VIII. The Moral Economy of Different Intentionalities

8.1 From Radicality to Reductions to...

Looking back, I would like to return to the concept of moral economy as we know it from Lorraine Daston, who defines it as 'a network of affect-saturated values that stand and function in well-defined relationship to one another (Daston, 1995: 4).' In this context, I described how the concept of morality enhances actions and objects with emotions (Daston, 1995: 4). I have shown that what is commonly called innovating in makerspaces and incubators are such moral economies. These are places where different people come together to negotiate an idea and a prototype that emerges from it. These places become marketplaces, and the participating actors become market criers, informing about their own ideas, expectations, imaginations, and desires. Studying these actors and their stomping grounds is highly beneficial.

> They answer old questions and pose new ones about how [a group of researchers and surrounding structures] at a given time and place dignify some objects, [in this case, the prototype] at the expense of many others, trust some kinds of evidence, [such as their data,] and reject other sorts, and cultivate certain mental habits, methods of investigation and even character of a distinctive stamp (Daston, 1995: 23).

Accordingly, I have introduced the objects the actors examine and explored the emotions that arise in the context of their creation and evolution. Both the developed prototypes and the directions, as the materialisation of implicit questions, can inform us about the society in which they emerge.

This does not mean the key figures of society give us information about quantifiable data. Instead, the moral economy examines what a group of researchers considers suitable or 'valuable' to devote themselves to, what problems they see in their field of activity, what they disgust or neglect at certain times, what they miss and regret, and whom they trust. We learn about their feelings and, thus, about social structures that give us information about which structures outside the group affect

them and how they deal with this, i.e. what obstacles there are and how they overcome them. Their mental habits, methods, and gaze tell us about their culture. Society and groups negotiate emotions. They show which feelings are 'permissible' to feel and which sentiments are socially acceptable. In terms of the triad of *thinking*, *feeling*, and *acting*, and next to it, the three different mental acts of *presentation*, *desire*, and *judgement* provide the frame of reference for what we evaluate: how we feel, think, and consequently act concerning something.

In this work, I have shown how ideas arise and to what extent their emergence emotionally charges them. Ideas are thus reflections of what happens to us in everyday life. Within the framework of our emotional and judgemental space, we evaluate what we consciously perceive, absorb it, and use this knowledge to let new things emerge from it. Problems become challenging sources of inspiration in the course of new spaces of possibility, which are supposed to optimise what exists in keeping with the idea of progress.

Accordingly, how we think about and imagine something says a lot about our ontological understanding: how we relate entities to each other to arrive at a reality where we can direct our feelings and values towards something. Ultimately, I have illustrated the many realities related to each other or at least attempt to be associated with each other as soon as an idea or a first prototype is brought into an incubator or makerspace to develop the technology further in a team with further patrons. I want to conclude by recapitulating these numerous realities.

1) The Radicality's Creativity

I found that motivation is emotional for inventors to become active, although it varies from inventor to inventor. I argued that how we feel represents our relationship with the world. *Our feelings and how we react emotionally express our previous experiences*. The ideas from the study arise from the oscillation of the inner and outer worlds. We make new additions to something already there and new combinations from what we know or spontaneous ideas that occur. Empiricism shows us that inventors often regard their ideas as having a saviour-like quality and as a 'Swiss army knife' seeking to improve the status quo. This understanding presupposes that a deficiency has been discovered or uncovered, whereby the perception of the problem depends on one's own experience. It is emotional because it depends on one's view of the world and its reaction. In this perception, there is a world judgement and, thus, an emotion.

The examples mentioned were mainly experiences from everyday work, examined in isolation in selected incubators or makerspaces. Contrary to what is often assumed, these ideas do not arise in a design thinking workshop. The innovators get down to the root of the problems and become *radical*, which ultimately constitutes their intrinsic motivation.

Discovering and collecting the problem is the prerequisite for what can later be called creativity. In the study, *the discovery of the problem is already emotional*. We find frustration, compassion, and burden as emotional expressions of the innovators' everyday observations. Offering a solution, i.e. the answer to the problem experience, is thus the result of what a frame of reference allows. They are, I argue, 'controlled solutions'. *Both emotions and innovations know their limits and adapt to their societies.* This means that not only is an idea managed in the course of its development according to an incubator, team, or milestone plan but also the emotions are adapted to what generally seems appropriate in a cultural framework. However, this phenomenon reaches its peak later, with the commodification of emotions to reach a broader consumer market (see the section on 'Emotions as Commodities').

It also became clear that what the interviewees described as motivation can be emotional. In particular, I think of Bahar in this context, who identified her anger at a grievance as her greatest motivation. However, it is a hurdle, especially in professional and scientific contexts, to name these emotions as such or to state them as a reason. Bahar said disclosing these feelings could be perceived as 'stupid' or pathetic. However, thinking and feeling about the prototype oscillate during the development process. Referring to the control of emotions and the boundaries observed, only the feeling that someone is willing to show becomes visible and collectively negotiated. Here, the first type of reduction begins, which we will encounter more often.

2) The Moral Impact

In these contexts, however, it becomes apparent that there is often a personal connection to the inventor's idea. This observation is not very surprising, considering the emotional content of the reaction to the outside world. My interviewees described a sense of connection, compassion for a grievance, and enthusiasm, excitement, satisfaction, fulfilment, and joy as feelings they experience when they have or develop a solution. A sense of power, as Karwen describes, is given to him when he thinks he can bring about an improvement through his act of creativity.

In this context, the purpose is equally articulated and emotionally linked, swiftly creating the impression that his form of altruism transcends his problem-solving aspirations. I called this state the *moral impact*, meaning *an inventor's activity claims to be meaningful and purposeful*. The described purpose and their conviction find confirmation through narratives that develop parallel to an idea. This confirmation helps to overcome uncertainties during the development stage. In this context, I observed religious parallels as the belief in the idea becomes an ardent desire. However, whether the prototype triggers this fire or the faith in it could be the subject of further investigation.

3) Structures of Innovation

Structures of innovation, such as through and in incubators and makerspaces, *are an expression of a creativity dispositif and the postulate*, be it political or social, *of being and becoming active*. Such spaces allow room for a 'could-be', i.e. possibilities and serve – in the eyes of the innovators – a greater purpose, one that they compose. Such possibilities, i.e. what innovators project into their prototypes, are a materialised expression of utopia. Through the inventors' activities, those spaces come to life. Thus, the structures are part of creative culture and, for this reason, one object of investigation of a moral economy.

Nevertheless, the structures also result in hierarchies influencing innovators, teams, and ideas. In these places, money often plays a role, exerting constraints. Especially during the COVID-19 pandemic, it became clear how many innovators, some of whom financed their ideas with their private funds, got into considerable difficulties that partly affected their livelihood. This problem is more likely to affect those who choose to work freely in makerspaces, as we saw in the M.lab. The situation is different in the incubator, which may pay a salary to innovators if it takes them and their ideas on board – in exchange for rights to the successful product. However, the management of an incubator can then reserve the right to make decisions during iterations or evaluations. The situation is different for Hydro GmbH, which I can only include here to a limited extent. With its breakthrough idea in the 1990s, the company is a well-established and permanent fixture in the field of hydrocephalus valves. This company is a success story in the German innovation landscape and, thus, an established structure. Its established nature means that fewer uncertainties influence its day-to-day business. What is interesting, however, is the observation that precisely because of the security, there are several possibilities to bring user perspectives, i.e. patient perspectives, more in line with the product and, overall, to focus more on taking the patient's needs into account. Accordingly, the problems and emotions mainly relate to the teams that feel more uncertainties due to the external structures.

4) Innovation's Obstacles

During the innovation process, there are continuous hurdles that the innovators, whether individuals or teams, have to overcome. The structural environment in which innovation takes place, who finances the project, and which actors are involved all matter, both in terms of the problem and the solution. As the empirical study clearly showed, *a lingua franca is often the solution or, even better, prophylaxis for potential difficulties*. As it turned out, mutual understanding of the professional backgrounds of the actors involved was a minimum prerequisite for this. It was also

mentioned that ethnic background should be considered to avoid misunderstandings.

Furthermore, shared frames of (moral) reference are beneficial. First, it is vital to work out the joint expectations of the project and the goals the team wants to achieve in practical terms. On a meta-level, the emotional frames of reference need to be aligned. This alignment means that common logic and moral concepts that correspond to common maxims must develop. Furthermore, the question arises of whether it is a foreign logic that the team adapts. If the horizons of expectation do not match, this may well mean a criterion for exclusion from further cooperation, be it the structural environment, the financier, or the team.

These questions are also essential since *a strong identification with the project and its work go hand in hand*. The values and logic that initially exist or develop within the team later stem from them as a jointly thinking collective. Making oneself understood is the prerequisite for the collaborative working and thinking process.

As my confidants described, the other side must be understood in its emotional world. *Mutual understanding includes retracing expectations, norms, and values and verifying emotional competence to achieve the mode of sociality.* Otherwise – as I have shown – conflicts arise, as we could observe with Felix and Bahar. Although there are other reasons, both feel they are not taken seriously by the other. Here, too, we encounter the reduction process described earlier, and hence, frustration arises when it is no longer about comprehensibility, and ideals have to be set aside to make more room for feasibility. As described, the market logic then takes hold, creating a different, new pressure, which is then – as we encountered in the incubator – passed on to the teams. I observed an accountability and transparency obligation for using public funds, which depends on success in sustaining its milestone plan.

Interestingly, *a team's efforts to create a common language, common goals, and an identity are then relegated to the background*. Once the incubator activates its role, the language and logic change as marketability comes to the fore, even though the incubator has benefited from the previous team's efforts, which were not necessarily in line with market logic but with the fulfilment of ideals.

As observed in the *Ellie* project, the website presents promises for marketability purposes that are far from fulfilment. Conflicts arise that promote excessive demands and disorientation. In addition, there are misunderstood hierarchical relationships and a lack of recognition or even suppression.

Bahar, for example, adopts a different, brasher behaviour as she feels oppressed and does not want to be ignored. In the decision-making process on prototype developments, we encounter frustration, discouragement, and dissatisfaction, and negative feelings influence decisions and hold further potential for conflict.

5) Trust as a Meta-Emotion in Co-Working Processes

In this context, it is unsurprising that *all the informants working in teams speak of trust as a means of creating a stable environment, which they consider necessary in the vagaries of the entire team and development process*. In the process, two types of trust were encountered, which I categorised as emotive and cognitive, whereby it became clear that the emotive category is often assumed, even if it indicates the other. The distinction would be negligible at first if not for the potential for misunderstandings. For example, when Jan speaks of trust, he means it cognitively and understands it as something a CV could exhibit as an extra skill. A critical aspect that can be ticked off when looking for potential team members is that an incubator has to buy in. Surprisingly, something as interpersonal as trust cannot be dispensed with, despite the logic of the market, although it seems to be a combination of interpersonal sympathy and the need for a market relying on such things. Financiers are aware that no team functions without what takes place on an interpersonal level, as these mechanisms cause people to develop sympathy and trust.

I found that entrepreneurs think of failure as a part of innovating. Apart from the desire to succeed, failure represents a Damocles' sword that hovers over innovators and their projects, whereby, sometimes, failure is a calculated position. The positive reinterpretation of failure is conspicuous in the entrepreneurial scene. When people talk about an 80% failure rate, this high percentage also needs justification, which is why they sum it up in a snappy saying that flits across the corridors: 'Fake it till you make it'. However, this saying also involves simulating results or a success story until they – hopefully – finally materialise. These over-optimistic narratives stabilise during the uncertainty that accompanies teams developing an idea. They are adapted, perhaps a 'tissue of lies', as Bahar describes it and provide justification and the need to implement the idea in times of uncertainty. Entrepreneurs make promises they cannot yet verify, which seems a common practice to maintain funding despite (and because of) best intentions.

6) Emotions as Commodities

Finally, my empirical research showed that *through continuous reduction, emotions eke out an existence as commodities*. An emotion culture develops that knows how feelings need to be managed in corporate culture to develop and become part of the marketing of a product. In particular, questions around authorship and (intellectual) property bring out feelings of irritation, insecurity, and fear. Viktor often describes feeling undervalued and functionalised in his work with the incubator. Ryan, on the other hand, feels pressured to withhold research data until his specific IP issue is resolved. Apart from being an individual problem in this project, this is also a challenge to the development of science, as it becomes apparent that he and his mentor

are becoming adjutants for economic purposes and are not allowed to act in their best interests as scientists. They imposed a duty of confidentiality on research data to commodify the idea, which runs the risk of becoming justiciable.

Such imposed regulations and structures in the incubator can be critical from several points of view, although the idea of public funding of innovative ideas is worthy of appreciation. While the accountability imposed on the incubator for transparency reasons due to handling public funds makes sense, conflicts with the internal expectations and self-designed business strategies are shared across the scene. As I had learned in the course of the survey, the incubator management was difficult to reach and accordingly, so were the teams that were placed through the management. Until the demo day, the projects largely remain confidential and only when the prototypes are ready for demonstration will the incubator make promotional films and present teams publicly.

The role of financiers, in general, and the Health Hub incubator remains dominant. Reductions mainly occur during evaluation processes in which the incubator interferes considerably in favour of feasibility. Its accountability – which is not only due to public money – seems to put the management under considerable pressure, which it passes on to the teams. We saw that such pressure manifests in reductions resulting in de-idealisation whereby the idea, with its original conceptions, gives way to a commodification process. 'Closeness' and 'empathy' are feelings that are necessary to get to a problem's root that otherwise fades into the background. With this in mind, the artefact could testify to a successful process of communication and rapprochement, but it ultimately does not remain so as feelings of empathy recede for the benefit of feasibility.

During the constant evaluation processes, the question can be asked whether the financier is not also part of the moral economy we encounter here. Moreover, this remains debatable until the end. This argument can probably be ruled out for teams such as *Feety* because the incubator, which finances the development, has long given the impression that it has yet to develop a lingua franca with the developers. This first manifests in the refusal to cooperate with the external consultant and finally in the fact that the original team was falling apart.

In the end, everyone wants to have their share. The incubator wants to be able to sell the rights to insurance companies. The external consultants want to sell their services to the incubator or the teams, and the team wants a functioning prototype that receives a security seal to satisfy the incubator. The incubator remains measurable by its number of out-licensing contracts; therefore, every success means a figurehead and vice versa; every failure means accountability. In this context, the demo day is a visual example of how narratives serve a purpose and become a performance act for emotions around the artefact.

The idea's purpose is 'retold' and manufactured in this show, ultimately generating emotions that appeal to the audience. Making a good impression is essential

because demo day becomes a sales stage to attract potential buyers, whether companies, insurance companies, or other financiers. For the teams of *Ellie* or *Feety*, the demo day involved prior practice with a theatre coach to tell a strategic and dramatic story that delivers a 'valuable' story in coherence with body language and emotions.

Ultimately, the emotions themselves become the product. Within the performance of a narrative to emotion, it is a process of accumulating many perspectives, from de-idealisation to functionalisation. In the process of gradual reduction, the emotions change their meaning. They are still world-making but have become flexible enough to serve a product or a market. *Emotions become functional companions and aim to reach or expand an audience, correspond to their ideas, or fulfil their wishes.*

8.2 ...Activity

Innovation is a collective term that arises from the self-image of our belief in progress. Through its broad application and the embedding of the modern belief in progress, it benefits from firm images and, through its imaginary form, permeates society, which, confronted with problems – whether individual or global – optimistically relies on the concept. It offers space for hopes, dreams, and wishes. The demand for the individual to make something innovative out of their imagination and ideas is tremendous. The idea cannot just remain an idea. The idea itself gains in value when it corresponds to a typical social idea of problem-solving. What we encountered are terms of increasing commodification that also permeate the imaginary and, thus, the emotionally inherent aspects. The imaginary and the creative have long since become an industry that has been taken up by corporate discourse, the DIY sector, and politics, whether in the call for more innovation and optimisation, an innovation union, or the idea of 'hacks'.

This realisation in connection with the reduction processes prompted a thought in me, especially in the last year of my work, that I have not been able to turn away from ever since: why is an idea initially built up and later reduced?

The multiplicity of an idea, the former vision, which certainly takes place individually at first, profits from the enrichment of many perspectives. Indeed, a shift in the focus of the problem would be more desirable, and yet plurality as such remains an enrichment. The one and the many ideas that become unified and perhaps ultimately indistinguishable in their iterative loops suffer from a certain point under capitalist market logic. The former enrichment of different ideals is reduced to a necessity, a profit. It is subjugated – to a system, a logic, a label.

Moreover, if I may now turn again to a theme of 'the one and the many', I would like to pose a question: why do we not enrich our ideas with what is already there but what we do not yet know? Why do we not enrich our perspective with that of others rather than reduce it again per our own logic? Why do we not start thinking of other

logic and ontologies? This would not be innovative in the sense of the unprecedented, but it would nevertheless be new. It would be the turning away from the progress that can only justify itself through a perspective that merely knows what is inherent in it. The problems persist, and the next label is already known: *sustainability*. Often, we find both tied together, namely being innovative and sustainable. Yet, the perplexity persists in both as we always find the hierarchisation of perspectives, logic, ideas, desires, and evaluations. Perhaps with problems that exist now, both highly evident and pervasive, we can introduce solutions already there, even if they are not in 'our world'.

During this ethnography and writing process, I learned that problems could no more be observed in a sterile way than a solution can be a sterile answer. Through the described reduction, which is ultimately an expression of rationalisation, on the way to further development, the teams lost a great deal of what they initially recognised as valuable and what is rich at the beginning subsequently becomes increasingly sterile. This mode harbours the dangers of a 'sterile fantasy' (Illouz, 2017: 114) as reduction is the confirmation of removal from former intimacy. By this, I mean the discovery of a grievance, a problem. To recognise and engage with a problem requires closeness, empathy, and intimacy, and the discoverer invests effort and care when they want to solve the problem and get to its root. When other actors do this together with them, a network of intimacies and closeness is created; their exchange, as I have described, takes place in their moral economy, and through their solution, the problem is addressed. At this point, I would like to link the dangers of a sterile fantasy with what Wilkie et al. criticised about a future design constrained by risk aversion (Wilkie et al., 2017). This risk aversion or rigid view of problems, for the purpose of the more popular linearity and predictability, is precisely those reductions due to a known and represented logic that follows from the above. In this respect, proximity to society and to a problem and, at the same time, a fearlessness that is not oriented towards the rationalities of the present is what we need to innovate in a visionary and, above all, future-oriented way. Yet, these days, fears and worries are justified, but not because we do not know what is to come. Weather services, climate researchers, and military experts predict and calculate the world's future through all kinds of technological tools and around the clock. Instead, the drive for predictability has checkmated us to where we can only tremble. What prompts our feelings of insecurity? Is it the persistent uncertainty, which, contrary to expectations, is tinged with hope? Or is it our inertia signalling that we are downplaying legitimate concerns? Our emotions—concerns, joy, fears, and enthusiasm—remain the most reliable indicators of what requires attention and accomplishment. We need them in all their diversity to respond to our environment adequately; these moments of reaction offer space to create.

Nevertheless, I am rewriting the final lines of this concluding chapter as we can observe how emotions persistently become orchestrated and choreographed by sev-

eral actors, e.g. the media, industrial companies and politicians that claim a certain emotional sovereignty of interpretation in everyday life. This idiosyncratic deprivation and recontextualisation of emotions not only signifies a misuse of authority but also the dehumanisation of human characteristics. Consequently, society is divested of its emotional autonomy and lacks interpretative sovereignty – a perilous circumstance for all. This alienation results in societal detachment from its core values and undermines opportunities for independent thinking, feeling and acting – all essential elements for autonomy, innovation and collaboration, and ultimately for creativity.