



Failing Diversity Dynamics

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ABSTRACT. Conventional diversity training consistently fails to alter behaviour; thus, this paper explores potential theories driving its failures/successes with conceptual and simulation models. Diversity training failure is a repetitive pattern that implores asking what structures may be driving the pattern and if the structure can produce better behaviour. The theories explored in the paper include those by psychology experts Jung, Brown, Peterson and McGilchrist, yet focuses on the hypothesis proposed by the Theory of Enchantment (ToE), founded by Chloé Valdary. The main dynamic hypothesis focus on how insecurities (triggering or resolving) directly affect negative behaviour, amplifying or diminishing diversity destruction. The theory is first expressed as a Causal Loop Diagram (CLD) and systematically expanded into system dynamics simulation using the Loop Stock Transform (LST) methodology. Three main scenarios are explored, revealing that “taking no action is not a solution”. Secondly, poor training may create long-term damage to people’s ability to deal with diversity, while, effective training that considers and deal with insecurity triggers could create successful diversity integration. Although the simulation is a qualitative exploration of psychological theories, it shows how system dynamics can expand parts of ToE and how diversity training can fail but also succeed.

KEYWORDS

Diversity, Qualitative Simulation, Theory of Enchantment, Loop Stock Transform

1. INTRODUCTION

Two men were casually sitting in Starbucks when one of the racially biased employees became fearful and called the police. The next moment, the police arrive and arrest both men, infuriating Starbucks customers (Calfas, 2018). The racially motivated incident led to Starbucks closing 8 000 stores and committing 175 000 employees for diversity training on 29 May 2018. However, hundreds of research studies dating back from the 1930s suggest that anti-bias training does not reduce bias, alter behaviour or change the workplace (Dobbin & Kalev, 2018). Often companies conduct the training to protect themselves legally instead of true transformation. Consequently, diversity training often frustrates the perpetrator and fails the victim (Lipman, 2018).



In 1776 Adams, Franklin and Jefferson proposed the motto '*E Pluribus Unum*' to the first Great Seal of the United States (Deutsch, 1923). The motto means 'Out of many, one'. Additionally, the horizontal Y represents converging diversity in the South African flag and is often combined with the Khoisan words '*!ke e:/xarra //ke*' which means 'Unity in Diversity' (SA Tourism, 2022). In the wake of the fourth industrial revolution, the world is more digitally connected than ever (DHL Group, 2021). Although the phenomenon is wonderful, it also requires the integration of very diverse ideas and cultures. Thus there is a real need to deal with the biases which prevent the integration of diversity and design the unity emerging from diversity.

If the diversity training framework conventionally fails, what are the driving dynamics leading to the failure? Can the system dynamics methodology be used to explore parts of how the diversity training fails and better theories of how diversity training could work? The system archetypes already point towards the fixes that fail pattern where the problem is solved with symptomatic solutions that worsen both the root cause and the symptomatic problem (Senge, 1990).

This paper will explore some of the major theories that propose a different approach to diversity training. The theory is then expanded using the system dynamics methodology into a simulation. Finally, the simulation is used for scenario analysis to explore some of the typical patterns found in reality and identify potential simulation insights.

2. PROBLEM STATEMENT

Conventional diversity training consistently fails while embracing diversity remains a global problem. Thus, the diversity failure needs to be understood. How can system dynamics be applied to explore the current concepts, challenges and potential dynamics at play to identify potential insights and approaches that work better?

3. LITERATURE REVIEW

3.1 LITERATURE BEHIND FAILING DIVERSITY DYNAMICS

In the past two years, the call to respect and include diversity has become prominent (Eswaran, 2019). In 2020 the recorded death of George Floyd due to police brutality was a trigger in the global Black Lives Matter movement (Silverstein, 2021). The movement is a call for diversity as the nuanced notion is that black lives don't matter and that we need to unite for black lives to matter. Beyond race, there is also a greater call for embracing diversity in the LGBTQIA community. In 2021, 375 transgender people were killed in hate crimes, the largest reported figure yet (Wareham, 2021). Promoting diversity is thus more about embracing each other's humanity and actively standing against dehumanisation. In the wake of these global needs, diversity training has become an essential part of community awareness (Hurix, 2020).

The conventional diversity training focuses on creating awareness of biases like white privilege, white fragility and whiteness (McWhorter, 2020). Each of the concepts are focused on conveying the deeply destructive behaviour within the underlying beliefs of white supremacy. It



explores the inequalities that still exist in society between different people. However, instead of the training assisting business in accepting diversity, many report that the environment worsened after the training (Executive Diversity, 2022). What made people less accepting towards diversity after being exposed to the inequalities within a race, gender, religion or sexuality?

Dr Jordan Peterson has studied human behaviour, practises as a clinical psychologist and is a best-selling author (Peterson, 1999). He observed how nature deals with diverse and different ideas during his research. For example, in a study on chimpanzees (Wrangham & Peterson, 1997), two different tribes of chimpanzees would be extremely violent to each other when in the same vicinity. Peterson attributes this to the animal's tendency to amplify their existing social bonds and reject the other, outside or alien presence. The proximity of the 'other' entity that looks like me but has different social norms is the most dangerous enemy.

The tension between self and others seen in the chimpanzees are also present within each human (Smythe, 2013). Carl Jung (Academy of Ideas, 2015) studied the human psyche and noticed that although humans primarily identify with their positive attributes, they wilfully ignore many negative traits. The negative qualities are often hidden from the waking mind, which Jung refers to as the shadow. The shadow is thus the 'other' within ourselves, which we do not wish to acknowledge since its nature does not fit into the values we reportedly hold dear (Academy of Ideas, 2015). Shadow work is the practice of facing the alter/negative ego, based on Carl Jung's work (Academy of Ideas, 2015), within us and realising that we all have a Shadow, which helps induce empathy for the 'other' person and compassion to oneself.

Dr Iain McGillchrist is a psychiatrist who has studied the human brain and mind for decades and is also a renowned author (Channel McGilchrist, 2022). In his recent work, 'The matter with things', he explores the dual nature of reality (including us) (Mackness, 2021). He postulates that the coincidence of opposites is essential for reality to maintain balance or harmony. For example, in order for a lyre to play music, it requires tension and the tension is produced by force between two objects opposing each other. If there is no opposing force, the string loses tension and the ability to produce harmonic sound (music). In application, the rejection of the shadow or dual nature of humanity might be creating the loss of tension within ourselves, which becomes balanced with increased tension outside ourselves. Heraclitus wrote, "There is harmony in the tension of opposites, as in the case of the bow and lyre" (Mackness, 2021).

Unlike chimpanzees, humans have been given far greater gifts of understanding which can help us deal with the tension within and without. Chloé Valdary experienced the outside tension between race and religion and was determined to contribute to a solution (ToE, 2022). She immersed herself into the teachings of deep psychology, historic freedom fighters and culture. She asked herself where do people invest their time, energy, and resources willingly with passion. She found that labels like Disney, Nike and Marvel all experience almost religious-like devotion (ToE, 2022). She hypothesises that these brands represent a desirable potential



version of ourselves, which we want to embrace, called enchantment. Her journey led to the ground-breaking Theory of Enchantment (ToE), a diversity training framework that helps people connect with themselves and each other.

The framework is rooted in love and compassion, which utilises contemporary art mediums to help connect people with paradoxical values (ToE, 2022). There is much focus in the workshops on introspection using 'shadow work'. One of the main differences between ToE and conventional diversity training is that ToE focuses on connecting divergent people in empathy. In contrast, the traditional approach aims to alter behaviour by increasing awareness of stereotypical biases. The latter often triggers group insecurities that lead to temporary conformity but deep unsettling internal insecurity, whose participants are unskilled in dealing with (Peterson, 2022).

Valdary hypothesises that triggering insecurities in an unsafe space without equipping the participants may lead to worse outcomes (Peterson, 2022). Consequently, the insecurity demands the ego to restore balance by taking on a supremacy mindset which breaks down the 'other' person's image to restore self-image. Valdary teaches that this destructive process is within all of humanity and that we need an alternative approach to deal with the insecurities and their triggers - ToE.

Dr Brené Brown echoes the sentiment of ToE in her latest book, *Atlas of the Heart* (Brown, 2021). Here she explains how the emotions of humiliation and disgust for other people are rooted in our insecurities and lead to de-humination of self and others. Also, this paper hypothesises that conventional diversity training portrays a Fixes that Fail archetype that creates more destruction due to triggering unequipped people to deal with deeply held cultural insecurities. The hypothesis is further explored with system dynamics in the following few paragraphs.

3.2 DYNAMIC HYPOTHESIS

The Fixes that Fail Archetype is chosen as a starting point due to training that initially dampens the problem behaviour but worsens the problem (Senge, 1990). The high-level Causal Loop Diagram (CLD) can be seen in Figure 3.1. The balancing loop shows the intention behind the conventional training and that it would lead to behaviour conformance to reduce destructive actions towards diverse individuals. However, the reinforcing loop indicates that conventional diversity training can increase internal insecurities and the need to feel superior. After some time delay, the need for superiority increases the tendency for people to break down the other's image. The breakdown takes the form of destructive behaviour, which worsens the initial problem.

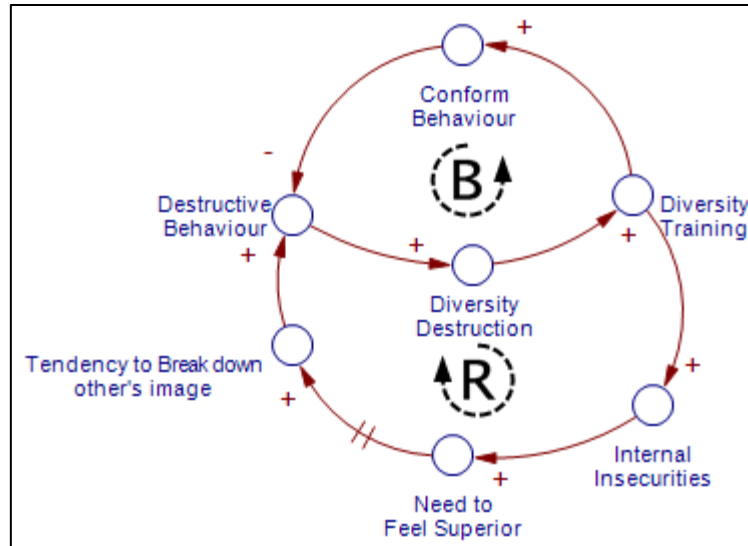


Figure 3.1: Reframed Fixes that Fail Causal Loop Diagram

The CLD in Figure 3.1 aims to capture the essence behind why diversity training could be creating more problems instead of solving them. However, it does not give the alternative ToE approach and therefore needs expansion. The main expansion is needed on the internal insecurities. Chloé Valdary and Jordan Peterson explore the potential deeper drivers behind the insecurities leading to problematic behaviour (Peterson, 2022). The perspective of self, relative to others can create a feeling of inferiority, which forces the ego to pursue more supremacy. The more superiority complex experienced, the more the ‘other’ person/group’s image is destroyed. The lower image of the ‘other’ increases the relative view of self. This balancing loop explained in the paragraph is seen as B1 in Figure 3.2.

The first reinforcing loop (R1), in Figure 3.2, shows how the insecurity induced destructive behaviour towards ‘other’ people leads to retaliation of the ‘other’. The retaliation often breaks down the image of self by triggering more insecurities. Higher insecurities reduce the relative view of self and increase the need to feel superior. The higher need for superiority reinforces destructive behaviour and insecurities. The behaviour is often seen where insecure leaders create higher orders of destruction despite having a good vision or intention (DFID, 2010).

The second balancing loop (B2) explains how the ToE framework addresses the problem. The ToE increases the internal awareness of insecurities and increases the application of ‘shadow work’ (or similar approaches). After some time delay, the practises starting resolving some of the deeper insecurities of the individual. Reduced insecurities lead to an improved self-image and less need for superiority. The B2 loop shows the power of the ToE to deal with destructive behaviour, yet the time delay indicates the approach needs long term adoption to be effective.

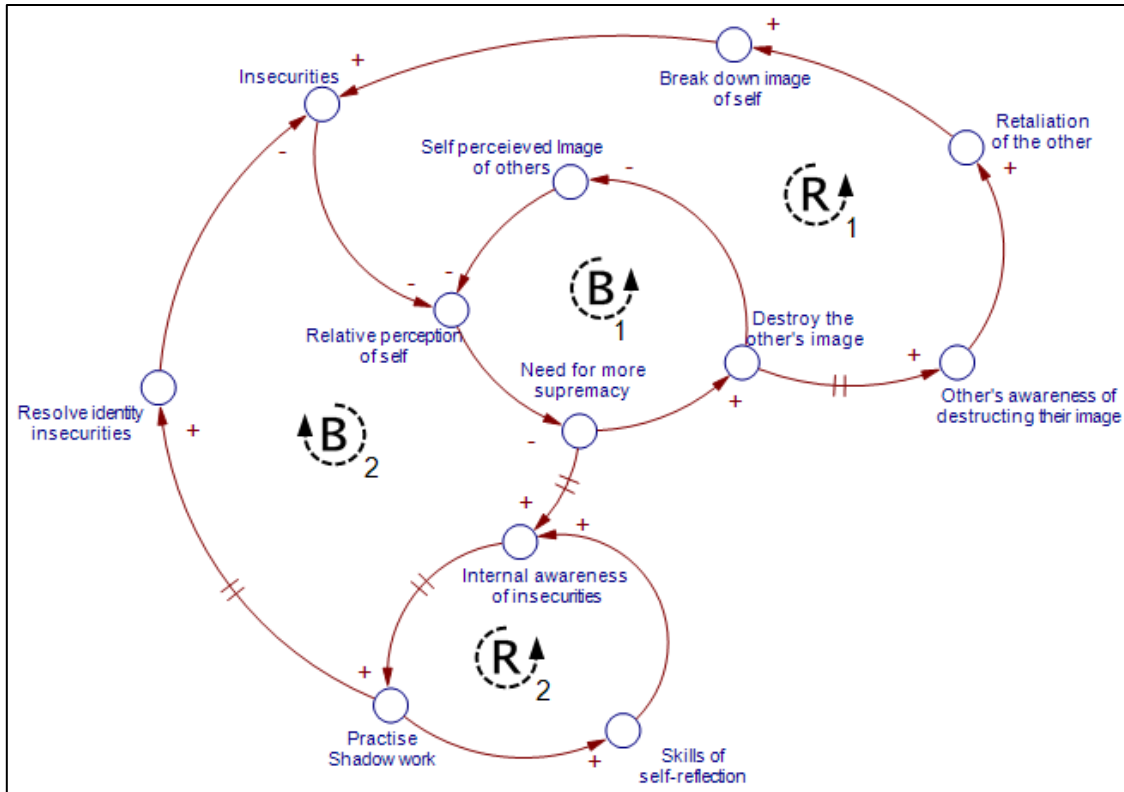


Figure 3.2: Full Causal Loop Diagram of Problem

The final reinforcing loop, R2, shows how the skills of self-reflection can grow or diminish. The more shadow work is practised, the more self-reflection skills grow. The higher skills of self-reflection lead to a more heightened internal awareness of insecurities. The higher internal awareness gives the person material to focus their shadow work on. The reinforcing cycle tends to indicate why once adopted the practise grows, however on the other side, when practise is not adopted, it becomes more alienated or challenging to adopt without support.

The theory captured in the CLD of Figure 3.2 gives a hypothesis behind the dynamics of why diversity training might fail or succeed. However, CLDs cannot explore transient behaviours or drivers (Richardson, 1981). As such, the CLD is expanded into a full mathematical simulation. The methodology of developing the simulation is explained in the next section.

4. METHOD

The Loop Stock Transform (LST) is a specific system dynamics technique combined with systems engineering that can systematically expand conceptual models into simulations. The technique was developed within a Master's thesis at the University of Witwatersrand (Du Plooy, 2021). The technique's development was moulded by nine system dynamics experts and influenced by the systems engineering paradigm on validation and verification.

The LST applies 11 different steps to systematically move from a word model into simulation with insights. The diagram below shows the overall step progression. The V-form is adopted from systems engineering (Caltrans, 2000), while the steps and iterations are derived from system dynamics (Forrester, 1961) (Sterman, 2000) (McLucas & Ryan, 2005) (Schaffernicht & Groesser, 2016) (Richardson & Pugh, 1981).

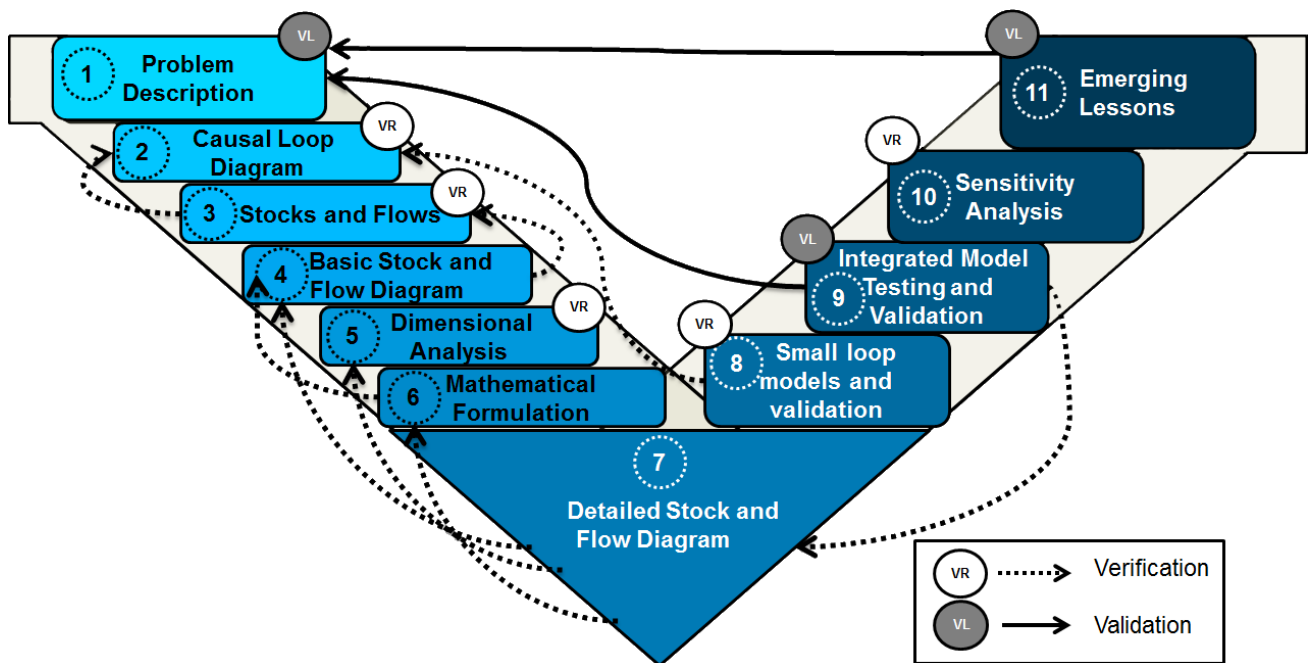


Figure 4.1: Loop Stock Transform Methodology Diagram

There are 18 different steps of testing the model development process iteratively, which is aimed at helping the modeller to meet the requirements and purpose set at the start of the modelling journey. Verification tests if the model is internally coherent with itself, while validation tests if it is coherent with external information.

The CLD in Figure 3.2 needs more definition and exploration to understand some of the potential structures and dynamics that drive the different loops, thus the LST is chosen. However, this approach has inherent ambiguity, managed by the 18 testing points, so the final simulation is only a hypothetical expansion of the static CLD. There surely is many other structures and factors not included in the final simulation, as Box Lightener wrote (Box & Norman, 1987), “All models are wrong, some are more wrong than others, and some are useful”.

5. RESULTS

Some of the simulation development artefacts are discussed in the following four parts. After that three different scenarios are explored using the final simulation.

5.1 CLD NOTES (STEP 3)

The second step's (Figure 4.1) output is the CLD seen in Figure 3.2. In step 3, the CLD is used to identify the main stocks within the CLD. First, stocks are identified using the snapshot test (Forrester, 1961). Next, the atomic behaviours are determined using the four studied atomic behaviours (Hayward, 2012) (Kampmann & Oliva, 2006) (Ford, 1999). Finally, Figure 5.3 shows the stocks as green squares and the atomic behaviour next to each.

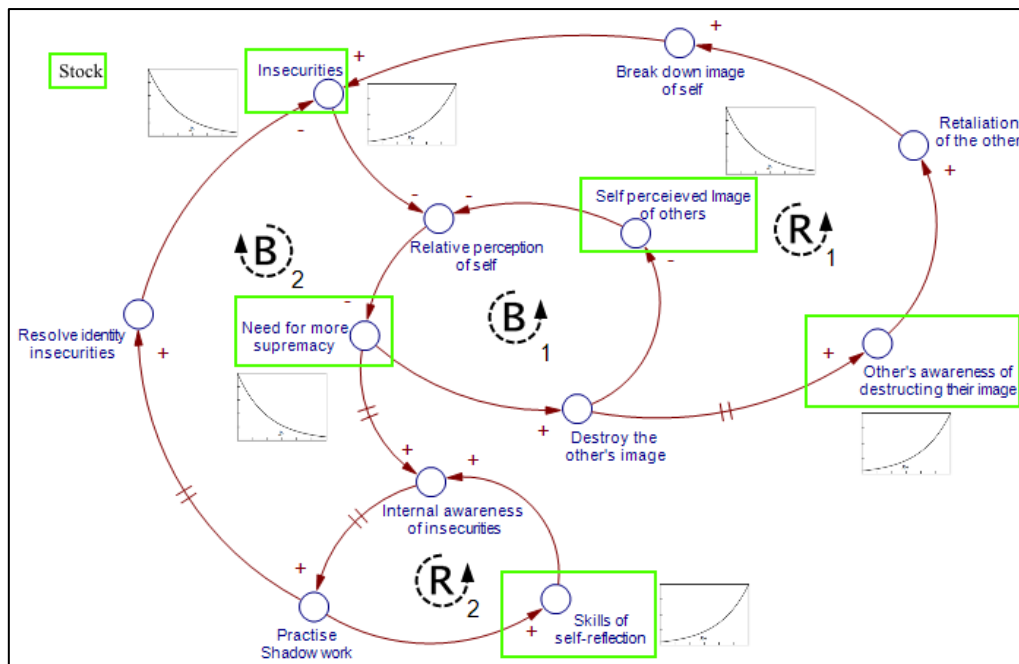


Figure 5.1: CLD Notes to identify Stocks and Atomic Behaviours (Step 3)

The stocks and flows are tested and expanded with dimensional tests and equation identification (steps 5 and 6). The full design of the simulation is completed in step 7.

5.2 DETAILED SFD (STEP 7)

Figure 5.2 the detailed stock and flow diagram (SFD). The detailed SFD is the blueprint before the simulation construction starts. The diagram shows the connected stocks and flows that emerged from steps 1 to 6. Additionally, it shows the dimensions for each variable. The dimension checks are used to create equations and effect variables shown with an E or F, respectively. The external inputs are printed in black. Effect variables are also known as table functions and capture non-linear relationships of cause and effect (Forrester, 1961).

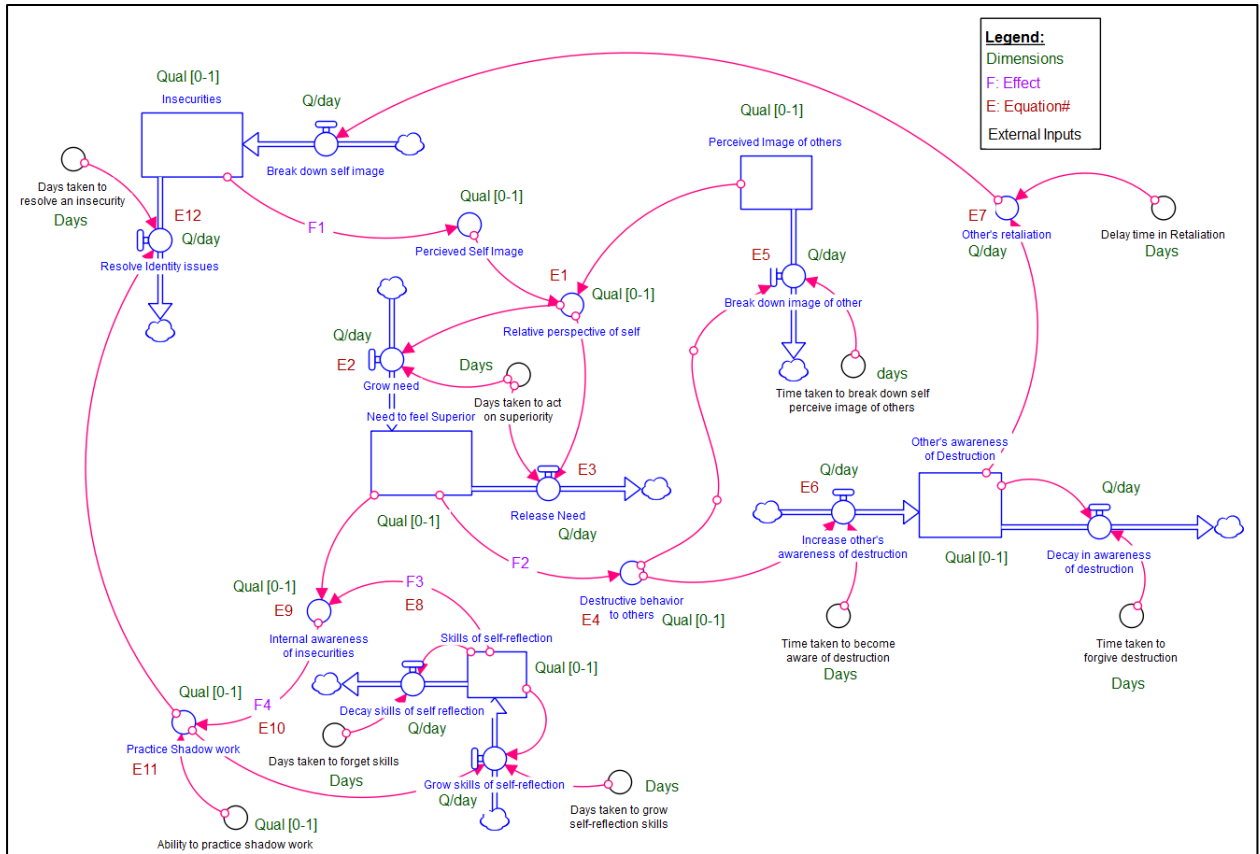


Figure 5.2: Detailed Stock and Flow Diagram (Step 7)

The blueprint (detailed SFD) is a valuable artefact since it can be used to construct the system dynamics simulation in most simulation software and mimics Forrester's process of creating hand-drawn simulations before putting them into a software application (Forrester, 1961).



5.3 INTERNAL VALIDATION TESTS (STEP 9)

Small model structures were developed for each loop independently and tested against the expected behaviours in Step 2. The first loop constructed and tested was loop B1. Both stocks, 'Need to feel superior' and 'Perceived image of others', reproduced the negative balance behaviour. The second construction was on loop R1, which contained the 'Other's awareness of destruction' stock, showing an exponential growth behaviour. Additionally, the last two loops, B2 and R2, were both able to reproduce the exponential growth behaviour for stocks: 'Insecurities' and 'skills of self-reflection'. Finally, all the small structures were integrated and tested for equilibrium before different scenarios were identified in step 10.

5.4 SCENARIO ANALYSIS (STEP 10)

The three main scenario investigations focus on three different approaches used in diversity training. The first approach is to do nothing ignore the diversity differences. The second approach is conventional training which focuses on concepts that trigger stereotypical biases. Finally, the ToE explores the value of investing in shadow work and self-reflection to deal with poor behaviour insecurities. The results from the three scenarios are discussed next.

5.5 SCENARIO 1: DO NOTHING

In the first scenario, no training is conducted, yet the initial amount of insecurity is varied. The scenario explores the structure's tendency to bring forth destructive actions. The initial insecurity is varied from 0 to 0.75, where 0 means no insecurity and 1 means maximum insecurity. The scenario is seen in Figure 5.3 below.

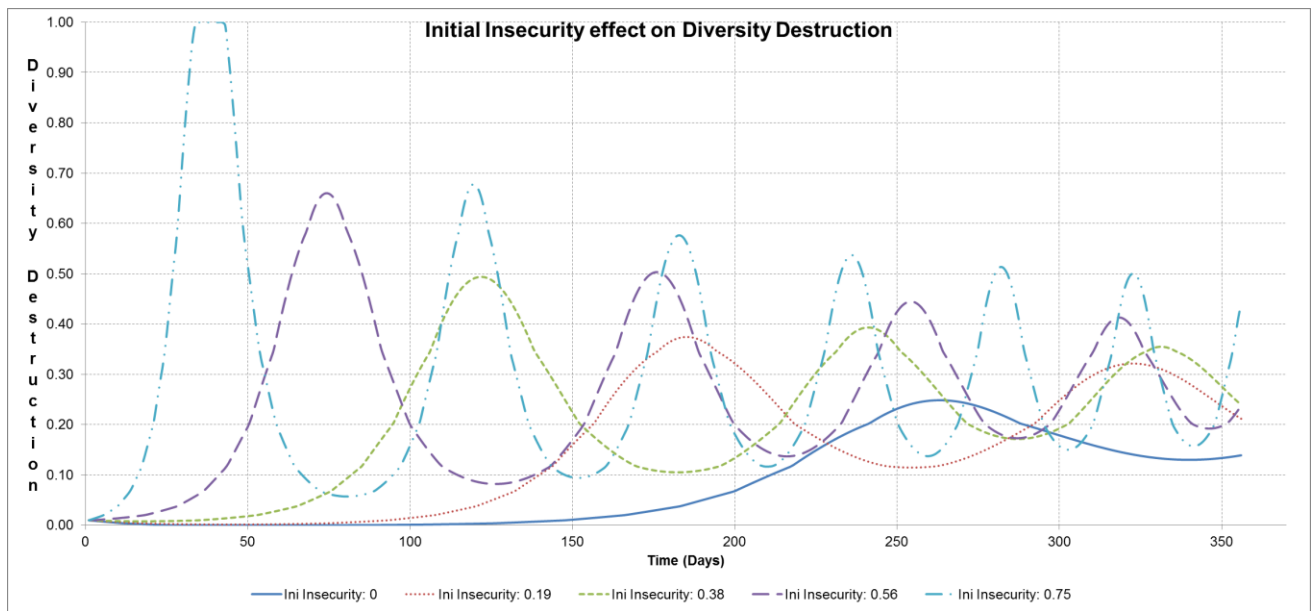


Figure 5.3: Results from Scenario 1, doing nothing

The mathematical behaviour above shows that all five scenarios have wave functions, indicating that the initial insecurity values do not change the behaviour pattern. Additionally, the result shows that the higher the initial insecurity, the higher the frequency and amplitude of the diversity destruction. A very high initial insecurity thus produces more destructive behaviour in this scenario, while low initial insecurity produces a much slower and less harmful wave.

The intuitive results are that the wave behaviour worsens the higher initial insecurities are. In reality, this might indicate that ignoring diversity destruction will only perpetuate the cycle. However, it is interesting to observe the initial insecurity of 0 (run 1). Even if the individual has no insecurities initially, insecurity will slowly grow and enter into a wave. In summary, the scenario reveals that the behaviour persists independent of the initial insecurity level, meaning that doing nothing is not a solution.

5.6 SCENARIO 2: TRAINING THAT FAILS

In the second scenario, the dangers of insecurity triggering training are investigated with the simulation. The training is assumed to induce a pulse of insecurity at day 10 of the simulation. The trigger pulse size is varied from 0 to 0.5, where 0 means no insecurity is added and 0.5 means that 50% of the maximum insecurity is added to the person's insecurity on that day. The effect of this trigger size on the diversity destruction can be seen in Figure 5.4 below.

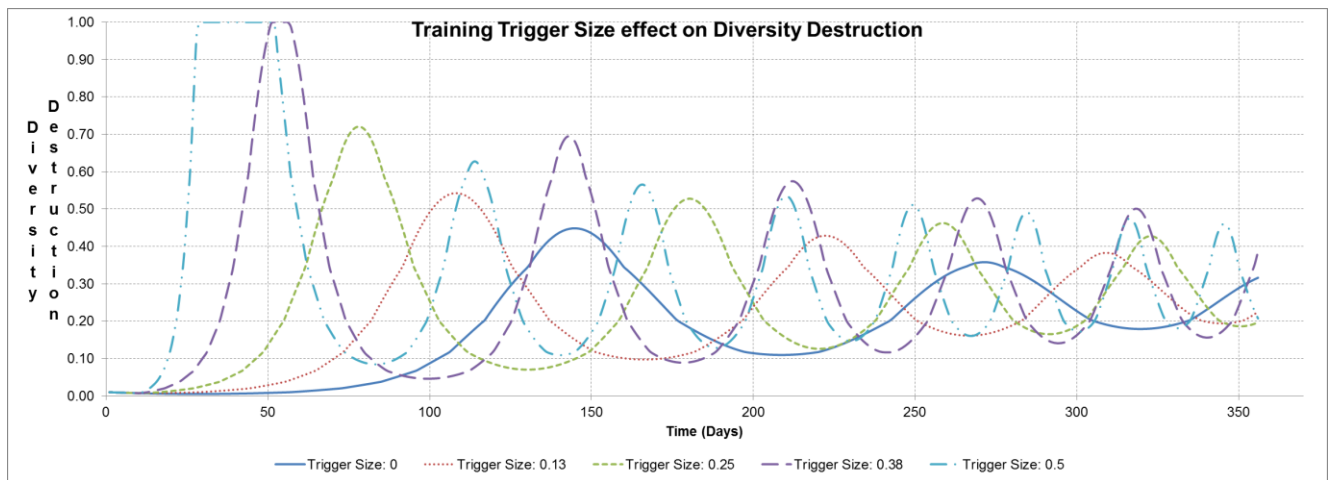


Figure 5.4: Results from Scenario 2, ineffective training

The trigger size of 0 shows the base case, where no insecurity is added. The same wave behaviour is observed in all five results as in scenario 1. However, the frequency and amplitude both increase as the trigger size increases. The scenario indicates that even though the insecurity pulse only took place on the 10th day, it creates a ripple effect throughout the simulated period.

The scenario might point towards the cyclical destruction induced by one ineffective training event. The destructive consequence of insecurity-triggering training has been experienced by multiple organisations, which report a more destructive atmosphere after training than before (Rock & Grant, 2017). The scenario shows this might be the case due to the increased frequency and amplitude of destructive behaviours after insecurity triggering training.

5.7 SCENARIO 3: THEORY OF ENCHANTMENT

One of the core practises used in the ToE is shadow work. Shadow work helps people face their negative egos and deal with insecurities within themselves. In the simulation, the shadow work ability combined with an awareness of insecurities slowly reduces the insecurity of the individual. In this scenario, the shadow work ability increases from 0 to 1, where 0 means no ability and 1 means perfect ability. The effect of the ability on diversity destruction can be seen in Figure 5.5 below.

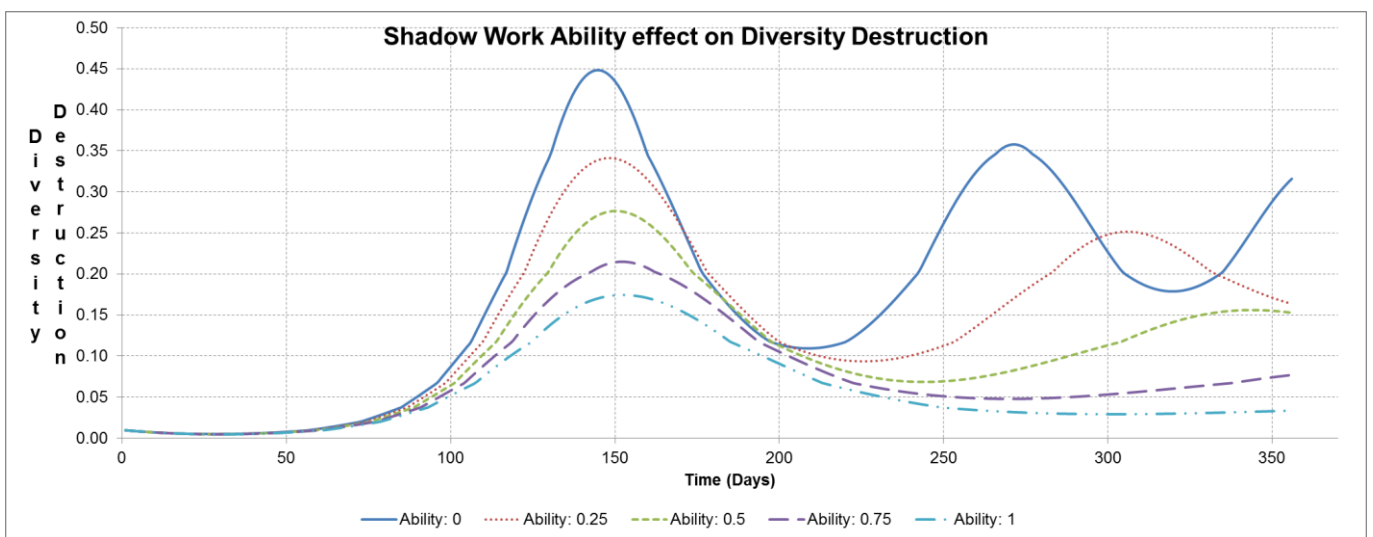


Figure 5.5: Results from Scenario 3, theory of enchantment

As in the two previous scenarios, the wave behaviour is still present in all five runs. However, some of the runs produce a seemingly stable pattern in this scenario. As expected, with no ability (0), the same behaviour is seen in scenario 2 – run 1, where the destructive behaviour returns in waves. However, when the ability is at 0.5 and higher, there are significant reductions in the amplitude of more than 50%. At perfect ability, the destruction remains at 0.04 (extremely low) on day 365.

The real-world implication of the scenario might point towards the importance of investing in the ability to deal with insecurities. In the ToE, the practitioners guide participants through a process where they learn to perform shadow work and face their humanity. The simulation indicates that even a small ability in these skills already produces better behaviour. Furthermore, the scenario indicates the importance of long term adoption of skills like shadow work which deal with self-insecurities. Finally, the insecurities' have an inherent tendency to return (as seen in the fourth scenario (0.75) of Figure 5.5), especially after it seems like insecurities have been resolved.

6. DISCUSSION

The first simulation scenario points towards the tendency for the structure to induce insecurity, even when there is no initial insecurity. The insight might relate to the chimpanzee, the human's closest animal relative. They naturally tend to destroy other tribes of chimpanzees. However, humans have more developed cognitive abilities explored in the other two scenarios.

The second scenario shows that insecurity-triggering training can worsen the insecurities and destructive behaviours. Furthermore, the extent and frequency of the outbursts remain higher, when one poor training event is attended. The result fits in with conventional diversity training experience that does not bring forth any improved behaviour change, and some even report worsened cultures (Rock & Grant, 2017). The insight here is that one poor training event can lead to a ripple effect lasting far into the person's future.

The final simulation scenario explores the investment into resolving insecurity, like the ToE. The scenario shows that even a small amount of Shadow work skills leads to improved behaviour and that expert skill levels will keep insecurities low while the image of the other increases. The summary of deduced simulation insight is: if insecurities and destructive behaviour remain low for extended periods, shadow work might be practiced less often due to less trigger awareness and resurfaces insecurities. This insight fits well with the observations from the ToE where the training is aimed to enable participants to adopt the framework as a long term practice. Furthermore, the approach also needs time to take effect, and instantaneous behaviour change is not expected.

The simulation cannot represent complex reality; however, it is a useful model to qualitatively explore some of the transience behind the ToE hypothesis on insecurities. The simulation shows that there is no quick fix for embracing diversity, yet equipping ourselves and others with more compassion and empathy is worth it. Being able to face the shadow in ourselves can equip us to face the shadow of others without dehumanising them. Ignorance of the shadow has led many to demonise and destroy the diversity found in the 'other' person.

7. CONCLUSION: TRANSCENDING THE SIMULATION

The LST was successfully applied to create a mathematical simulation of a qualitative psychological framework, ToE, to explain failing diversity dynamics. Furthermore, the simulation confirms that doing nothing is not a solution, conventional training can be ineffective or even destructive, and how adopting frameworks like ToE takes time but can improve behaviour. However, reality transcends any simulation, yet it emphasises the importance of embracing the tension between the positive ego and the shadow. Without embracing the tension within, it creates tension towards others and destructive dehumanisation. The finding echoes the need to embrace the paradox: the coincidence of opposites.

The postmodernity cultural disconnect between shadow and ego, body and mind, self and other, human and nature are deep psychological paradigms that produce and reinforce mental health problems, culture wars and even climate chaos (Mackness, 2021). ToE shows that the disconnect worsens without recognising the duality within ourselves, between shadow and ego. Once we become aware of our paradoxical beliefs, process and accept them, the need to be superior dissipates and we are enabled to embrace identity within diversity: our shared humanity. The practice might allow us to live out the motto of USA and South Africa: 'Out of many, One' and 'Unity in Diversity'.

The insights above are not novel, but the author believes they need to be re-learned from the past. The revolutionary work of Professor Forrester for General Electric (GE) in the 1950's started the field of system dynamics (System Dynamics Society, 2022). The hand simulations of the stock-flow-feedback structure revealed a counter-intuitive insight for GE managers. The simulation showed that the GE employment instability was due to the internal structures of the firm and not external business cycles as originally thought. The endogenous view of system dynamics assumes that internal structures drive most behaviours. The behaviour of failing diversity training is also driven by the endogenous belief systems held by the participants and facilitators.

Freedom fighter Dr Martin Luther King demonstrated the importance of being aware of the internal (endogenous). Dr King believed in six key principles of non-violence. The fifth principle was that he does not only refuse to shoot his opponent but also refuse to hate him (Stanford, 2022). The second principle seeks to understand and prevent the opponent's humiliation. Thus before every protest, his fellow freedom fighters will investigate their internal beliefs and check if there is any hatred or desire to humiliate the opponent ('other'); if there are, they will remove themselves from the protest. This approach is profound when considering typical modern conflict, protests and digital dialogues. Dr King deeply understood the principles and consequences of how our internal insecurities affects the world. Furthermore, he lived out an example of what true humanity can be.



Finally, the author would like to invite the reader to humbly embrace the limits of their own awareness and the courage to face the endogenous shadow we all share in common humanity, albeit with diverse cultures.

8. ACKNOWLEDGMENTS

The author would like to acknowledge Dr Liza van der Merwe. The paper emerged out of the deep conversations and challenging mental models shared in our regular discussions. Thank you for truly listening, sharing and pruning my ideas, to yield greater fruit.

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BIOGRAPHY



Corné du Plooy has been working in system dynamics for the past 8 years mostly in water and energy applications. He has been actively driving the development of system dynamics in South Africa as part of the South African Chapter of the System Dynamics Society (SACSD). In 2018 he initiated the first SA System Dynamics Modelling competition, this year would be the 5th edition. His passion for spreading and teaching system dynamics has led him to pursue an MSc in teaching the field in a more structured approach for entry-level students (Loop Stock Transform used in this paper). In December 2021 he completed his MSc cum laude.