a whiteboard with lambskin?” Yes, it is correct.
external collaborators, and she says no, but once she attended an innovation day: it was fun, but she had to run back and forth a bit to some budget negotiations. The head of the steering committee fiddles with the cuff of his white shirt and says it’s good to meet in a room like this, it makes it all more informal and we can come up with more ideas. We are so happy with the new building and all the possibilities it offers.

During the break I have another cup of coffee and one of the cinnamon rolls. I’ve baked countless cinnamon rolls in my thirty-year career as a mom, but this one beats them all. I forget to make small talk. The canteen is good, says the head of the steering group.

After the break, we talk about innovation, new contact interfaces and mechanisms rather than efforts. Diffusion routes and robust collaboration models. One of the external collaborators says that they have set the bar high with a vision of extraordinary professionalism. The mantra now is strong communities. Her manager, the one who managed to attend both the innovation day and the budget negotiations, says that there is always a risk that something like this is hot air, but the room is full of energy now and a vocabulary that brings us closer to each other.

I’m thinking of a movie that I haven’t seen but have read a review of: After work. The main question in the film, and according to the review the only one explicitly asked, is: if you could get paid without having to work, how would you spend your time?

In the evening I have dinner at my neighbors’. There is asparagus, white and green with homemade hollandaise and fresh fjord prawns, boneless and stuffed chicken with new potatoes and a pavlova with raspberries from the garden, but the strawberries, cherries and blackberries are from the grocery store. There’s just the right amount of powdered sugar on top, and we say it’s too pretty to eat and then we eat it – two servings for everyone and three for the biggest of us. We are fond of guests, says my neighbor, otherwise there is not much to do other than wait for the next meal – when you are retired, it feels a bit empty between 10 o’clock coffee and lunch. At 11 pm I say thank you for the food and a pleasant evening, I have to get up tomorrow, you know. Poor thing, they laugh.

Novelty is not a property
There are different ways to describe the threefold process of innovation, e.g. as a new idea which is taken up and acknowledged as useful or valuable (Mulgan et al., 2007). Hartley (2013) argues for the value of analyzing the significantly different phases of innovation and describes the cycle of innovation as an analytical tool to help understand innovation as a complex and iterative process. However, the depiction of innovation in “phases” throughout the literature might give the impression of linear change processes (Osborne & Brown, 2013). I wonder why the literature acknowledges the complex and iterative nature of innovation and still recommends phase models. Even though some of these phase models are circular (or spiral-shaped), each phase is still suggested to appear in a certain sequence, the novel idea being the first. Phase models
may be genuinely restrictive of innovation in practice (Wegener, 2016). This is because the imperative of novelty – the new idea – often overshadows other important aspects of innovation. The preconception that innovation starts with something new comes to govern the management of innovation in unfortunate ways. The professional care workers and managers in my studies often talk about improvements they are proud of and find to work well, and they talk about significant learning that has led them to more competent problem solving. But they don’t know if these experiences deserve the label of innovation. “Maybe it’s not that new,” they say, or “We don’t really know when we came up with it, but looking back, we’re doing things completely differently now.” In other words, it is difficult, maybe impossible, to point out precisely the birthplace and time of an idea and what it looks like when it has been put into practice and creates value. There seems to be no beginning and no end. Several change processes are going on simultaneously, and they intertwine in opaque ways.

Other parts of research on innovation point to the fact that innovation is never genuinely new: the new often arises by combining already-existing knowledge, technology, or processes in new ways (Hargadon, 2002) or by changing routines over time (Evans & Waite, 2010; Feldman, 2000). Thus, novelty is not a property of the idea, but something that happens in processes of combining, tearing apart, re-combining and rude juxtaposing.

The prism
The morning sun is caught by the prism in my kitchen window. Myriad rainbow spots are sprawled over the white wall, and some have even escaped to the white-painted panels in the hall through the open door as if they have decided to elope from the group. Today I have an insistent voice in my head telling me I will not be writing anything of quality or interest. It paralyzes me when someone, anyone, asks me to write something specific. My texts must evolve from the inside (not my inside, the inside of the text itself). Or sideways, obliquely. Rebelliously, surprisingly. I like my texts to surprise me, as the science fiction writer Ray Bradbury once said (Bradbury, 2017).

I am trying to write about innovation within a defined frame, and although I have made the frame myself, I am bored and severely restricted. I feel I have nothing to say about innovation that hasn’t already been said. I can’t even write something I believe in myself. I (try to) write because I have this book contract and a deadline, and it is indeed deadly. The more restricted I feel, the more I discover that I can’t just write what innovation is, what this innovation agenda is all about, and the ways in which we can make innovation happen. I am so frustrated: I wish to tear apart the arguments about innovation for growth and global competition. I want to strangle the word “innovation.” I want to tell the readers: Here are my stories, here are my worries, my jokes, go find out your own truths. I want to say: I have nothing more to offer, but don’t buy the paced rhetoric that scares you with “innovate or die” logic. I want to write: All idea generation workshops, the best version of you and your company and the global market in its entirety – “stick ‘em where the sun don’t shine,
all right?”, as horror writer Stephen King (2000) so beautifully said about “all those messages and those morals.”

I look at the rainbow spots on my wall, and slowly, slowly, I discover ways to write. I write about jazz improvisation and the sweet spot (where the fresh and the familiar come together perfectly); I step back and dissect the notion of “a problem”; innovation is supposedly the cure, but for which disease? I write a chapter about innovation metaphors and muse over their ordinariness – a light bulb popping out of a brain, cogwheels, smiling stick figures or walls filled with post–it notes in bright colors. Innovation metaphors are certainly not innovative; how come? I round off the manuscript with a scene from a conference where I was supposed to talk about innovation and ended up talking about resonance:

I am at Agder University in Norway, to give a lecture on innovation. I am first on the program and am introduced as the guest from abroad. As I am about to begin, it turns out there is a small program item before me. The organizer has invited two of their students to play, and the two young men on guitar and saxophone play a jazz standard and then a samba. I’m not really nervous about my talk, but as I sit and listen to the music, I become completely present in the room in a way I’ve never experienced before a lecture. I feel a joy and gratitude to be right here, right now. It’s as if the whole room of people, things and sounds are being synchronized.

My first PowerPoint slide is a close–up image of strings on a golden guitar case, and over the image I have written Resonance. I thank the young people for their fantastic introduction to my lecture, talk about my inspiration from Hartmut Rosa’s ideas about acceleration, resonance, and the idea that we must strive for “intelligent innovation.” I don’t have quite as much time as I expected because of the mini concert, so I skip the part of my presentation where I had planned to tell a story from a refugee aid innovation project on Lesbos about sewing life jackets and rubber boats into bags. But I finish on time. The organizer thanks me for my contribution and adds that the university are collaborating with the Lesbos project. As a thank–you gift she hands me – a bag made of life jackets from Lesbos.

I caught a poetic moment of complete sync in the lecture hall. I knew that no matter the reviews, this would be the final scene of my book. By writing this scene into my account, I turned into a transparent broker of what innovation can do. I became the prism catching the sun, pointing the reader’s attention not to me, the clever researcher knowing what innovation is, but to the variety of innovating as a verb, like myriad rainbow spots on a kitchen wall.4

4 A version of this piece was published as part of a blogpost: https://blogs.lse.ac.uk/lsereviewof-books/2017/12/15/materiality-of-research-word-matters-words-matter-on-fine-tuning-our-vocabularies-of-academic-writing-to-become-better-writers-by-ninna-meier-and-charlotte-wegener/
On time

*Revolver* was released on 5 August 1966. The Beatles were retiring as a live band and, freed from the screaming crowds, the band made abundant use of studio technologies that would never work on a stage. I have often felt out of sync and displaced, and occasionally still do – discovering gems way too late and longing for things I have lost or have yet to find. I listened to Jeff Buckley’s *Live at Sin-é* for the first time in 2013, when I was finishing my dissertation. It was released in 1993, when I was mature enough to pay attention, but I didn’t. I found The Band’s groovy *King Harvest* a month ago, never before having bothered to browse the album *The Band* although *Across the Great Divide* has been with me forever. My longing has to do with this feeling of events and places out of reach but working their gravity on me, and a vague sense of regret. A slight annoyance at being late or sidetracked. Sometimes, I was physically there, but only in the wake of the event realized that something important had happened. With *Revolver*, I was on time. On 5 August 1966, I was eleven months old.

My parents later told me that *Revolver* was a gift from my uncle, the tall one in curry corduroy trousers and an Afghan coat, only one year younger than my dad. My dad was bearded, too; he only occasionally had a haircut, but his hair was always shorter than my uncle’s, and his corduroy trousers were always blue, never curry. It was the countryside, after all.

With *Revolver*, I was on time, and present. I transacted with every bit of it; I still know the lyrics by heart, every chord and strange Indian timbre, which song is next, and the cover’s black and white collage and ink. I have never questioned its relevance and quality; I always knew it was art, and it is in my blood. Asynchrony is not an issue with *Revolver* as there is no disconnection between this album and me. Nobody introduced it or labeled it or commented on it whatsoever. It was just there, and so was I. When I was old enough to decide for myself and operate the record player, I sat in the beige beanbag near the speakers. Cover on my lap, I studied the ink-lined faces of Paul, John, George, and Ringo, George’s eyes and mouth clipped from a photo, and the paint and photograph collage emerging from their wormlike hair – like thoughts, or dreams. John had a black ear and Paul a white one with someone in it looking annoyed – is it Ringo?

The back of the cover was even better because there they were, for real, with sunglasses, casually as if they did not care at all about the photographer, and immensely self-reliant. Meanwhile, Taxman set off with a cough. I hummed each note and pulsed to each catchy or weird chord sequence as I floated on the beans. Over the years, I got access to the psychedelic universe as I learned the English words, although the oriental instruments and chords, the irreverent fading in and out, and the juxtaposition of genres had already taught me what was going on.

When my daughter wished for a record player for her birthday, my parents gave her one and with it, the old album. I tell her I knew it by heart before I could walk, and she laughs. I am *Here, There and Everywhere*, all at once (Samson et al., 2022).
I just needed to write this tiny text to realize I had my first and defining innovation lesson in that beanbag. What I learned is that you can juxtapose whatever you want and make powerful claims – if you are skilled enough. Sometimes people get it, and sometimes not. And it is more likely that people will give it a try if you put on your sunglasses and look as if you know exactly what you’re doing.

The sweet spot

The “sweet spot” is something that happens in jazz improvisation. The concept of improvisation directs attention towards the everyday and messy work from where innovation may emerge. When you improvise, you play something that is not in the sheet music and has not been rehearsed. But what you do is not accidental. There are clear frameworks within which you can improvise, and good improvisation requires skills, collaboration, and presence. When we want to allow for innovation, we must not blindly believe in order and control, but strive for nuanced understanding, flexibility, and willingness to take risks, says Weick (1998). His reflections on improvisation are based on the study of organizations, but he relates them to a wide range of areas in work and private life. You can improvise a speech, a dinner, and teaching. The point is that, for the guests to be entertained, the food to taste good, and the students to learn something, you must be skilled. Beginners usually need to plan in more detail and follow their plans more slavishly. The less experienced, the less leeway in terms of improvising.

If you want to improvise competently, you must know your material inside out, your technique must be flawless, and you must be present in the moment. When the jazz musician improvises within the sweet spot, she creates something that is so suitably unexpected that it is exciting and arouses curiosity. If the music moves outside the sweet spot, it fails to capture the audience’s attention, because the music is either too boring or too strange. Being “boring” or “strange” is not a property of the music, of course: it relies on the audience, the atmosphere, and the musicians’ skill and attitude.

When jazz musicians compose music on the spot – when they improvise – they have to be creative under pressure, says Weick. Improvisation is the creation of art in the moment and cannot be undone. It is not pure intuition or spontaneity and not at all coincidental. It is a handling of material: leaning into a pulse, following a series of harmonies, and relating to a melody. The quality of the improvisation depends on the extent to which the musician has built up a base of musical knowledge and technical skills, including a myriad of conventions within the genre. In addition, the quality depends on the musician’s ability to formulate an idea logically, convincingly, and expressively.

An improvisation, as a noun, is a transformation of an original model. Improvising, as a verb, is a variation that moves further and further away from the original and eventually turns into a new composition – a completely new way of solving the task. This means that the less you let yourself be guided by the original melody or work...
routine, the more sensitive you must be to other forms of guidance. You must be guided by what you know and what is manageable to you and to the moment as it unfolds. Improvisation requires temporal awareness and trust. Weick says that this is why full-scale improv rarely takes place in paced and uncertain environments.

**An existential microcosm**

I am not done with Weick and improvisation. Improvisation is a balance between know-how and ad-hoc, the ability to repeatedly exercise one’s knowledge and skills in a new situation; it is new wine in old bottles. His point is that both small-scale (incremental) and large-scale (radical) innovation have their origin in something already existing, and that the more skilled and present we are, the more we can free ourselves from the original. Successful improvisation aims at, in Weick’s wording, clear and emotional communication that is logical in an unexpected way. These are indeed ideas transcending traditional dichotomies. Clear and emotional, logical, and unexpected.

This improvised communication is impossible if you plan it, and that is exactly the point. A jazz musician must act in order to think, and the form arises from what Weick calls retrospective meaning-making: each new musical phrase is created on the basis of what was created just before, and in this way a structure emerges. It is not decisions that are made, it is meaning-making that happens by constantly looking backwards while creating forwards.

Improvisation requires responsiveness – you cannot just listen to yourself and to what you just played in order to build the next phrase on it; you must also be responsive to the other musicians and to the audience. You must be proficient in your profession, and you must practice every single day, but you can only make it happen by throwing yourself into it – by taking action and sensing what is going on. You create meaning retrospectively. This is the core of successful innovation according to Weick. You don’t know what has happened until it is too late to do anything about it. You create something out of what you have at hand, and it all takes place in a public space – an existential microcosm. In jazz music, this microcosm is the musicians and the audience, instruments, sound systems, the jazz club, the drinks and much more. In elderly care education the microcosm is teachers, mentors and students, technology, curriculum and regulations, classrooms, internship facilities and much more.

The point, says Weick, is to understand the balance between order and control on the one hand, while being open to innovation and autonomy on the other. This perpetual balancing takes place in many areas of life besides jazz, and Weick mentions cooking, dancing, traveling, chess, love, marriage, singing, painting, war, therapy, and more. He mentions conversation, and here is something of great importance. A common problem of improvisation is self-absorption. The worst people to work with are those who are only waiting for you to stop talking while planning what they themselves want to say. They forget to listen.
Altered inquiry

In an essay on the relation between reality and writing, David Foster Wallace reminds me that “words are both symbols for real things and real things themselves” (Wallace, 2012, p. 263). To engage with words as real things and sense the materiality of words, I need books, not just the screen. Books are containers of words, but they are (also) material to be handled beyond reading – I can write in them, make dog-ears, and even transform them. I am in urgent need of books as material to ground the ever-floating signifier “innovation.”

Altered books are a therapeutic method, but I want to find out if the making of altered books can also serve as therapy for a stuck innovation researcher who loves words, but not the ones she finds in much innovation rhetoric. I am venturing into altered books as a method in my quest for altered vocabulary. At first, altering a book seems like a destructive act. You take a book – a thing that is supposed to be read, cherished, and displayed on a shelf. And then you start tearing out and gluing together pages, painting, writing, cutting, and collaging. It seems irreverent beyond words.

Searching the literature, I find that altered books are present in research papers mainly as the object of research: researchers initiate or observe processes of altering books as a therapeutic method for building self-efficacy, healing trauma, and handling life transitions. Researchers write about other people making altered books. However, looking into the publications on art-based research, one paper on altered books as research method pops up: a doctoral project in a Creative Arts Therapies program (Chilton, 2013). As altering books involves collaging and writing poetry, we can learn more by looking into the vast literature on art-based research, and maybe revisit the idea of upcycling (Wegener & Aakjær, 2016b). To me it seems especially tempting to upcycle books because the book is such a value-laden medium in academia – embraced with devotion and yet often ignored in its impractical materiality as more and more words are now digitized.

Books have a tactical appeal, and often some aesthetic quality, which I find crucial to my versatility as a researcher. Working solely in front of the screen makes me dull. I am always in search of new ways of connecting (with) words (Wegener, 2022). Art-based research is considered a third approach together with qualitative and quantitative methods, an approach with the power to “alter the rules of science through methodological innovation” (Muhr, 2020). Muhr considers art-based research a methodological boundary object between the arts and sciences and (referring to Leavy, 2017) invites “more creativity, spontaneity, and aesthetical value into research” (Muhr, 2020). You don’t have to be an artist to engage in arts-based research – arts-based research uses or is inspired by art for data production, analysis, interpretation, and/or representation (Leavy, 2020). Leavy suggests that the arts can be utilized for their transformational capacity because “languages, practices and forms of art allows us to think and therefore see in new ways” (Chilton, 2013).
Research often involves finding patterns, organizing material, and making categories. I love categories. I am endlessly fascinated by processes of categorization and the ways in which categories influence meaning-making, opinions, and actions — and vice versa. I am, however, a miserable categorizer. A journalist once interviewed me about decluttering, and I invented a term for my own strategy: *random archiving*. I just allow papers, notes, and sketches of ideas to pile up together with the kids’ drawings, newspaper clippings, and letters that made it all the way to my physical mailbox. Thoughts and messages springing from life lived, turning slowly but steadily into mess until I need to make new space on the shelves and take some time off to declutter and discover unexpected gems as these old ideas emerge from the pile to combine with my present interests and questions. A physical archive may tidy up this strategy. I tentatively alter an inherited art book into a folder index. It looks almost like those rotation devices for address index cards, except that it doesn’t rotate. Solid ground and no rotation are fine for now. Now I “just” need to make up the categories, write labels, and organize material between the folded pages. My first altered book sits on my desk and reminds me of my wish to keep playing with material and organize it into ever-new categories and combinations.

**Discussion**

I was particularly interested in composing a text in which I did not solely write about crystallization as a methodology but actually performed crystallization, that is, crystallization as a textual practice. This is different from traditional ways in which an academic text should be structured. Hence, I did not jump right into crystallization, but attempted in the introductory paragraphs to explain the structure of the text and its justification. Then I juxtaposed seven tiny texts, claimed, and disclaimed categories, and suggested various takes on innovation. I sought to combine the political and the privately felt in a practice of “sociological imagination” suggested by Mills (1959), who notes that researchers can “understand what is going on in the world and understand what is happening within themselves in their capacity as tiny points of intersection between biography and history in society (in Brinkmann, 2012, p. 18).

As I am writing these condensed texts and compiling them into a larger text, I am sensitizing myself to aspects of innovation by zooming in on these tiny points of intersection. These points do not follow a sequential logic but take place in an extended “Now” that embraces a simultaneity of thoughts and experiences. In doing so, I am creating an antidote to the logic of speed and urgency found in policy rhetoric (and too often mimicked in scholarly innovation literature) as well as in the logic of academic conventions that favors unambiguous findings and measurable societal impact. I am learning from Weick (1998) that full-scale improvisation rarely takes place in paced and uncertain environments. With Rosa (2019), I suggest an alternative; one that may involve slowing down, but most importantly an alternative that allows for resonance,
which in this case means abandoning linear academic reasoning and trying out meanderings, detours, and potential dead ends.

Just like any other research account, however, crystallization is fashioned by the researcher, who exercises power through inclusion and exclusion, vocabulary, and composition. In terms of power, Ellingson (2009, p. 40) suggests “a profound awareness:”

> It helps to keep in the forefront of your mind that every time you make a claim as you crystallize, you do just that – you *make a claim* on the trust of your participants, on the reader’s time and attention, and on the collective body of knowledge in your own and related disciplines.

Ellingson (2009) emphasizes that writing as crystallization does not solve ethical problems related to distribution of power, but she suggests that crystallization assists the researcher in resisting easy categorization, in intertwining individual experiences and larger social realities, and, overall, in representing contradictions and multiple points of view. Moreover, to me, crystallization is not solely power handled in the least violent way. It also reflects the way my mind works – I understand things through a “simultaneity of living, reading and writing” (St. Pierre, 2011, p. 620). To catch ideas in their temporariness between my living and my reading, I write these essayistic tiny texts. The first iterations take place in my journal and, initially, a tiny text is never intended for publication. I write this way because it allows me to step out of the linearity of academic reasoning and write myself into to the present.

Mills (1959) insists that researchers should not allow public issues as they are officially formulated to determine the problems that are taken up. Taking advice from Mills, innovation research must not just study the innovation concept and innovation practices, but also keep playing with and exploring alternatives to dominant policy logics of linearity and speed. Rosa (2019) says that the counteraction to speed is not going slow, it is resonance. Resonance dissolves the dichotomy of fast and slow and makes us move towards what he terms *intelligent innovation*. This is what I attempt to study empirically in elderly care education, and it is not so hard. The hard part is the writing. How to combine representation and performance? How to combine truth claims and suggestion? In this text, my reply is the seven tiny texts arranged into a pattern using crystallization as a principle. It is an embrace of textual “products-for-now” (Samson et al., 2022), of knowledge production when objects from previously unrelated domains are brought together in writing (one hallmark of innovation) and with the hope that readers take up the invitation to bring into the conversation more perspectives and composition principles.

**Conclusion**

The seven tiny texts (Lamott, 1995), each a small, self-contained entity, were harshly juxtaposed, allowing for chance combination (Mills, 1959) and resonance (Rosa, 2019).
for me as I revised and arranged, and hopefully for you the readers, in your various readings. It was processual writing that admitted into my account events of the time in which I have been with my object (Benson & Connors, 2022), a simultaneity of engaging in and creating the topic of my research (Lund, 2021).

Crystallization creates a simultaneity of different aspects of a “thing” all happening in one Now. Crystallization also questions if it is at all the same “thing” you observe when you observe from different angles or perform crystallization in writing. The frames of reference, the metaphors, and the tools we engage with shape what we perceive. Metaphors are strong conceptual frames that informs sense-making and privilege some meanings while hiding others (Samson et al., 2022). Crystallization is a metaphor that shapes suggestions, improvisation, and chance combinations as research strategies, assists complexity, and dodges singularity: a conclusion, an innovation, is not enough.

When St. Pierre (2011) introduced the concept of post-qualitative inquiry, she abandoned methods understood as pre-described steps to follow and argued that post-qualitative research takes place solely on the methodological level (Østern et al., 2023). I have here countered this argument and suggested that even though methodological (understood as a philosophical, onto-epistemological concern) is crucial to a paradigmatic change from qualitative to post-qualitative research, we still do things on the level of method. We think with concepts and metaphors in certain ways which can be – not pre-described – but performed, shared, critiqued, and further elaborated for the benefit of intelligent innovation.

This text is not written to claim a new conceptualization of innovation, nor to claim one right way to write about it. Juxtaposing ideas in writing produces effects, not categories – the tiny texts are obviously experiments and could have been written and arranged otherwise. I am suggesting rather than concluding (Wegener, 2022). And what I suggest is that the way we write and the metaphors we use shape what we perceive. The ways to do it cannot be pre-described, but each attempt can be performed and shared. My fracturing of innovation included a sandal (and perhaps a mindset) trapped in Sticky Tack; rainbow spots on a wall while facing a deadline (meandering); it included listening to vinyl from a beanbag (sensation prior to cognition); theorizing from jazz improvisation (novel combinations); and a quest for making altered books (things are also processes). I hope these light beams will be read as an invitation to take time and make space for ideas, thoughts, and problems to meander, and for writing to meander as well. It is an invitation to listen like Cage’s audience, and to perform our improvisations in ways that make others listen. If you take up the invitation, please share.

**Author biography**

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care across workplace practices and vocational education. She is passionate about writing and seeks to do innovation in various genres and genre blends. She is also a writing coach and runs writing workshops and retreats.

References


