Mistakes Are the Portals of Discovery: James Joyce’s Mistakes and (Beuys’) Art Discovering Joyce

Christa-Maria Lerm Hayes
University of Amsterdam

Editing James Joyce’s work is an impossible endeavour: full of neologisms and featuring one of the largest vocabularies in English-speaking literature, how is one to know whether a word actually exists or if it was the error of the typesetter? Even worse—or more interestingly—Joyce valued mistakes. His characters are likeable, real people because of their errors and misunderstandings: somebody understands the newly invented wheels as rheumatic instead of pneumatic; in *Ulysses*, Molly Bloom doesn’t know what metempsychosis means and Leopold Bloom’s humanity is not only indicated by the fact that he doesn’t stand in peoples’ way (like most of us do), but that certain deviations from expected formulations appear around him: the “language of flow” is valid in and of itself, but language of flowers has more to do with Bloom (his adopted surname, a translation from the Hungarian Virag, means flower); “world” and “word” are confused. Bloom’s offer to an acquaintance to keep a newspaper and “throw[it] away” is understood as a tip to bet on a racehorse called Throwaway—and as an indication that Bloom has himself bet money on it. When the horse wins and he doesn’t then buy a round of drinks in the pub, the acquaintance and his friends are annoyed. Bloom does not experience this kind of hostility for the first time, but counters the men’s xenophobia with a most courteous and humble plea for love: “the opposite of hatred.” Misunderstandings are inevitable. The heretofore-unknown level of reality that we perceive in Joyce’s works partly owes to the fact that the writer makes active and positive use of his characters’ failings. He programmatically explores the gap between what one person says and what another understands. He employs this insight to construct his writings, as well as an ethics of and in his work.

In the following, I would first like to ask the question what it might mean, and why it might be important that Joyce embraces mistakes as portals of discovery; what kinds of mistakes may be meant, and then turn to some artists who have—with reference to Joyce—taken up such an understanding in their work. Lastly, I will use some scholarship on unintended negative consequences, in order to problematize art history’s work in our current, mistake-adverse world.

While Sigmund Freud conceived of the so-called Freudian slips, characteristic mistakes in language, as something to be interpreted in a particular way, i.e. as giving access to the speaker’s subconscious, usually to precise childhood trauma, Joyce considers mistakes and misunderstandings as something less one-dimensional. In Molly Bloom’s case, the unawareness of the meaning of metempsychosis may have to do with class and education, but in general, the line between understanding and not understanding, as well as the reasons for mistakes are not so clear-cut. His is not an “anything goes” attitude either, but openness exists in relation to mistakes and their interpretation. Mistakes are subject both to the particular character’s motivations, associations and abilities, but will also continue in the work’s reception, i.e. relate to those same factors in the individual reader. Multi-layered, creative reading of the works in relation to the recipients’ knowledge, language, age and cultural backgrounds are encouraged directly through the challenge that interpreting Joyce poses. Stephen Dedalus, the writer’s alter ego, mentions the diligent librarian immediately after proposing that errors are portals for discovery. But the challenge is not just book-based or academic. It is also of a more general nature. Joyce’s is a post-Freudian perspective: “who are we to control our scribblings,” is one of his dicta.

Umberto Eco’s book *Opera Aperta (The Open Work)* from 1962 consists of two parts, a general one that visual artists of the time on the European continent read with great interest and a second part entitled “The Poetics of Joyce.” James Joyce became the main example for theorising openness as the basis of both artworks and their active interpretation. Reading and viewing were no longer passive pursuits, but creative endeavours, empowering anyone to perceive and thus also to construct their personally inflected meaning, even to tell their own story in and through the interpretation of cultural artefacts, while going further and further into an ever-changing depth. While it is still possible to make (factual) mistakes in an interpretation of an open artwork, the task of the author is no longer seen as clearly communicating one
thing in only one way and the reader receiving it in the same manner. The recipients are rather assumed to have the intelligence to think and feel for themselves and the wish to take on responsibility for the future life of the artwork. Responsibility is an important word here. It does not imply that the viewer or reader is more perfect than the mistake-making characters in the book, but that the trust that active reception will happen to the best of our abilities is considered to be a compliment, as an enriching, important task for a diverse group of people who will accept it.

Joyce’s later work, *Finnegans Wake*, which employs over 40 languages, thus specifically calls for being read in a group that should be composed of as many differently educated and acculturated members. In 2007, I proposed that such a reading group, foremost among them was the one at the Zurich Joyce Foundation, Switzerland, which could or should be seen in the context of recent (relational aesthetics or social practice) visual art formats. The artist Dora García has created her *The Joycean Society*, documentary film of this group since in 2013 (Fig. 1).

A decade after Eco, Harold Bloom in his book on the *Anxiety of Influence*, 1973, comes close to establishing all strong and lasting interpretation as necessarily deviating from the intentions of the writer, hence likely “mistaken,” especially when that interpretation consists of creating new works of literature (or art) in response to an (overpowering) tradition. Harold Bloom concludes that stronger works display a more independent, distanced relationship between the predecessor or predecessors and the visual interpretation, which is also (heightened through the movement across disciplinary boundaries) necessarily a misinterpretation. As such it can shed revealing light on Joyce. Harold Bloom’s three revisionary ratios (out of six) that focus on such distance thus describe the state of affairs most appropriately: *clinamen, tessera* and *kenosis*. They are respectively a swerve away from the model, its completion and antithesis, as well as a humbling movement towards discontinuity.³

According to this understanding, artists have to engage critically with what went before, they have to update, misunderstand and thus make tradition theirs, revealing through the “mistakes” their time’s changed perspectives and assumptions. This on the one hand renders tradition, formed by subsequent work as it is, as always necessarily misunderstood. On the other hand it renders the tradition of continued, even increased, value for the present.

That could sound as though misunderstandings were there to enable continued canonicity and with it the retention of the status quo. This is arguably not how Eco and many theorists after him would have understood the notion of the empowered, active recipient. One can claim by contrast that such thinkers prepared the ground for widespread anti-authoritarian changes in Western thinking, art and politics around 1968: one began to consider it as inevitable and preferable to misunderstand creatively, albeit responsibly. *Kenosis*, the humbling movement towards discontinuity, signals towards such understanding of creative reinterpretation well.

In art, the exploitation of “errors” or, in this first instance, unwilled generation of form, is prominently associated with Max Ernst, whose decalcomania technique was put to use in works such as *Europe after the Rain*, 1933, a more or less randomly generated, alternative “map” of Europe, envisioning an unrecognizable continent after the catastrophic war it rightly predicts. This painting belonged to Carola Giedion-Welcker and Sigfried Giedion, friends of the Joyces in Zurich. Joyce thus dined underneath this work. Here, the artist’s non-willed production of creative form reveals the far-reaching mistake of the Fascists’ orthodoxy: to claim to possess logic and truth, i.e. not to make mistakes.

Marcel Duchamp’s *Large Glass*, 1915–1923, was broken in transport, whereupon the artist decided to leave it in this cracked state. While Joyce and Duchamp lived not too far from one another in Paris for years and Duchamp’s partner, Mary Robinson,
turned a first edition of Joyce’s *Ulysses* into an artist’s book with a slipcase, using maps, there is no proof that the writer and the artist met. I was able to trace the rediscovery of Duchamp in the 1960s (which proceeded on the basis of his notes e.g. for the *Large Glass*) as having been driven by artists like Joseph Kosuth, Richard Hamilton and Brian O’Doherty—all of whom had their ways of thinking and aesthetic preferences trained by obsessively reading Joyce, especially *Finnegans Wake*. Joyce’s (or again Stephen Dedalus’) dictum that he wished through his art to hold the “cracked looking glass of a servant” to orthodox Catholic Irish society may have less to do with Duchamp’s motivations to leave the *Large Glass* broken than with the wish to let chance enter the work.

Robert Rauschenberg’s lithographic stone broke in the printing process—and he decided to go ahead and incorporate the mistake, creating an all the richer, more complex work. Rauschenberg was married during his Black Mountain College time to Susan Weil, who has created a great many Joyce-related works. Rauschenberg himself was certainly exposed to Joyce’s literature, as was John Cage, the composer, who was also part of that Black Mountain community. Cage had discovered *Finnegans Wake* already in his youth, when reading it in instalments as *Work in Progress* in the avant-garde magazine *Transition* during his travels in Europe. Cage would later gather sounds in all places that are mentioned in *Finnegans Wake* and arrange them according to chance operation, using the I Ching: his *Roaratorio: An Irish Circus on Finnegans Wake* (1976–1979). The contention here is that there are no categorical mistakes: all sounds are “composable” and artists can create work out of anything, especially chaos, or “chaosmos,” as Joyce’s *Finnegans Wake* puts it.

My interest here lies not in further listing such instances of—directly or indirectly—Joyce-related incorporation of mistakes and / or chance into art, but with introducing an artist, who appears to have learned from this and from whom we can learn about certain ideal or inevitable ways of one tradition relating to another: Joseph Beuys (Fig. 2).

Like some of the artists just mentioned, Beuys read Joyce’s works during his formative years, when he was recovering from a depressive crisis and was searching for ways to create art that could respond to some of the urgent needs of the time, such as democratizing post-WWII societies. Beuys created works e.g., where he wrapped plasters or fet around sharp knives, meaning that one should not only dress a wound, i.e. attend to fixing the symptoms of a violent gesture or mistake, but also pay attention to what caused this wound, help the perpetrator. *Show Your Wound* is a motto and work title in Beuys’s oeuvre: acknowledging mistakes and failures is of course the first step towards preventing their violent recurrence.

Multiple work of Beuys’ consists of an early computer printout, into which he inserted some marks with a pen: a correction of what the machine had apparently calculated in error. The simple message is that one needs human intelligence, social warmth and flawed beings—also in order to correct the mistakes of also inevitably flawed machines and only seemingly fail-safe systems. This is not an anti-science stance: Beuys was the co-founder of the Free International University for Interdisciplinary Research. It is more an insistence on multiple, open perspectives.

How did Beuys then respond to the humanity of Leopold Bloom, to the mistake-embracing and social warmth of Joyce’s universe? To answer this would take a great deal longer than the time I have here. However, I can summarize some of my work on this question by pointing to Beuys’ so-called *Ulysses Extension* body of drawings, ca. 1957–1962. In Harold Bloom’s terminology, such an extension would be called *tessera* if also formulating an antithesis. It does: while in Joyce’s *Ulysses*, Leopold Bloom, the land-walking advertising agent, becomes the modern-day Odysseus, Homer’s cunning and humane seafarer, Beuys saw his task as introducing Penninus, a figure that shares the conical hat with Odysseus, and the traversing of land with Bloom: he is a personified connection of the Apennine mountains in Italy and the Pennines in Scotland, thus spanning Europe North to South. The Penninus motive, a schematic mountain with an “O” or sun on it, also resembles the book with spine and
open, roof-like covers. It is a motif borrowed from Joyce’s layout of a page from *Finnegans Wake*, where the letters form a delta (Greek letter and river delta) and are crowned by the sun, which is also to be read as French for “eau”—water. The cycles of water and life, occurring in books, in mythical time and today: such are the broad connections Beuys found in Joyce’s work. This led him in the *Ulysses Extension* drawings to formulate a proposal of sculpture for the site of the extermination camp Auschwitz, i.e. to confront his own recent history as a German soldier in WWII.

Joyce’s understanding of the materiality of language, as shown in the river-delta / water / book motif that Beuys transposed to Penninus, also led the artist to the sculptural materials that would become characteristic for him: the words he balances out in this drawing from the *Ulysses Extension* are “fat” and “felt,” as well as the German “fett” and “filz,” which resemble one another in Beuys’ handwriting.

It appears that Joyce’s own approaches towards traditions—to use Homer e.g. as scaffolding and a quarry to be pillaged—in general share the *modus operandi* of strong legacies with visual artists working on him. It is thus true of artists’ work in relation to Joyce that it cannot be fully justified in the straight line of a verifiable, cognitive and hermeneutic interpretation. What Derrida in *Specters of Marx* says of his relation to the Marxian heritage might be said of the strongest legacies. Each is a “performativinterpretation, ... an interpretation that transforms the very thing it interprets.” Only such faithful-unfaithful appropriation can be a responsible reception of such a legacy.\(^5\)

Visual artists in that faithful-unfaithful mode can reference their literary model quite directly without being called epigones. For instance, Joseph Beuys formulated a “confession of faith”-like text in a work on Joyce (*Joyce with Sled*, 1985) that could not have been addressed to a visual artist. Beuys, however, does not illustrate *Ulysses* or *Finnegans Wake*, he applies Joyce’s layout formulations, some motifs, but particularly his thinking, his multiplicity of sources, his stylistic means and what he considered to be the underlying humanity to his own concerns, historical and cultural position, language and art form. Beuys’ distance from Joyce, the degree to which he misunderstands the writer and expands on his work is the paradoxical measure of the adequacy of his response.

In *Joyce in Art* (Fig. 3), I showed about 100 works and in the book of the same title discussed about 200 artists in relation to the writer.\(^6\) I was able to ascertain that the socio-politically engaged artists of the 1960s and 1970s have the strongest claim to “owning” Joyce, but—again—not by illustrating the writer, who was too apolitical for Western literary scholars at that time, but by reacting to his writing in a faithfully-unfaithful way, re-interpreting his open works and self-assuredly, responsibly “mis-”understanding tradition.

Sarat Maharaj\(^7\)—also with Joyce in mind—had in 1994 developed a theory on the untranslatability of the other, juxtaposing multi-lingual *Finnegans Wake* and his own experiences of South African culture. He critiqued then still popular notions of multiculturalism and hybridity under the title of *Perfidious Fidelity* and posited that seeing the other, one should never remain unseen—and that hybridity has both positive and negative or impossible sides. What is not to be understood—or only to be misunderstood—can still be accepted or approached ethically, affirmatively.

When one takes such an unfaithfully / faithful notion and seeks to tease out its implications or possibilities, one may also turn to Luc Boltanski’s insights\(^8\) that dominant members of society are...
allowed to have an indirect, questioning relationship to tradition, power or the law, being trusted to understand, act responsibly in the best interest of the shared system, even to understand it in their individually independent way, which would include misunderstanding it to some degree. On the other hand, those who are dominated need to take a direct approach to what they are told, adhering to the letter of the instruction, in order not to be disciplined. Yet the (in those circumstances desired) compliance disables active participation in repairing the system, once any misunderstanding or mistake occurs.

Unintended consequences abound, social scientists tell us, when it is not acknowledged that interpreting traditions, laws or tasks is already an active, creative activity.9 When openness is not acknowledged, creativity and responsibility are discouraged or isolated, relegated specifically to narrowly understood artistic activity, mistakes of the unintended, uncreative kind do not only occur more frequently, but repair mechanisms also do not function as well or as quickly as they should. The paradox ensues that by being mistake-averse, mistakes occur more frequently and become worse. Educating people to have an active, responsible attitude towards traditions, rules etc. is inevitable. That Boltanski considers this to be a dominant attitude should not make us forget that the implication of what I’ve been saying is also that that dominance can never lack humility and creativity. It is not a positivist, static kind of assertion of power.

“Unintended consequences” is the fashionable way of referring to and accounting for grave mistakes: the use of that phrase has multiplied over the last years.10 The phrase acknowledges good intentions and implies that nobody has to be directly responsible, yet, something major went wrong: from the global economic “downturn” in 2008 and Brexit to the crisis of European universities and of course in the global natural environment, we appear to act against our own best interests in many core areas of our lives. Social scientists who have studied this phenomenon conclude that such mistakes are the result of attempts to control and regulate too tightly what should be based on strong cultures of human responsibility.11

Can we in art and art history draw in decision-makers, who have the wish to acquire cultural capital, and recommend or model different behaviors, different ways of thinking: valuing complexity, mistakes, individual responsibility and the paradoxical power, achieved through humility, that characterize art and culture? I do not know. I tried in 2014 by curating a small exhibition by a friend of Beuys12, Royden Rabinowitch, whose Joyce—and Brancusi-related Greased Cone, 1965, I showed in a new version in Belfast, Northern Ireland, for the benefit of politicians there (Fig. 4).12 The discussion was meaningful. It focused on local knowledge of working with rolled steel in ship-building, materiality and social warmth, the abject and the role of accepting disgust as not just characteristic of the other, the cone as symbol of hierarchy, etc. I discussed with the politicians the fact that loving affirmation of a flawed world, including our own flawed selves, as seen particularly in our bodies, is a necessary sentiment for a working democracy. Martha Nussbaum had made that point forcefully, and she chose Joyce’s Ulysses as privileged example for it.13 I cannot know the outcome of my small effort at mediating art to politicians.

Can societies learn from the mistake-valuing art and art-historical / humanities paradigms to underpin modest and sustainable futures? Again, we cannot tell. But that does not mean we should not try. On this way, art history should not—and today mostly does no longer—espouse certainties, focus on facts, dating and ascribing as aims in themselves, but it values the openness that draws viewers in, so that they are taken seriously as makers of meaning and that they can become partners in forging a new, creative responsibility. When social scientists study unintended consequences, they turn to what one could call indirect efficacy: they point to secondary stakeholders and wish them to be treated as primary.14 Art is—I would like to argue—a secondary stakeholder in any and all contexts.

Art history today acknowledges that it is creative itself—through (most often) the use of language. How words and images intersect can also not be determined once and for all, but requires to be re-captured or newly investigated at each turn.15 To work the inevitability of misunderstandings and mistakes into our prose is a writerly challenge, best tackled through considering words as artistic means, lacking fixity,
but in themselves prone to be mistakenly applied or wrongly translated. Joyce (like Freud) was of course intrigued that Michelangelo’s Moses should have horns, due to a translation mistake. Aby Warburg’s initiation as an art historian occurred through detective work finding the translation mistake that had let a very strange-looking person enter the usual iconography of the signs of the zodiac in the pictorial scheme of Palazzo Schifanoia. Beyond those prime examples of the fact that language is not static or a faithful mediator of meaning, Joyce’s many lists, borrowings from newspapers and other sources clarify that reality is here not represented but made speak through its diverse and flawed manifestations. He was after all Warburg’s contemporary, reflecting as deeply on the spectral Nachleben (afterlife) of tradition, which never exists as affectless, faithful copying.

What role (if any) does art history then play in mediating the habit-breaking mistakes and misunderstandings with which art operates? It is arguably already the discipline that has a more multiple understanding of itself than any other field (as visual culture, curatorial practice, exhibition history, aesthetics, cultural studies, at best: Aby Warburg’s discipline without a name). It is already employing the most diverse methods and modes of outcome (curated exhibitions, their catalogues, guided tours, monographs, peer-reviewed journal articles, co-creation with artists). All this is—in the light of what has been said—necessary. It is as it should be: the epistemological maturity of a discipline that once set out to discover fakes (intentional mistakes).

Each of our responses is calibrated to its situation and helps to construct what it interprets. Art history now does what it can to break the habits that lead to negative unintended consequences. It joins artists in doing so, in entering their ways (our joint ways) of thinking into ever-new environments. Beuys’ and his contemporaries’ (John Latham and Barbara Steveni’s Artist Placement Group should be mentioned)—their ambition was to do just that: to let artists’ thinking enter corporations, universities and government at a time when creativity still had not become a nearly meaningless buzzword in management circles. Maybe—ideally—that joint habit-breaking work will also occasionally challenge us art historians in our own habits and expectations of ourselves.

As far as mistakes and misunderstandings are concerned, I would lastly like to argue that we understand art accurately when we occasionally trade places with it. All this does not necessarily make ours the favourite discipline in the eyes of those who still consider it possible or desirable to avoid mistakes and misunderstandings (and they possibly do so through an impoverished or lacking cultural education). The under-funding of art and the atrophy of philosophy and art history, when no creative industries seems to justify continued existence, e.g. in UK or Dutch universities—is tantamount to “shooting the messenger,” as well as the doctor. It is gratifying to see that this tendency as far as art history departments is concerned, is the opposite in China. When only the canon and numbers of visitors or auction results are considered to be apt justification for our work, unintended consequences cannot but abound. We have the imaginative tools to show—and model through our work—art and art history to stand for what is otherwise. As I hope to have shown, what provides them is particularly art of the faithfully-unfaithful kind, such as that which responds to Joyce. We would like to continue to use these tools, interpret misunderstandings and, employing our own (inevitable) misunderstandings, value—thus possibly help to achieve—the kind of responsible humanity that art can help us to discover.

NOTES

1 The context is a discussion on Shakespeare involving Stephen Dedalus, Joyce’s alter ego: Mother’s deathbed. Candle. The sheeted mirror. Who brought me into this world lies there, bronzed, bronzelidded, under few cheap flowers. Liliata rutilantium. I wept alone.

John Eglinton looked in the tangled glowworm of his lamp.
—The world believes that Shakespeare made a mistake, he said, and got out of it as quickly and as best he could.
—Bosh! Stephen said rudely. A man of genius makes no mistakes. His errors are volitional and are the portals of discovery.

Portals of discovery opened to let in the quaker librarian,

Soft creak footed, bald, eared and assiduous.
—A shrew, John Eglinton said shrewdly, is not a useful portal of discovery, one should imagine. What useful discovery did Socrates learn from Xanthippe?
—Dialectic, Stephen answered, and from his mother how to bring thoughts into the world.

James Joyce. Ulysses (London: Random House, [1922] 2001), 243, lines 221–236. Initially, Stephen’s interior monologue is devoted to thoughts of his mother’s death. The mentioning of mistakes then irritates Stephen, as he has been accused of having made a mistake in not conforming to his mother’s deathbed wish by not praying for her. His life choices are determined by facing the effects of his “volitional
2 This happens in the so-called “Oxen of the Sun” episode of Ulysses.
3 Harold Bloom, The Anxiety of Influence: A Theory of Poetry (New York and Oxford: Oxford University Press, 1997), 14. “Bloom challenges the commonplace notion that [...] tradition is a benign and empowering source of influence on modern poets.” Instead, Bloom argues that for poets since Milton the achievements of their great precursors are barriers to their own aspirations to originality. “Influence,” Bloom insists, “is Influenza — an astral disease,” and against its threat, strong poets learn to protect themselves by “misreading” their predecessors. Such “creative misprision” operates through six techniques, or “revisionary ratios,” which together form the foundation for Bloom’s manifesto for a new “antithetical criticism.” Ibid.
6 Christa-Maria Lerm Hayes, Joyce in Art (Dublin: Lilliput, 2004).
10 The University of Amsterdam library’s “catalogus plus” records search results for publications with this phrase until 1999: 4,682 occurrences; 2000–2007: 7,472 occurrences; and 2008–2015: 11,174 occurrences.
11 Hannah Arendt already concluded as much — and Rashed and Mouyiasis maintain that Charlie Chaplin best encompasses their findings when he says: “more than machinery, we need humanity” and “Machinery that gives abundance has left us in want.” Rashed and Mouyiasis, Negative Unintended Consequences, 2 (from The Great Dictator, 1940).
12 The exhibition also contained two Rabinowitch drawings and a vitrine with Friedrich Schiller’s Letters Upon the Aesthetic Education of Man, 1794, material pertaining to Beuys’ presence in Northern Ireland, 1947, relating to Rabinowitch’s and Joseph Beuys’ gift of artworks to the Muzeum Sztuki, Lodz, during Martial Law in Poland, 1981, exhibited in Warsaw, Winter 1988/89 (when the Iron Curtain began to crumble), and Rabinowitch’s gift of the Greased Cone displayed to a public collection in Northern Ireland. The Ulster Museum, where the work was first planned to be shown, had cancelled the exhibition with two weeks’ notice and declined the gift. The Arts Council did not respond to an acknowledged letter offering it. The Greased Cone (together with any archival holdings relating to the exhibition) is now finding a permanent home at the Van Abbemuseum, Eindhoven, Netherlands.
13 E.g. in the passage: Ulysses’ “sexual explicitness and its insistent sexual focus can now be seen to have political significance. For, first of all, they are a linchpin on the project of restoring the reader to acceptance and love of the body, with all its surprises [...] a focus on the body’s universal needs is an essential step on the way to the repudiation of localism, therefore of ethnic hatred. [...] the novel suggests [...] that the root of hatred is not erotic need [...], rather, the refusal to accept erotic neediness and unpredictability as a fact of human life. Saying yes to sexuality is saying yes to all in life that defies control — to passivity and surprise, to being one part of a very chancy world. [...] this yes to humanity, Joyce suggests, is the essential basis for a sane political life, a life democratic.” Martha C. Nussbaum. Upheavals of Thought: The Intelligence of Emotions (Cambridge: Cambridge University Press, 2008), 709.
14 Rashed and Mouyiasis state: “By taking secondary stakeholders and treating them as primary, this research aims to provide an insight regarding [unintended negative consequences of innovation] in terms of a silent actor, the social natural environment (the society and the natural environment). As an outcome of ignorance, environmental destruction, due to corporate innovation-practices, eventually may lead to a future case of corporate crime. [...] The innovation value-add [sic] needs to consider non-value adding mechanisms regarding secondary stakeholder importance, for responding to unintended [negative consequences of innovation].” Rashed and Mouyiasis, Unintended Negative Consequences, 2.