university of groningen

university college groningen

RESILIENCE OF
UNIVERSITY COLLEGE GRONINGEN

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1. INTRODUCTION

This paper focuses on resilience of social complex systems. More specifically, in this paper, the resilience of University College Groningen is tested as a case study to learn how social complex systems can act effectively in a complex environment and uncertain world. The importance of focusing on resilience stems from the high level of system coupling and interaction between and within systems, which brings about significant vulnerabilities. Resilience can contribute to management in complex and uncertain situations, or help understanding politics and financial markets. For instance, the refugee crisis and recent financial crisis are perfect examples of situations wherein political and economic resilience was tested. More resilient organizations will be better at mitigating and managing the effects of unprecedented events (Carpenter, Arrow, & et. al, 2012).

This paper starts off with a theoretical exploration on social complex systems, complexity and uncertainty and resilience. Within this review, all the concepts are explained and presented with a multidisciplinary approach. Several interpretations are presented per concept. The concepts that are discussed are University College Groningen, social complex systems, complexity thinking, fundamental uncertainty, the GloComNet FAUC framework and resilience. For each of the aforementioned concepts, there will be one definition used throughout this paper. The goal of this review of literature is to create a blueprint model of UCG as a social complex system, and offer an understanding of what the important concepts of such a system entail.

The PNI method (participatory narrative inquiry method), created by Cynthia Kurtz, is the research method applied in this paper. The aim of this research is to examine the important characteristics of UCG and determine what resilience means in context of UCG as a social complex system. In contrast to a formal understanding of UCG, regarding UCG as a social complex system allows for qualitative characteristics to be incorporated in defining UCG, such as relationships between staff and students that play an important role at the college. The PNI method is interactive and allows for a thorough understanding of the resilience of UCG through having many different perspectives from different groups within the college.

UCG is an interesting organization to involve in this research, since the faculty has only been operating as a complete faculty since 2014, when the first year of students arrived. Therefore, the faculty is still in its starting phase, during which resilience is of crucial importance. Not only is it important for the continuity of the college, but also because in the early years of the college it is likely that certain dynamics will be rooted in the system that are still visible in later phases. Whilst better resilience strengthens an organization, making it less vulnerable, understanding how UCG should anticipate, adapt, cope and recover efficiently from negative surprises could contribute to UCG as a faculty.

The research question of this paper goes as follows:
How should University College Groningen anticipate, adapt, cope and recover efficiently from negative surprises?

2. REVIEW OF LITERATURE

2.1. DEFINING THE CASE STUDY OBJECT: UNIVERSITY COLLEGE GRONINGEN

What is University College Groningen exactly? University College Groningen, abbreviated as UCG, can be understood through many different lenses. The different approaches to defining UCG could all serve different purposes. The formal definition, for instance, is that UCG is the 10th faculty of the University of Groningen offering an undergraduate program in Liberal Arts & Sciences to over a hundred students.

General production theory also offers a way of understanding the college. Within this theory, a certain input is transformed by the company or organization to create a desired output with economic value. In order to do this both material and immaterial resources can be used. The students that study at the faculty can be seen as the input for the organization. The knowledge of staff members and facilities in the building are the immaterial and material resources that UCG uses to transform the students. These resources are put to practice within the transformation process, which is the three-year undergraduate program of Liberal Arts & Sciences. Lastly, the output element in this analogy is the educated and interdisciplinary student.

Also, the transaction cost perspective is an interesting way to look at UCG. This point of view generally states that the main goal of companies or organizations is to minimize transaction costs. This entails that the organization has certain contractual responsibilities to its stakeholders. This theory helps to understand where organizations draw their boundaries; it helps understanding why firms keep some transactions within the firm rather than in the market (Williamson, 1989). In terms of UCG, the faculty would have several contractual agreements with stakeholders. These stakeholders are students to which the faculty owes education and educational facilities, staff members whom are employed at the faculty, institutions such as TNO and the University of Groningen itself to which UCG owes certain performance results. The goal of the college in this analogy is to minimize transaction costs, or to satisfy the needs of the stakeholders collectively.

The abovementioned perspectives present how we University College Groningen formally, and what an economic interpretation of the college could be. This paper will refer to UCG as a social complex system. The next section defines what a social system is, what complexity means and when such a system is complex. Also will be argued why this perspective helps understanding the organization better.

2.2. UCG as a Social Complex System

A social system can be understood as a relational system of interactions existing between individuals, groups and institutions that collectively form a coherent system (Kroeber & Parsons, 1958). Complexity theory, and more specifically social complexity, adds that such a relational system of interactions can have numerous possible arrangements and futures. These arrangements and futures, subsequently, are subject to fundamental uncertainty and the particularity of past, current and future events. Complexity thinking incorporates the aforementioned elements, which could contribute to a deeper insight in how the social characteristics and interactions function in the system of UCG. In order to be able to understand UCG as a social complex system, this section outlines what complex systems are, and what fundamental uncertainty is.

2.2.1. Complex Systems

Complexity theory advocates understanding of the world or systems as systems that comprise underpinning interacting elements. Thinking from a complexity perspective entails that the world or a certain system should be looked at as systemic, synergistic and multi-scalar; path-dependent and sensitive to context; emergent, fundamentally uncertain and episodic (Boulton, Allen, & Bowman, 2015).

When approaching a system as systemic, this means that a system cannot be understood by solely studying all of its individual parts. The elements that are neglected when a system is not studied systemically are the interactions between the parts. These interactions account for the interconnectedness and interdependencies of the parts. In complexity theory, this non-linear connection between individual elements is called a synergistic connection or relationship. This synergistic relationship influences the distribution and behavior of parts within the system. Thus, since these parts synergistically coexist, the system as whole represent more than only the summation of its parts. Additionally, Boulton et al. stress that complex systems are multi-scalar (2015). Connections, relationships and characteristics of the elements of a system cannot be explored properly by focusing only on one level in the system. Each level or scale within the system encompasses unique characteristics and patterns and, for instance, patterns on small scale do not necessarily explain patterns at large scale, vice versa.

Secondly, the dynamic nature of complex systems is dependent on historical factors as well as contextual factors. To elucidate, the historical factors represent the order of events that happened, through which a system finds itself in its current state. On the other hand, the contextual elements refer to the context in which these events take place, also having effect on the status quo of a system. Together, these historical and contextual elements form the pathway that led to the current state of the system. In this sense, the system is path-dependent. However, path-dependency does not imply any deterministic relation between events; the present and future are not set. On the contrary, the idea of path-dependency helps understanding the change that has occurred and is occurring in a complex system. So, complex systems are path-dependent, and since the continuously changing details of events determine the paths, future pathways are highly uncertain and there is no perfect way in predicting future pathways. Namely, neglecting these details removes the piece of information that could help explaining previous pathways and predicting those to come.

Furthermore, complex systems change episodically. Episodic change entails that systems change at irregular intervals, which can result out of micro-level changes in the system that might be overlooked a priori, because on the macro-level the system seems to be stable. These changes can occur in the form of tipping points. Tipping points are thresholds whereat the system shifts from one state into another (Scheffer, 2009). These regime shifts are irreversible in complex systems; there is no possibility of returning back to the previous regime. At such tipping points, mostly qualitative factors of the complex system are changed, such as characteristics of and connections between elements. Such changes can be quite radical through which newly unprecedented relationships may self-organize, unpredicted characteristics may emerge and previous features might even disappear out of the system. After radical change, the system is most likely significantly different from its previous state, which makes the system an emergent system. Nevertheless, one state of the system does not emerge smoothly into the new state due to the level of uncertainty or unpredictability of certain events. Despite the future state of a system cannot precisely be predicted, the change does not occur randomly. Also, having a thorough understanding of the present does not enable one to precisely predict the pathway to the future state, and it is important to realize that therefore multiple futures are possible. Understanding the episodic change of emergent systems helps improving alertness to early-warning signs of tipping points, bringing change to and avoiding change of a system.

Complex systems are path-dependent emergent systems that comprise synergistic agents (agents that produce greater effect when combined than the sum of their separate effects), which make the system change episodically. The unpredictability of possible futures states of the system is due to the fundamental uncertainty that complex systems are subject to. The following section illustrates what it means for a system to operate in a fundamentally uncertain environment, and illustrates the difference between fundamental uncertainty and ambiguity.

2.2.2. FUNDAMENTAL UNCERTAINTY

This section outlines the conceptual differences between ambiguity, risk and fundamental uncertainty. Fundamental uncertainty and complexity interface at the idea that different possible future outcomes are not perfectly predictable. Namely, complexity theory states that complex systems are path-dependent, and that continuously changing details determine these paths. The continuous and swift change of details make possible future pathways of the complex system fundamentally uncertain, and thus unpredictable.

Fundamental uncertainty and ambiguity

Complex systems operate in fundamentally uncertain environments. In order to understand this concept, it is necessary to draw a line between the concepts of fundamental uncertainty and ambiguity to avoid any confusion around either of the terms.

Both terms pertain to an uncertain situation, however, it seems that each of the concepts refer to different information of an uncertain situation (Dequech, 2000). Ambiguity refers to the information of a system that does not exist yet, but can be acquired. Whereas, on the other hand, fundamental uncertainty refers to the information that does not exist yet, and cannot be acquired either. The reason why this information is unobtainable, is because, according to fundamental uncertainty, the future is yet to be created and multiple futures are possible.

The future states of systems operating under fundamental uncertainty are essentially undetermined. This indeterminacy is due to the allowance of creativity and structural changes within such systems. These dynamics can bring about intended as well as unintended surprises that make the future state of complex systems unpredictable. Ecosystems, for instance, operate under fundamental uncertainty. In these systems, creative and structural changes, in e.g. a food chain, can have unprecedented and unpredictable consequences.

Fundamental uncertainty and risk

Risk can be understood as quantifiable uncertainty. Given a situation in which risk is involved, measurable probabilities can be assigned to possible outcomes (Glickman, 2003). For instance, the probability of throwing heads or tails when flipping a coin is 0.5. In context of a complex system, risk in the financial world is used to determine investment decisions. Mathematical calculations using the probability of future payoffs of an investment are applied to decide whether the investment should be made or not.

In contrast to risk, fundamental uncertainty states that the future is yet to be created, thus unpredictable and therefore unquantifiable. This entails that rationally no probabilities can be assigned to different future outcomes, which in turn means that investment decisions are not just a matter of rational calculations using probabilities but much more complex. Many economic variables that affect investment decision-making, such as consumer preferences, are subjective, which implies that they are changing overtime and cannot be quantified using probabilities (Keynes J. M., 2008 [1936]).

John Maynard Keynes presented his perspective and understanding of uncertainty in his book Treatise on Probability (1921). This book together with Frank Knight's Risk, Uncertainty and Profits (1921) are regarded as the foundations for the concept of fundamental uncertainty. Both Knight and Keynes stress the fact that not all future possible outcomes of any decision can be known a priori (Keynes, 1921; Knight, 1921). Knight claims that profits of an entrepreneur would not exist in a world without uncertainty. He regards profits as a reward for the company or entrepreneur for acting in an uncertain world.

2.2.3. THE SOCIAL COMPLEX SYSTEM OF UCG

University College Groningen can be understood as a social complex system. Once again, social complex systems are:
- Systemic with synergistic component parts
- Path-dependent and sensitive to context
- Multi-scalar
- Episodic and fundamentally uncertain
- Emergent

The community at UCG consist out of individuals, groups and several institutions. The *individuals* at the college are simply all people whom are either employed or study at the faculty. The *groups* of people represent the categorized individuals, which are the staff members and students. The *institutions* at the faculty represent the Faculty Board, Advisory Council, Secretariat, Faculty Council, Study Association Caerus and its committees, but also institutions like the University of Groningen belong to UCG's social complex system, et

cetera. Also, it is important to note that there is overlap between the individuals, groups and institutions. One individual, for instance, can be a student and part of the Faculty Council. This overlap is important to include in this social system, because this individual can have a different relationship with another person as being an individual (relationship 1), while he or she might represent the other person in the Faculty Council (relationship 2). Not allowing overlap, in other words, would neglect relationships that provide information about UCG as a social complex system.

The following diagram depicts the different groups and connections that are current at UCG:
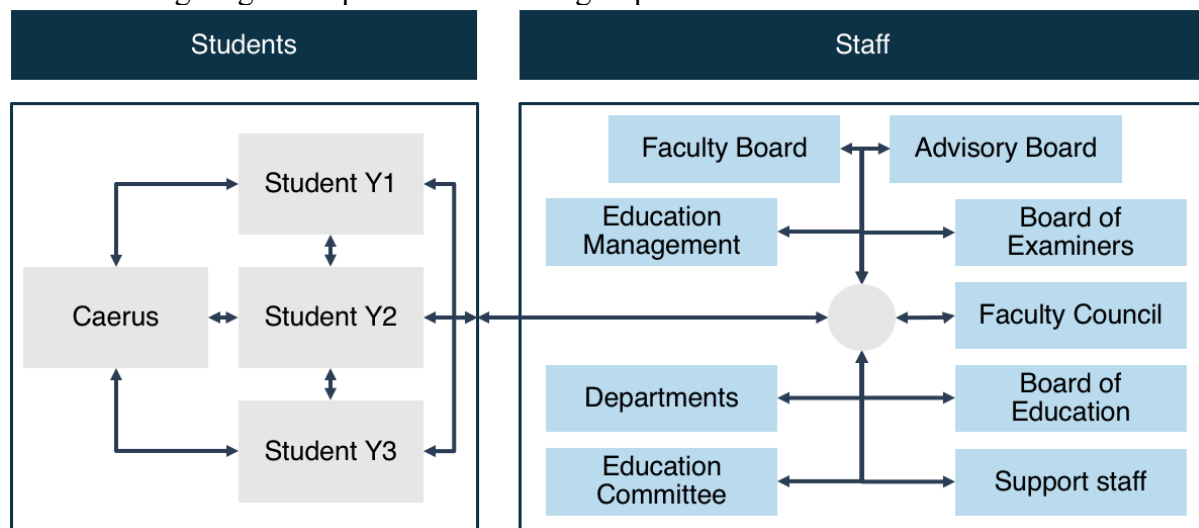
The arrows in this picture represent the connection between all the separate groups. The grey circle in the 'Staff' box represents that all the different groups are interconnected, is used to maintain oversight in the box which would have been cumbersome with many additional arrows. It should be noted that certain groups used in the diagram could be further fragmented into additional groups, but this would not add to the goal of the diagram. The arrows in the middle, connecting staff and student, represent that students and staff are connected, but also that all the separate groups or individuals of 'Students' are connected to separate groups or individuals of 'Staff', vice versa. To exemplify, students and staff are connected as a whole, but Caerus and the Faculty Board also have a separate relationship. Some relationships between two groups are inevitably stronger than others, but this indication goes beyond the point of this diagram.

The definition of UCG as a social complex system will become more complete by contribution of the results of the research that is presented in the third chapter of this paper on *Methodology*.

2.3.   ACTING UNDER UNCERTAINTY AND COMPLEXITY

The Global Complexity Network (GloComNet) developed a framework for organizations and institutions that can help them to act effectively in a complex environment under uncertainty. This framework is a framework that addresses how to act effectively under uncertainty and complexity (FAUC). Therefore, the FAUC framework interfaces with the research question, and describes that resilience is an important element to focus on for effective behavior of social complex systems. This sections illustrates the main focus of this framework.

2.3.1. FAUC FRAMEWORK

The GloComNet FAUC Framework comprises five concepts that constitute a model for effective behavior of agents in situations under complexity and fundamental uncertainty (GloComNet, 2017). Since the world is getting increasingly complex, the level of uncertainty in the world around us increases too. Therefore, entrepreneurs, organizations, policymakers, and other agents, that are acting in a complex world under uncertainty should know how to cope with the surprises that a complex and uncertain world bring about. The ability to dealing with both positive and negative surprises can be assessed and improved upon by use of the FAUC Framework. The five points of assessment are listed below:

1. Alertness
   The ability to learn/recognize/identify about surprises
2. Adaptiveness
   The ability to adjust to surprises
3. Creativity
   The ability to surprise other actors or to thrive under stress
4. Resilience
   The ability to survive and absorb negative surprises
5. Entrepreneurship
   The ability to integrate thinking, acting, evaluating, reacting in an ongoing interaction

This paper focuses on the *resilience* element of this model, applied to the social complex system of UCG. Nevertheless, the notions of alertness, adaptiveness, creativity and entrepreneurship will be referred to as well in this paper, since there is some overlap between these definitions and resilience. This overlap is referred to in the next section on resilience. In order to make sense of what resilience of a complex system means, the following section presents multiple understandings of resilience.

2.4. RESILIENCE

Resilience can be understood through different interpretations, but also in different applications. Resilience can for instance be understood as the bounce-back effect after absorbing a shock, while, on the other hand, resilience can also refer to the process of reacting, responding and coping with the shock (this is defined as *adaptiveness* in the FAUC Framework). To exemplify, the former definition fits well to the resilience of a shoe sole, while the latter definition of resilience conforms more to how resilience of an ecosystem is understood. The difference between resilience and stability is that stability focuses on the equilibrium state of a system. To elucidate, as negative events occur within a system, its ability to retain or return to its equilibrium state is referred to as stability, whilst the understanding of resilience is in general much broader. Resilience, in contrast to stability, allows for a reconfiguration (new equilibrium) of features, and refers to the extent to which a system is capable of going through negative changes (Holling, Resilience and Stability of Ecological Systems, 1973). Undoubtedly, the precise meaning of resilience in context of an organization would also be different from resilience in a shoe sole or ecosystem. Since the resilience of UCG in context of UCG being a social complex system, it is important to find a definition that fits well within the concept of social complex system. Therefore, multiple interdisciplinary notions of the term are presented and discussed in this section.

2.4.1. NOTIONS OF RESILIENCE

Economic equilibrist resilience
According to Sànchez, et al. (2015), a resilient economy is one that better withstands an adverse shock and returns back faster to the pre-shock trend growth rate, i.e. minimizing the cumulative GDP loss relative to potential output (Sánchez, Rasmussen, & Röhn, 2015). This view is labeled to be the equilibrist interpretation of economic resilience: an economy absorbs a shock and either returns back to the previous state or into a similar but new state.

A similar but more general and complete version of the previous definition is presented by Pike, et al. Here resilience is described as a notion seeking to capture the differential and uneven ability of places/institutions/economies to react, respond and cope with uncertain, volatile and rapid change (Pike, Dawley, & Tomaney, 2010).

Economic evolutionary resilience
A more non-linear approach to economic resilience is presented by Simmie, J. & Martin, R. Here resilience is understood as 'adaptive ability', which overlaps with *adaptiveness* in the FAUC Framework. This adaptive ability, for instance of a firm or economy, shapes the evolutionary trajectories of a firm or economy over time. More specifically, this theory emphasizes adaption and change as key processes in the development of economies and firms (Simmie & Martin, 2010).

They reject the equilibrist approach by stating that firms, economies and organizations are continually changing and adapting, and therefore never in equilibrium. Additionally, they define resilience as a process rather than an unchanging characteristic.

Also, the evolutionary notion seems to state that the definition of resilience is closely allied to, or maybe even inseparable from, adaptiveness. For instance, higher adaptiveness of an economy would entail a more resilient economy; vice versa, a more resilient economy would

improve an economy's adaptive abilities. Whereas the equilibrist notion focuses more clearly on the meaning of resilience, disregarding other components like adaptiveness.

Social two-dimensional resilience
In this notion of resilience, the definition is divided into two parts (Birkland, 2016):
1. The size of the shock that the system withstands;
2. The speed at which the system returns to its prior functionality.
The resilience of such a system can therefore be strengthened by adopting policies that reduce the amount of damage that a system withstands, and that put measures in place to allow for rapid recovery of system functions after a shock has occurred.

Social tri-dimensional resilience
Lorenz outlines a three dimensional understanding of resilience. Firstly, he describes that a social system comprises three different capacities: an adaptive, a coping and participative capacity, defined as:
1. Adaptive capacity: the property of a system contributing structures to prevent future disasters
2. Coping capacity: the capacity of the system to cope with previous disastrous processes
3. Participative capacity: the ability to of a system to self-organize and use its adaptive and coping capacity
Resilience is here defined as the capacity to avoid or withstand disasters from happening, where disasters are understood as failures of future expectations (Lorenz, 2013).

Uncertainty approach to resilience
Resilience when assuming the existence of significant uncertainty is the ability to learn how to cope with unanticipated hazards through a positive attitude toward failure or embracing error (Lorenz, 2013).

Ecological resilience
Holling, arguably responsible for the wide use of the term, was an ecologist that described resilience as a measure of persistence of a system, and the ability of that system to absorb changes and disturbances, while maintaining the status quo ante relationships between populations or components of populations (Holling, Resilience and Stability of Ecological Systems, 1973).

Biological resilience
Resilience can be thought of as a dynamic process, not as an individual trait. This is because some individuals are resilient to certain outcomes, and others are not; people are resilient to certain outcomes at certain points in their life, but not to others. Therefore, the resilience of an individual, following trauma and/or stress, cannot be solely attributed to, e.g., genetic or environmental factors (Bowes & Jaffee, 2013). The interaction between individuals and their environment and the dynamic relationship between genes and individuals are key to understanding the resilience of a human body.

Bounce-back resilience
Resilience in physics or mathematics can be understood as a more linear and equilibrist type of resilience. The following example exemplifies resilience in physics:

The resilience of a shoe is the bounce-back-effect of the sole while walking (Stark, 2014). Additionally, the resilience of a shoe decreases overtime due to the degrading sole. This dynamic is comparable to the equilibrist resilience explained in *resilience in economics*.

2.4.2. RESILIENCE OF A SOCIAL COMPLEX SYSTEM

The appropriate definition of resilience that this paper will use has to conform with the understandings that lie in the notion of social complex systems. Certain notions above, such as the economic equilibrist interpretation or the bounce-back perspective on resilience are non-linear approaches to defining the term. Whilst, on the other hand, the definitions of economic evolutionary and ecological resilience conform more to social complex systems. Namely, these notions state that systems are continuously changing and adapting to their environment.

Furthermore, the social tri-dimensional understanding of resilience also in part conforms with complex systems. This view calls for the importance of adaptive and coping capacity when dealing with both positive or negative surprises (Lorenz, 2013). In reference to the FAUC model, this states the previously mentioned overlap between resilience and the other elements of the model. Adaptiveness and alertness (adaptive capacity), and creativity and/or entrepreneurship (coping capacity) are in Lorenz's notion understood as part of what defines resilience. The advantage of the FAUC Framework is that it creates more oversight by separating the concepts of alertness, adaptiveness, creativity, resilience and entrepreneurship.

The last definition presented above that intersects with elements of social complex systems is the uncertainty approach to resilience. This definition stresses the fact that some events are unprecedented, thus the future is fundamentally uncertain, which is embedded in the notion of complex systems.

To conclude with an all-encompassing but pragmatic definition for resilience, that has its asymptote closest to the definition of social complex systems, and is conform the FAUC model, is presented here:
Resilience is the ability of a system to anticipate, adapt, cope and recover from the effects of surprises.
This definition of resilience will be used in the remainder of this paper.

2.4.3. RESILIENCE OF UCG AS A SOCIAL COMPLEX SYSTEM

The resilience of UCG refers to its ability to anticipate, adapt, cope and recover from the effects of surprises, while allowing the system as a whole to retain old structures or a reconfiguration of structures with possible new emerged features.

What is left now is determining what relationships and characteristics of UCG constitute the resilience of the system. Subsequently, the aim of this paper is to find out what the weaknesses are and how to strengthen those so that UCG will be able to *anticipate, adapt, cope and recover from the effects of negative surprises*. The research will be done by involving many individuals of UCG itself. The approach to this research this is presented in the third chapter of this paper on *Methodology*.

3. METHODOLOGY

The participatory narrative inquiry (PNI) method in this research will be done using two different sessions. The first session consists out of ten individual meetings with different people from UCG. These individuals are asked to share three or more stories about experiences they had at UCG. Subsequently, the second session is a group session. During these group sessions, the individuals of UCG collectively make sense of each of the stories to determine what they reveal about UCG. The results of the second session will ultimately be linked to resilience to examine whether these results can improve insight in the resilience of UCG. The following paragraphs will explain what PNI exactly means, and how this method is applied in this research.

3.1. PNI METHOD

What is the PNI method?
To define the participatory narrative inquiry (PNI) method, PNI is a method in which people in groups collectively work with stories that concern personal experiences. This methods is used to make sense of complex situations and to improve decision-making (Kurtz, 2014).

What are stories?
People use stories to create a world map of experiences. This allows for people to have a reference point while acting, which helps with decision-making. Simultaneously, people are able to dynamically simulate the stories in their minds, through which they are enabled to think of certain possible outcomes before having decided upon a specific action. Besides, stories include personal experiences, beliefs and feelings that can reveal a lot about a persons' perspective.

Stories are collections of experiences of both individuals and groups of people. Since the content of stories broadly include thorough experiences, it can be used as a qualitative method to detecting problems in an organization or community. The diversity in story banks is of crucial importance, since the more diverse the story banks, the more resilient an organization.

Stories play an important role for communities and organizations. Stories are shared within communities and organizations to set common goals and create shared meaning (social contract). The extent to which people share stories, and feel as though there is a story sharing tradition present within a community, contributes to a good working place.

How does the PNI method contribute to answering the research question?
University College Groningen is a relatively small faculty with great diversity in both staff, professors and students. This faculty advocates interdisciplinarity and diversity, since the solutions of today's challenges require the collaboration across cultures and disciplines (Van Ees, 2016), which certainly is reflected in the community of the college. It is very likely that in such a community, with varying perspectives, the experiences of similar events will differ per person. Additionally, it is very likely that many individuals of UCG will have experienced different events or emotions during their time at the college, since not everybody plays the same role within the system.

Personal experiences and emotions are key in determining what relationships and characteristics are current at the college. Furthermore, personal experiences and emotions are embedded in experiences, which can be shared through story telling. Such a narrative technique allows for the inclusion of important and sensitive information that otherwise might be unspecified or left out in quantitative analysis. The PNI method provides a structured approach on how to collect these stories and interactively include the research subject itself, UCG in this paper. Having a community sharing these experiences and emotions with each other, might enhance the community feeling or reveal weaknesses of the community that can be improved upon to strengthen its resilience.

3.1.1. THE MODEL OF PNI

The model of PNI is divided into three essential phases, with three extra phases. Each of these phases are listed and defined below.

There are three main phases:
1. *Collection*
   Collecting stories from organization
2. *Sensemaking*
   Members of the organization make sense of the collected stories
3. *Return*
   Returning back the stories to the organization

Extra phases:
1. *Planning*
   Designing the project
2. *Catalysis*
   Preparing materials to improve sensemaking
3. *Intervention*
   Discussing findings with participants
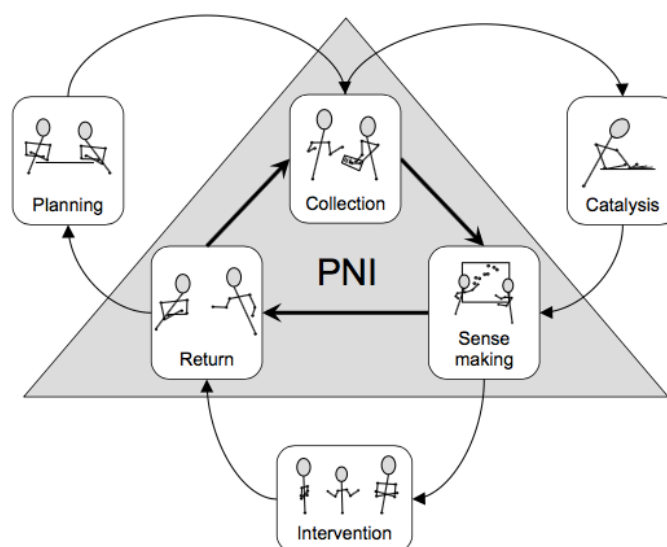
Figure 1: A visualization of the different PNI phases (Kurtz, 2014)

3.1.2. PLANNING PNI

The following figure visualizes the six necessary elements for planning the PNI project (Kurtz, 2014):
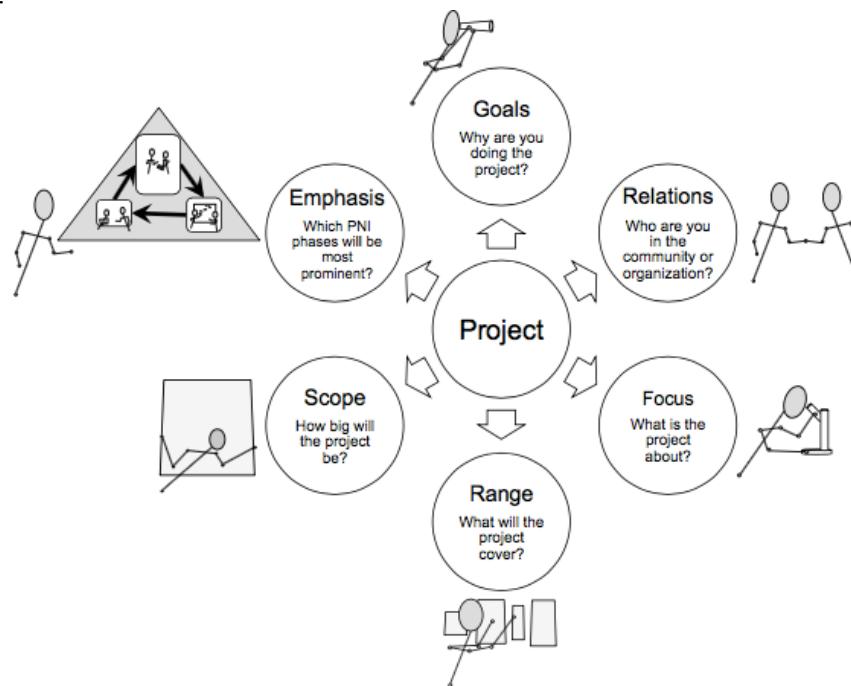
Figure 2: PNI project planning (Kurtz, 2014)

The six elements of planning PNI are listed below, provided with answers to each question:

1. *Goal*
   Why are you doing the project?
   The goal of this research is to find out how the people at UCG experience the college, and examine whether these experience reveal anything about the resilience of UCG. Ultimately, when a clear understanding of UCG is reached, this will be used to analyze how UCG should anticipate, cope and recover from effects of negative surprises. This idea is not shared amongst participants, but the implicit aim of this research.

2. *Relations*
   Who are you in the community or organization?
   The conductor of the individual and group sessions, a third-year student of the first class of UCG, Class of 2017. The participants of the sessions are listed in Appendix A.

3. *Focus*
   What is the project about?
   The research is about understanding UCG as a social complex system and trying to determine how this system can be resilient.

4. *Range*
   What will the project cover?
   The research will cover two PNI sessions. The first one is an individual story collection session with people from UCG. The second is a group sensemaking session of these stories, again with people from the college. In other words, the content of

these session are stories about experiences of individuals at UCG, which are collected in the first session.

5. *Scope*
   How big will the project be?
   As mentioned in the *range* paragraph, two sessions will be held. In the first session, at least three stories about experience of at least ten people are collected. This amounts to a minimal number of thirty stories. During the group session, the second stage, at least twelve people have to collectively make sense of the stories.

6. *Emphasis*
   What PNI phases will be most prominent?
   The *story collection* phase is inevitably crucial, since this phase provides the content for subsequent phases. Nevertheless, the *sense making* phase is most prominent because the results of this phase, the group session, will provide the information that is needed to describe the characteristics, relationships and/or resilience of UCG.

3.1.3. METHODS OF PNI

This section illustrates which methods of PNI are used per session. It is important to note that there are many useful methods, and that each of the methods is more applicable in a certain situation than in others. Therefore, a justification for every method of PNI used in this research will also be presented throughout the following paragraphs. The methods used are based on the proposed methods by Cynthia Kurtz in her book Working With Stories (2014).

Session one – story collection
The aim of the first session is to collect at least three stories of ten different people, thus a minimum of thirty stories. These are stories about experiences that the interviewees had at UCG. To avoid pushing the topic of the experience into a certain direction, or to leave out any expectations that interviewees might feel to have to meet, only one simple question is asked: Could you please tell a story about an experience you had at UCG?

Session two - sensemaking
The purpose of the second session is to make sense of the stories collected in the first session. This is done in the form of a group session consisting of twelve people. Two group sessions of approximately one and a half hour are organized, with six people in each group. Each group of six people will once again be subdivided into two teams of three. Thus, there will be four teams in total, since there are two group sessions organized. The number of stories collected in the first session will be equally divided over the four teams. Their task is to make sense of the stories in teams. The procedure of the teamwork is presented as follows:
   1. Discuss the content of each story in teams, and try to understand what this story reveals about UCG.
   2. Map the story onto the story landscape (the story landscape used in the group sessions is presented in the following section 3.2 *Story Landscape: Circumplex Model*).
   3. List any important information or characteristics that this story reveals about UCG.
   4. Indicate whether the story indicates signs of either good or poor communication, only if communication plays a role in the story.

Participants

The aim is to have a group of participants that is as diverse as possible for each of the sessions. In context of UCG, this entails that there should be at least three to four students in each of the sessions that all hold different positions within groups of UCG, such as Faculty Council or a board position at Caerus. Regarding the staff members, there should be a diverse number of professors, Faculty Board members, caretakers, members of the Secretariat, Board of Examiners, and so on. The lists of participants per session can be found in Appenix A, this appendix includes the UCG-related profiles of each of the participants.

3.2.   STORY LANDSCAPE: CIRCUMPLEX MODEL

This section illustrates the story landscape that is used during the group sessions. The landscape is called the Circumplex Model. This model proposed by Cynthia Kurtz in her book Working With Stories (2014) as a useful tool for group sensemaking in communities, and is created by David H. Olson (2000).

3.2.1.   DESCRIPTION OF THE MODEL

The Circumplex Model is a useful tool that allows to diagnose relationships within family systems or communities and focuses on three important dimensions of systems: the level of *cohesion*, *flexibility* and *communication*. Systems that manage to balance these dimension well are understood to be optimally functioning, unbalanced systems are thus understood as not optimally functioning. The following paragraphs will outline the specifics of this model.

Cohesion

The cohesion within a system refers to the degree to which members of the system feel bonded to one another. This model presents four different levels of cohesion (Holson, 2000):
  1. Disengaged
  2. Separated
  3. Connected
  4. Enmeshed

These levels range from a very low level of cohesion (disengaged) to a very high level of cohesion (enmeshed). Balanced systems range between *separated* and *connected*, the other two extreme levels of cohesion (*disengaged* and *enmeshed*) harm the well-functioning of the system. The following figure (Figure 1) depicts the model, showing the different levels of cohesion on the horizontal axis:

LEVELS OF FLEXIBILITY:

	DISENGAGED	SEPARATED	CONNECTED	ENMESHED
CHAOTIC	CHAOTICALLY DISENGAGED	CHAOTICALLY SEPARATED	CHAOTICALLY CONNECTED	CHAOTICALLY ENMESHED
FLEXIBLE	FLEXIBLY DISENGAGED	FLEXIBLY SEPARATED	FLEXIBLY CONNECTED	FLEXIBLY ENMESHED
STRUCTURED	STRUCTURALLY DISENGAGED	STRUCTURALLY SEPARATED	STRUCTURALLY CONNECTED	STRUCTURALLY ENMESHED
RIGID	RIGIDLY DISENGAGED	RIGIDLY SEPARATED	RIGIDLY CONNECTED	RIGIDLY ENMESHED

CHAOTIC
- Lack of leadership
- Dramatic role shifts
- Erratic discipline
- Too much change

FLEXIBLE
- Shared leadership
- Democratic discipline
- Role-sharing change
- Change when necessary

STRUCTURED
- Leadership sometimes shared
- Somewhat democratic discipline
- Roles stable
- Change when demanded

RIGID
- Authoritarian leadership
- Strict discipline
- Roles seldom change
- Too little change

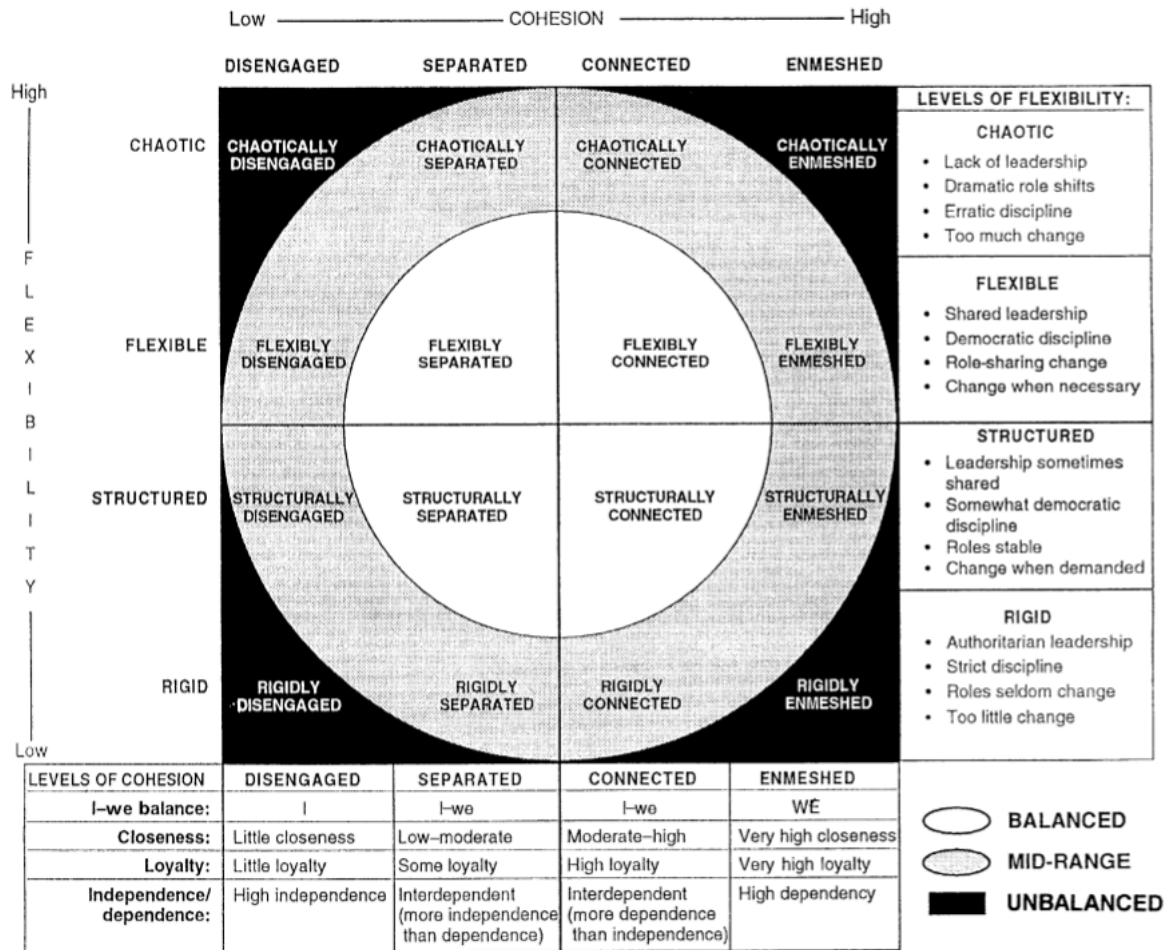| LEVELS OF COHESION	DISENGAGED	SEPARATED	CONNECTED	ENMESHED
I–we balance:	I	I–we	I–we	WE
Closeness:	Little closeness	Low–moderate	Moderate–high	Very high closeness
Loyalty:	Little loyalty	Some loyalty	High loyalty	Very high loyalty
Independence/ dependence:	High independence	Interdependent (more independence than dependence)	Interdependent (more dependence than independence)	High dependency

BALANCED — MID-RANGE — UNBALANCED

Figure 3: The Circumplex Model (Holson, 2000)

If a community is able to balance its level of cohesion properly, it belongs either to the *separated* category or *connected* category. This means that the members or groups that belong to the community are capable of living their separate lives, while still being either low-moderately connected or high-moderately connected to their families. In case a community would fall into the *disengaged* area of Figure 1, the members or groups of the community would be living very separate from each other, with little to no level bonding to each other. On the other hand, individuals and groups in *enmeshed* communities would barely do activities on their own, there is a high dependency on each other and almost everything is being done collectively.

Flexibility
The level of flexibility within a system or community denotes the extent to which the system or community is able to balance stability and change. In this model, flexibility refers to the presence (or absence) of leadership, the extent to which roles play a role and the amount of change is present in a system. Also for flexibility there are four different levels (see vertical axis of Figure 1), ranging from very low to very high flexibility (Holson, 2000):

1. Rigid
2. Structured
3. Flexible
4. Chaotic

The ability of a system or community to adjust its structure (e.g. roles or strictness of leadership) when necessary determines the level of flexibility. The extreme level of *rigid*

states that a system is not flexible and undergoes authoritarian leadership with roles that seldom change. Such as system is incapable of changing its structure when necessary, while a *chaotic* system would be too flexible and likely misses structure in general. A *chaotic* system lacks leadership or has erratic leadership, as opposed to a *rigid* system, and has roles that change frequently. Therefore, systems that fall under either of the two extremes are not capable of functioning optimally. A *flexible* or *structured* system, on the other hand, has the ability to adjust its structure sufficiently, which allows for optimal functioning. To elucidate, a *flexible* system is defined by a democratic structure, shared leadership and the ability to adjust the structure when necessary. *Structured* systems sometimes share leadership, are less democratic than *flexible* systems and adjust structure when demanded. In order for the system to function at optimum level, it should either fall under the *flexible* or *structured* category of this model.

Communication
The third dimension of the Circumplex Model is communication. This dimension is not depicted in the model, since it functions as a facilitating dimension (Holson, 2000). This entails that, in case of positive communication, a community would be more capable of balancing the dimensions of flexibility and cohesion. The same counts for negative communication: a community or system would be less capable of balancing these two dimensions. To exemplify, if a community finds itself in one of the extreme corners of this model, bad communication would make it more difficult for this community to stabilize. In other words, communication facilitates and improves the ability of a system or community to balance flexibility and cohesion.

The Circumplex model assumes that the balance of flexibility and cohesion changes overtime. Therefore, it is not necessarily a problem for a system to get into one of the extreme corners of the model. However, the systems that are relatively balanced and have good communication are most capable of re-balancing in response to a crisis, and thus returning to a balanced position. For instance, if a group within a community desires or demands change, others groups or individuals of that community will have to respond to this. Also changes in the structure of groups within a community could lead to other groups being required to respond to this change in order to stabilize the situation.

To exemplify, next year a new group of approximately 120 students will join University College Groningen. Assuming that UCG is currently very well balanced, and would be on the *flexibly connected* area on the Circumplex Model in Figure 1. Also, this example assumes that the staff-student relationships are the key element in keeping the community connected, flexible and the good level of communication due to these staff-student relationships facilitates the ability of UCG to balance the two former dimensions. Currently UCG has around 120 students, so adding another 120 students means that the number of students will be doubled. Staff-student relationships are harder to maintain the larger the group of students is, assuming that the number of staff-members do not increase proportionally. Therefore, the intimacy or quality of the staff-student relationships could be in danger due to the doubling of the students. To refer back to the Circumplex Model, UCG could go through the following stages in response to this crisis, note that this example is an interpretation and does not follow from the analaysis:
1. Before: *flexibly connected*
   The students and staff have built op good relationships and staff allow for the students to have say in the decision-making process, so there is a democratic discipline.
2. After students arrive: *rigidly disengaged*

The students will not be able build up relationships with the staff in the beginning, so the community becomes disengaged, and because democratic decision-making is too cumbersome yet with many new students, authoritarian leadership is more efficient.

3. UCG responds to the crisis: *structurally disengaged*
   UCG learns how to restore its democratic discipline, and manages to somewhat share leadership again. Nevertheless, the students still remain to feel disengaged.
4. UCG becomes more inclusive and democratic: *flexibly separated*
   UCG has fully restored its democratic discipline, which entails that leadership is shared and the voice of the students is incorporated. To some extent students have been able to build up relationships with the staff, and vice versa, but will not reach the same level as before.

The abovementioned example illustrates how changes in the structure of a balanced community, UCG, can push a system toward different corners and positions in the Circumplex Model. Also, it shows that UCG is assumed to be able to return to a balanced, though different, position on the model: *flexibly separated*. In other words, a system or community that undergoes a certain crisis does not strictly have to return to its old state in order to be functioning optimally. The more balanced systems have both the resources and ability to go through changes and eventually return to one of the balanced states (*flexibly separated, flexibly connected, structurally connected and structurally separated*). Nonetheless, a system or community could prioritize one of these states, and work towards reaching that.

4. RESULTS AND OBSERVATIONS

This section outlines the observations and results of the two PNI sessions. At first, the individual sessions of story collection will be discussed. Secondly, the group sessions will be discussed. Lastly, this section will present the results and observations that follow out of these sessions. The paragraph on results will also address to what extent these results and observations provide insight to the resilience of UCG.

4.1. INDIVIDUAL SESSIONS – STORY COLLECTION

During the individual sessions, described in section 3.1.3., 32 stories were collected. The content of each of the stories varied highly amongst the ten participants. Examples of topics were: feedback sessions with staff and students, experiences of staff with students and vice versa. The complete list of stories can be found in Appendix B.

4.2. GROUP SESSIONS - SENSEMAKING

The sensemaking group sessions included both a mix of staff and students, similar to the group of participants of the individual session. As listed in section 3.1.3, the sensemaking procedure was divided into four separate tasks:

1. Discuss the content of each story in teams, and try to understand what this story reveals about UCG.
2. Map the story onto the Circumplex Model story landscape (see figures in Appendix C)
3. List any important information or characteristics that this story reveals about UCG (see Table 2 in Appendix C).
4. Indicate whether the story indicates signs of either good or poor communication, only if communication plays a role in the story (see Table 3 in Appendix C)

All 32 stories collected during the individual story collection sessions were discussed and mapped onto the story landscape during the sensemaking sessions.

4.3. RESULTS

4.3.1. THE COMBINED LANDSCAPES

Figure 4 depicts all the 32 stories mapped onto the Circumplex Model described in section 3.2. Recall that the vertical axis of the figure ranges from *rigid* (low flexibility) to *structured* (moderate-low) to *flexible* (moderate-high) to *chaotic* (highly flexible). In reference to the horizontal axis, the level of cohesion ranges from *disengaged* (low cohesion) to *separated* (moderate-low) to *connected* (moderate-high) to *enmeshed* (highly cohesive). A more elaborate explanation of the axis can be found in section 3.2.1, and area-specific explanation will be discussed later in this section.
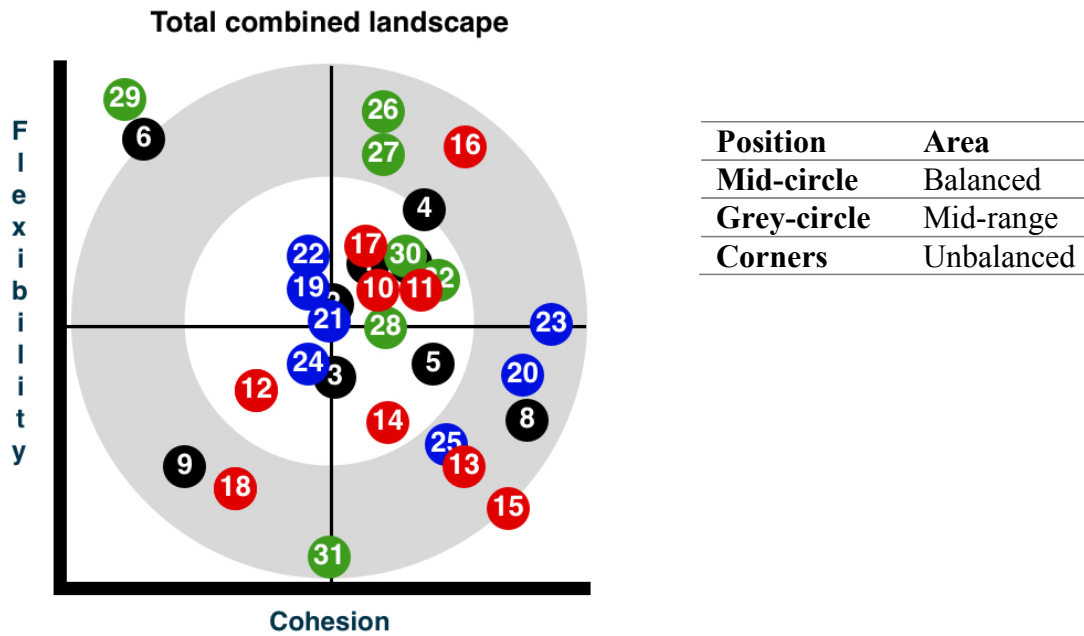

Position	Area
Mid-circle	Balanced
Grey-circle	Mid-range
Corners	Unbalanced

Figure 4: Total combined landscape (Appendix C)

Table 4: Stories per area in Circumplex Model (Appendix C)

Balanced	1	2	3	4	5	7	10	11	12	14	17	19	21	22	24	28	30	32	**18**
Mid-range	6	8	9	13	15	16	18	20	23	25	26	27	31						**13**
Unbalanced	29																		**1**

The Circumplex Model states that the more balanced communities have better resources and capabilities to overcome negative surprises. This model defines a balanced community as one that falls under the balanced area of the landscape, the white circle in Figure 3 (see section 3.2) and 4. The stories that indicate that UCG falls in the balanced area must, therefore, either reveal that UCG is *flexible* or *structured* - and - *connected* or *separated*. The balanced area is the white circle in the middle of the model (see Figure 3 in section 3.2 for an illustration) (Holson, 2000). It is important to note that this model is not used as a tool to assess the resilience of UCG, however, it helps to understand what the strengths and weaknesses of UCG are. This, in turn, provides valuable information when looking at the resilience of UCG.

Table 4 presents the specific numbers of the mapped stories per area. The total number of stories per area in the landscape are indicated in the rightest column. These numbers clearly indicate that UCG is certainly not experienced as unbalanced with regards to flexibility and cohesion, and slightly more balanced than mid-range (or moderately balanced).

Observations:
Regarding the cohesion of UCG, Figure 4 shows that most of the stories are mapped either close to the vertical axis, or on the right side of the vertical axis. This denotes that UCG is experienced as a relatively cohesive system. On the other hand, Figure 4 shows relatively more dispersion with respect to the level of flexibility. As described in section 3.2, flexibility refers to the presence (or absence) of leadership, the extent to which roles play a role and the amount of change is present in a system. Roughly, this implies that the leadership, amount of change and the degree of democratic discipline at UCG is experienced to be relatively inconsistent. The following two figures (Figures 5 and 6) display the dispersion of the levels of flexibility and cohesion:

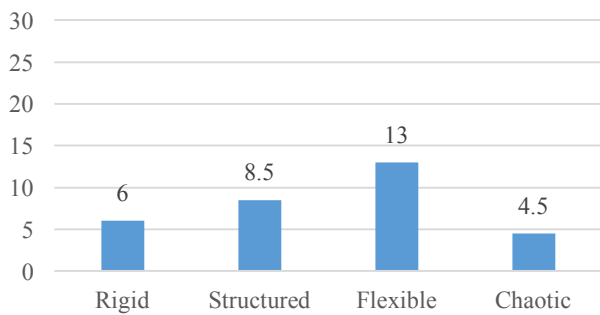Figure 5: Number of stories and level of flexibility

Figure 6: Number of stories and level of cohesion

Counted combined landscape

Figure 7: Counted number of stories per sub-area
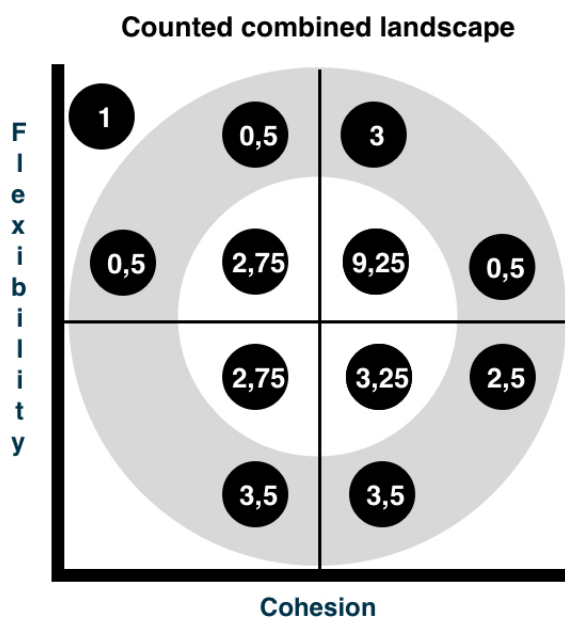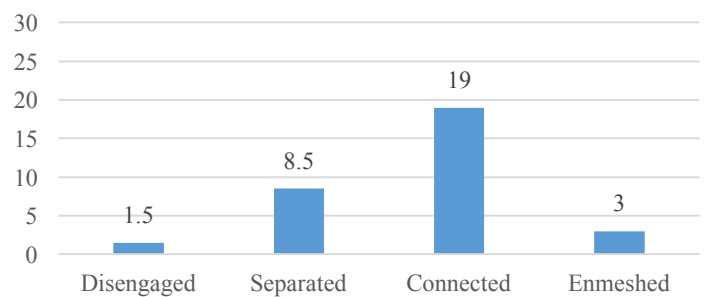
Figure 7 on the left displays the counted number of stories per sub-area. Here again it is obvious that most of the stories (18 in total) are mapped in the balanced area of the model. Also, this figure clearly shows that there is relatively little dispersion in values on the horizontal axis of cohesion, as there in flexibility. The reason why most numbers contain decimals is because the participants decided for certain stories that those belong to two or more areas. Therefore, the story count has been equally divided over the areas.

4.3.2. EXPLANATION PER SUB-AREA

In this section, an explanation per sub-area will be given for what it means for UCG that certain people experience UCG as, for instance, 'flexibly connected' or 'flexibly separated'. These explanations will be mainly based on the characteristics that people indicated per story (see Table 4, 5 and 6 of Appendix C), but also partially on the information given per area in the Circumplex Model (see Figure 3 of section 3.2). Only the areas with at least a story count of 2,5 or higher (see Figure 7) will be explained, since in these areas at least 3 stories have been mapped (the decimal is due to overlap of one story with one or more peripheral areas). Anything lower than a story count of three entails that only one story has been mapped in that specific area, which is assumed to not reveal sufficient substantial information. The explanations will start with the areas in the balanced area, afterward the mid-range areas will be explained.

Balanced area:

Flexibly connected (9,25 stories)
In this area, UCG is mainly seen as a positively flexible, highly open and inclusive college. The experience of flexibility is based on the democratic discipline that both students and staff sense at the college. Especially staff feel that there is not authoritarian leadership, but that there is little to no hierarchy and they could all contribute to decision-making. Furthermore, UCG is regarded as a highly inclusive and open college where both staff and students are highly engaged and connected. Student-staff relationships undoubtedly contribute to this connectedness, but also the high responsiveness of staff and students, and the dialogical approach to developing UCG contribute to this. This dialogical approach is reflected in, for instance, feedback session on courses. With regards to student-staff relationships, people do sense that these relationships are likely to be less common and harder to build up as the number of students increases.

Structurally connected (3,25 stories)
Here UCG is also experienced to be a close and connected college, although slightly less flexible than in the *flexibly connected* area. There is a great diversity of both staff and students and people regard everybody as equals. People at the college are loyal, very responsive and aware of their responsibilities. Staff seems to be proud of its students. Nevertheless, the decision-making is relatively structured, and the democratic element that was noticeable in the *flexibly connected* area is still present, but to a lesser extent. Slightly more decisions are made from higher up, or rules that have been set have to be followed. The rules, for instance, bring about a certain degree of structure, which could go at the expense of the inclusiveness (more rules might make the college less dialogical and therewith less engaging and inclusive).

Structurally separated (2,75 stories)
People experience UCG as a college that engages students, as an inclusive college, but also as a college where people live relatively separated from each other. This means that people are both able to be part of the community, but also wish to live partially independent from the community. The degree of leadership and the extent to which people sense that they are part of the decision-making process is similar to *structurally connected*; people feel relatively less involved in decision-making. This could be due to leadership that is shared to a lesser extent, or rules that have to be followed.

Flexibly separated (2,75 stories)
Although there is a sense of community, there are signs of generational differenced amongst
students and staff, and the relationship between student and staff is especially less developed
with the current first year students. In other words, staff and students live more separated
from each other, despite the sense of community. With respect to the leadership, staff and
students are relatively more engaged in the decision-making process, making it more
democratic than in the *structurally separated* area.

Mid-range area:

Chaotically connected (3 stories)
There is a strong desire for community feeling, which is acknowledged in the stories. People
take their responsibilities and like to help one another out. Nonetheless, UCG is experienced
as a rather chaotic system that is still in its developing phase. The frequent changes at UCG
indicate a lack of structure with regards to, for instance, decision-making and roles. People
experience that UCG is certainly doing well, but there is room for improvement.

Structurally enmeshed (2,5 stories)
A strong feeling of community feeling and support is sensed at UCG. People at the college
seem to be entangled into the community and therefore less likely to work independently.
Notwithstanding the strong community feeling and very positive relationships between
students and staff, there is a danger that these relationships become weaker as the number of
student increases. Also, the leadership and decision-making is somewhat experienced to be a
collective effort.

Rigidly connected (3,5 stories)
UCG is a very open college, very inclusive, engaging and people are well-connected.
However, UCG is sometimes experienced to be highly structurally stable. The boundaries set
at the college limit the flexibility of the dynamics at the college, despite its openness.

Rigidly separated (3,5 stories)
In the rigidly separated area, UCG is experienced as a rigid college with very little change
and flexibility. There is a community feeling, but staff and students tend to live more
separately.

4.3.3. COMMUNICATION

The third dimension of the Circumplex Model, *communication*, is not visualized on the
model itself. As explained in section 3.2, communication is a facilitating dimension. More
balanced communities or systems will have better communication than communities or
systems that fall under the mid-range or unbalanced areas. Also, better communication will
facilitate a community or system to become more balanced.

The participants of the group sessions indicated, per story, whether the story indicated
positive or negative communication, only if communication played a role in the story. To
elucidate, positive communication refers to the presence of good communication, while
negative communication refers to either bad communication or a problematic situation that is

due to the absence of communication. Table 3 in Appendix C lists the level of communication per story.

This table shows that for nine stories participants indicated negative communication (with sign 0). What is remarkable is that seven out of these nine stories that reveal negative communication at UCG fall in the mid-range area of the Circumplex Model. These stories are indicated in the table with a bolded '**0**' sign. This reveals that more than half of all the stories in mid-range area of the model reveal bad communication. The point here is not to state that these stories are in mid-range, thus not in the balanced range, because of poor and/or a lack of communication. However, according to the Circumplex Model, better and more frequent communication in all situations at UCG facilitates in balancing the flexibility and level of cohesion in the system. In other words, some participants might have experienced UCG to be more balanced if there was not a lack of communication, or poor communication.

4.4. LINK TO RESILIENCE

This section will present how on average people experience UCG, and what the strong and weak aspects of these characteristics are. Resilience in this paper is described as the ability of a system to anticipate, adapt, cope and recover from the effects of surprises. The strong aspects of UCG are those characteristics that make UCG a comfortable system for staff and students to live and work in. It is not the case that the stronger these aspects of UCG, the more resilient the system is. Namely, the ability of UCG to anticipate, adapt, cope and recover from the effects of negative surprises that pose a threat to the aspects that make it enjoyable for staff and students to cooperate and coexist is understood here as resilience in context of UCG. This section describes what these strong aspects are, and who would be responsible for protecting these aspects. With respect to the weaknesses revealed in the stories, this section discusses these aspects based on how the could pose a threat to the resilience of UCG, and examines whether certain suggestions follow out of these aspects that could improve the resilience.

Strong aspects

UCG is experienced to be a very inclusive, open and connected system. Within this system, many different cultures and nationalities seem to be able to cooperate and coexist, regarding both staff and students. The openness and inclusive element of UCG is likely due to the fact that the staff is highly responsive to the voice of the students, and the students are very responsive when they are asked to be involved in e.g. decision-making or a project. To exemplify, course feedback sessions, student involvement in the Faculty Board and student involvement in interviewing new staff members are practical examples of when students and staff cooperate. Furthermore, students and staff meet in the canteen, during tutor meetings or socialize with each other during community events. There are numerous ways and occasions where students and staff are building up a relationship. This inclusiveness and democratic discipline in combination with the little number of students that have been present at UCG allowed for great student-staff relationships to emerge. These aspects give both students and staff the feeling that there is little to no hierarchy present. In summary, three key elements shape the strong points of UCG: the high level of student engagement, student-staff relationships and the democratic discipline at UCG. These three aspects conform closest to the *flexibly connected* are in the Circumplex Model, which is the area that by far had the highest story count (see Figure 7).

Weaknesses

There seems to be a trade-off in structure and inclusiveness at UCG. This is sometimes explicitly mentioned, but also implicitly in certain stories. On the one hand, UCG wants to be a really inclusive and open college, and according to the experiences this is working out really well. On the other hand, since UCG is an educational organization, there are certain rules and boundaries that have to be respected. This entails that not all the decision-making and not all the procedures can be democratically determined; some rules are set by the University of Groningen for example. This could also explain the dispersion of the levels of flexibility, or inconsistency in flexibility, shown in Figure 4 (see section 4.3.1.). It should be noted that the less democratic UCG becomes, the less students will be engaged (especially in decision-making). Furthermore, people sense a threat of diminishing student-staff relationships. This is due to the fast increase in the number of students, while the number of staff members does not proportionally increase. Once staff and students are bonding less, the sense of community and feeling of little to no hierarchy might be threatened. With respect to the community feeling, it might be the case that UCG will consists out of multiple communities: a community of staff members that know each another well, and a community of students that socialize together. Lastly, communication at UCG overall has been indicated by participants to be positive on average. However, certain negative experiences, or chaotic experiences were due to the lack or absence of communication. Improving communication and more frequent communication between actors could avoid certain negative experience from happening. Additionally, communication helps UCG balancing its level of flexibility and cohesion. In practical terms, if perfect communication would exist at UCG, it would be easier for the system to have shared leadership, democratic decision-making and a highly connected community (*flexibly connected*). So, there are three weaknesses that could harm the resilience of UCG: UCG becoming less democratic, diminishing staff-student relationships and poor communication.

5. CONCLUSION

The stories reveal that UCG is very flexible, inclusive and very democratic. Both students and staff seem to feel as though they are part of University College Groningen rather than having the feeling of being a part of a specific group within UCG. The high level of student engagement, the relationships that students and staff members have amongst and with each other and the democratic dynamics at UCG seem to facilitate these experiences. These aspects undoubtedly contribute to the inclusive college that UCG desires to be. Therefore, to a certain extent this desired college is realized. However, there are certain factors present, and likely to be more present in the future, that could harm these characteristics. A factor that could have significant impact is the high increase in the number of students that will join UCG in the following years. An influx of a large number of students makes it more cumbersome for UCG to maintain democratic decision-making. Also, since the number of staff members will not proportionally increase with the number of students, it is very likely that students and staff will be bonding less. Lastly, achieving good levels of communication might also become more difficult with many people at the college. Factors like an increase in the number of students are not necessarily surprises, they can be expected, even determined and known before they happen. However, this factor serves as a good example of how the strong aspects of UCG can be harmed in case UCG does not protect itself well against these negative effects.

The resilience of UCG refers to its ability to anticipate, adapt, cope and recover from negative surprises. Negative surprises, in context of UCG, are surprises that could harm what characterizes UCG: a strong community where students and staff have good relationships, are highly engaged in many aspects of the college and are to a great extent make the decisions democratically. In order to be able to protect these characteristics through all stages of a negative and surprising event (anticipate, adapt, cope and recover), UCG needs to act as a collective. Everybody from the college should be engaged in the decision-making process when anticipating a negative surprise. There is not one agent or group of agents, such as the Faculty Board, responsible for making UCG an inclusive college, or one where students and staff know each other well. Students need to be responsive and willing to engage, while staff members need to be responsive too and willing to engage students in their work. When dealing with negative surprises, UCG as a collective, as one community, should cooperate in anticipating, adopting, coping and recovering from it. By doing this, it is most likely that the UCG after the crisis will still be one community, and the strong characteristics might come out even stronger. In time of a crisis, UCG will need its strong characteristic the most together with an improved level of communication. Therefore, it is important that these characteristics are maintained so that they can be utilized during a negative surprise.

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APPENDIX A – PARTICIPANTS

Table 1: Participants of the individual and group sessions

Name Participant	Profile 1	Profile 2
Rob van Ouwekerk	Faculty Board	Program Director
Marthijn Kinkel	Year 3 student	Ex-Chairman of Caerus
Frank De Morree	Year 3 student	Ex-Faculty Board member
Jelena Busch	Year 3 student	Ex-Secretary of Caerus
Sienie Werkman	Secretariat	Support staff
Hugo Rosado	Caretaker	Support staff
Tjeerd Andringa	Professor	Board of Examiners
Tom Barbereau	Year 2 student	Faculty Board
Simon Friedrich	Professor R&M	Academic Coordinator R&M
Aine Gormley-Gallager	Professor Social Sciences	Thesis Coordinator
Barend van Heusden	Professor Humanities	Head of Dep. Of Humanities
Melina Ekic	Recruitment & Communications	Support staff
Claire Hudson	Year 1 student	
Ferdinand Lewis	Professor	Academic Coordinator of Projects
Roland Chiu	Professor Health & Life Sciences	Department of Health & Life Sciences
Jack Dignam	Year 2 student	Faculty Council
Sander van den Bos	Faculty Board	Head of Student Affairs
Cyntha Wieringa	Year 3 student	Ex-Secretary of Caerus
Isidora Cvetkovska	Year 1 student	
Ayse Arslanargin	Professor Linear Algebra	Department of Mathematical & Natural Sciences
Marieke van Beek	Year 3 student	Ex-Caerus Committee Affairs Officer of Caerus
Nick Bootsma	Year 3 student	Ex-Treasurer of Caerus

APPENDIX B – COLLECTION OF STORIES: INDIVIDUAL SESSIONS

Individual Story Session

Story 1

We have a relatively young group of staff members, unexperienced with the concept (UCG). That counts for all of us, X and I are also not so experienced with this concept. But, since we founded the College, we were looking around us a lot more for information, thus perhaps we are informed a little bit better. However, regarding experience in this type of education, we don't have that either, so you have to make sure to do it together and that can be quite difficult. In this situation, people often just like to be told what to do, and ask what we are going to do, how they have to develop certain things. Here you see that the call for structure is really noticeable. It depends per staff member, but there are several staff members who just want to have all the rules on paper, and keep on emailing me asking where exactly is explained what the policies for, for instance, presence in class is, or when a reflection report has to be submitted, what has to be included in this and how they have to grade these reports. One of the principles of Liberal Arts & Sciences is that everything should not be perfectly structured, for instance, do this in week 1, this in week 2 and make sure you do that in week 3. You should just get a feeling for how you mentor students while keeping the end goals in mind. These movements constantly clash, which is exciting but challenging at the same time.

Story 2

As a teacher, I had never taught precisely this material. Some of it maybe, but not precisely this. I put in quite a lot of effort, also methods-wise. It's also emotionally something that you get involved with as a teacher. It's also a challenge there to not get depressed when you get negative feedback, or discouraged. On the other hand, it's also a challenge then to still take it seriously. There were also some colleagues who just said: 'I don't care'. Well, I think in general, it's maybe better to say 'I don't care', while I look at the suggestions, but I don't care emotionally. That is almost the best reaction you can have. There are also many teachers who really carry this with them. The comments can be like this, very straightforward. I think I remember one comment that was like: 'The teacher in this course is talking for hours and hours even though he knows that we find it boring'. Actually, maybe it was also a bit revealing, because my ambition was to not let it become a monologue, but really wanted it to be a dialogical way. I don't really know as a teacher, when you read this, there is still some truth to it, or maybe this is someone that is just angry. Among teacher we sometimes talk about the evaluations that we get and especially about the nasty comments. So the job of the others is to encourage you that this is not so bad (laughter). That's I think what the community is for, psychological stability, in that sense it is important that teachers get along well with each other.

Story 3

All the staff members now follow a course on Cultural Awareness, Language and Cultural Awareness is what it's called. This entails that we have to look at all the differences between the cultures, because we have a lot of students descending from different cultures, but also staff members. If you look at the group of professors, there is a really diverse number of people coming from different countries. Also, in the first years, we have 23 different nationalities. Every culture has its different way of dealing with certain things. This is what we have learned at the Cultural Awareness course: if you, as a Dutch person, are a talking to other Dutch people, you will continue to talk and before you are done talking the next person will start talking. However, if you talk to somebody from Finland, for instance, the professors too, they listen to the conversation but first process and think about what has been said. We had a professor here, X, she comes from Finland. At a certain point, there were some troubles. Then I told her: 'Girl, you have to make sure to have your own back.' They are not used to directly, just like us Dutch people, that we have direct responses in conversations, if we don't agree with something. Of course, not everybody has this, but we are a direct folk. In this way, you can see that in other cultures, such things work completely different. This doesn't entail that we should take into account all the cultures, that is impossible. You can't be like: 'Oh, this is the way I should approach him, because this person is from Finland. I have to approach her differently, because she is from Italy.'. What you can do, you will have a better understanding of how people respond to things, and how they deal with certain things. For instance, during New Year's Eve, Dutch people give each other three kisses, but that is different in other cultures. I remember, with the staff we organized a New Year's breakfast, something like that. I met X there, one person just gives a hug, while the other gives you one kiss, but we as Dutch people give three kisses. Of course you just have to do what you feel like is the right thing. It was just interesting for me to see, like, how do we deal with other cultures. Also, with regards to students, that you are able to take this into account. I don't know what kind of students these are, but you have students that respond 'I understand it', when you ask them if they do, while they actually might not understand it. Maybe they say that because they are scared of us thinking that he or she is dumb for not understanding something. The workshop that we have helps us with understanding this.

Story 4

Some students are more approachable than others. Sometimes it's noticeable when a student looks troubled, or is dealing with something. Then you can easily ask them about what's going on, or whether something is wrong. But, it's more likely that you do this with the students that you know. Look, the first years that I currently know, by name, are mostly students that frequently have something. Not that those are problematic students, but I know all of the second and third years by name and that will be even less next year. When X had this accident, she walked up to me and I found out that she wasn't insured. I was kind of mad at her, because, how can you be here, you assume that students have this, you know, Dutch students are insured. But not all foreigners have figured out their health insurance. Then you find out that she doesn't have this, while she has been told to get this many times before. Then you get a little mad at her: 'Girl, do you realize how high the bill of the hospital is going to be?' You notice that, in the country where she is from, you don't have health insurance there.

Story 5

I received an email from a student who was beyond excited about a piece of text that he had to read, by Maslow, about self-actualization. It was a long text, two pages. Reading the text about self-actualization was the homework, and identify several characteristics that you find in others around you and in yourself. This guy was really excited about the assignment: 'This is me!'. He wrote a piece about: 'If this is who I am, how did I become like this?'. He wrote such a delightful piece about how his parents have prepared him for life and how in this course certain pieces are converging, and his mind is in the sky at the moment. He wanted to write about this in this assignment. He just submitted his homework. Those kind of things, if I have this every month, I would be a super-professor, and UCG would then be a super-education. I don't have this every month, but I do have this quite frequently, or other professors have this. This was the most beautiful answer to an assignment I have ever seen.

Story 6

The UCG student shop, how to start… A couple of students spoke with the managing director and the Dean and pitched an idea of having a student shop, which is a good idea to be honest. I totally agree with this. Then, without any concrete authorization from the managers, they took over a room at UCG and started selling things. The caretaker told them that they had to get permission, and that the managers had to give the caretaker green light, which didn't happen. So they were asked to write a proposal that had to be answered by the board of UCG. They didn't want to do that because they felt that everything they did was enough. The moral is, the caretaker wanted to help them to get the shop officially authorized. Then, they started the shop anyways, without authorization. In the end, they left the food – and – the money in the shop. Now the caretaker asked them to pick up the food and the money. After three months, the caretaker approached them again and offered them their own money back. They looked confused and accept the money. The caretaker asked himself, why would you start a shop, if you don't even use the many, and don't even come to collect it.

Story 7

At this point I am already reflecting on my personal development. I can't really explain that in a concrete way. I can tell my experiences and based on this, tell myself like: 'This is what you've done'. I have to ask myself questions like, what have you done exactly, what did you develop exactly? The only thing that I see really is, you had X at the beginning of the bachelor and now you have X at the end of the bachelor, and there is a really big difference between the two. Of course you stay true to your, like your values for instance, those stay the same. I mean, I still value people, I still value the bigger perspective that you shouldn't harm each other. That did not really change, but what changed is how realistically you take your values. You have to realize that there are billions of others on this earth. You can dream of something huge, or have an enormous ambition for something, but you should realize that you should work with the limits that you have. I think that UCG and studying in general really contributes to this. But I think that a lot of experiences outside of UCG also contribute to this. UCG facilitates this environment from which you can do these things. UCG as a platform from which you can develop yourself is special. UCG assumes that people operate on their own initiatives, but if you need any assistance then you will get that. You have to look for it though, and it won't always be easy, but for some reason this does feel like a good

combination. Because this forces you to look for things on your own, to think about what is realistic, and what is a good plan. People should try to not get cynical, like nothing is possible at UCG. At UCG, it's important to find the balance. I think that UCG should emphasize this and that for us as first years it worked out fine, but they should make sure to not lose out on the newer years. They should avoid becoming a school. Despite it sounding cliché, UCG is more than just an education system. You are developing people, people that really want to do great things, that is the idea, you have to facilitate that. Then ask yourself, how can you do that in the most optimal way? Where do you emphasize? Not on GPA or something like that, or stamps of excellence. It really depends on whether you really believe in what you're doing.

Story 8

For my first story, I will go back to the first year. The thing that pops in my mind is a certain moment, I think a Sunday evening after five weeks when we were writing essays and doing all these introductory things, IC2I projects and Calculus started. All of a sudden, I was walking to someone's room, and I saw that he or she, I can't remember, it was just going bad. Then other people just walked in randomly, and everyone was feeling so so so overworked. It was this moment when we were all looking at each other like, why did we even start this, why did we sign up to be here at UCG, what are we doing here, do we even want to be here? All these existential questions popped up and motivation and everything. It just felt as if, like personally, as if I started something that was so much tougher and more exhaustive and challenging then anything I had ever experienced before. And, yeah, that was just such a weird moment for me. But seeing that everyone was feeling the same way, and later that I found out by asking other UC students from other University Colleges whether they were having similar feelings after five weeks, I think they even called it a five-week breakdown or something like that. That I experienced that in my first year, like, so early in my UCG career was something I had never felt before.

Story 9

On that note actually, of Dutch directness as well is student feedback. I remember last year it was in block 2 feedback maybe for the current second years and I don't know what course we were talking about it was so it was a group feedback meeting and all the students and staff were there. And the students gave feedback or whatever and then X criticized the staff in front of students and whoever I can't remember was it X or who the staff was but that wasn't the point. I was like shocked you know that he did this because it sort of gives a, that's not professional whether you're Dutch or not i don't think and those are the points I brought up last year in the complaints thing. But and I think that the response hasn't been as much group feedback so I don't know it was that X wouldn't attend the group feedback because it is fine if the staff and the teaching is discussed with students feedback, but when the boss is there then that's not and he'd get, you know, them uncomfortable. So I think that was the response that he would no longer attend so that was good he wasn't a good or wasn't professional. I feel like I'm bashing X too much, I do like him. It was a general feedback session for block 2 (*2015-16 academic year*) and i don't know which course it was but i think it was X and the students has said something whatever the complaint was and he had said that she shouldn't have done that or you know and she put her head down and didn't get into it more you know she is not the person to get into it in front of everybody but you know it was uncomfortable even as a spectator and never mind other people even the students were like. But I did bring it

up during that meeting last year and other people had brought it up too and similar things at the time I think that was the agreed response that he would no longer attend feedback sessions. He still sees the paper you know but he does not attend the oral feedback sessions anymore i am not so sure because I am not so involved with teaching anymore but that was the decision that he wouldn't attend but he would still get the paper feedback the forms so.

Story 10

I was sitting together with the first years, a couple of weeks ago. We discussed the issue of being present during classes, because we received several complaints of professors that some students did not turn up during class. There was one situation wherein two students wanted to sit in the back of the class, because the evening before they played beerpong (drinking game) for a while. This really frustrates me, because if you can be a hero during a party at night you should be a hero in the morning after too. After this, we discussed what exactly the rules are with regards to presence during class. I said, I don't want rules about presence, I just think everybody should be 100% present. The others said that they still want to have rules, so we discussed with the students about what they think about this. Do you want us to write down in a policy book that you have to be present for 80% and you are allowed to miss 20%, if you miss more you will be punished? No, no, that sounds too much like a school system. Okay, but how do we prevent that you guys have a beerpong evening again, and that the classes are half empty? That should actually be done by ourselves, the students responded. Yes, but it does not seem to work that way at the moment. The students find this really difficult, we just asked them to advise us. Come with an advice on how I am supposed to solve this issue. Then the dilemma becomes quite big, and it appears that the issue is not solved so easily. This makes me doubt the idea of a collective College, I mean, the question is, will you succeed in sorting out these kinds of problems? While, actually, this does interface with the philosophy of the College. The self-organizing and conducting are some of the elements that I still find rather difficult, with respect to how to solve certain issues. This is the way I kind of see the College, as a sort of organism that continues to grow and develop, but in such a way that it can be controlled, and of which I hope that at a certain point this organism will learn how to control itself.

Story 11

My colleague X and I are not always exactly on the same page. We get along we well. We are in a special situation, because we offer Liberal Arts & Sciences, and it is clear that everyone should not only do Science but also get some ideas about Social Sciences and Humanities, and vice versa. But the question is how much discipline-specific knowledge should each of you, nevertheless, acquire? So this is always a trade-off right. Because if I oblige physics students to do lots of math, they will not take the Humanities-methods course. Maybe they will do one, but this is the idea. And X, has the tendency to think that what makes us special really is that you can have this multi-facetted menu and we should also see that students do that, because it is really something special to study here. I see the point, but I have more the tendency to say: 'Still that comes second, students should become serious academics in something where they major in, so they will gain more than superficial knowledge, and we see what else is possible'. That manifests itself in concrete questions about how we will do Methods in the next year, or whether we should make five credits

mandatory in another field. I will be against that, and X will not, both I think for good reasons.

Story 12

Last year February, I was ill, and I'm never ill. I haven't been sick in three and a half years. That time I was seriously ill. It was not for you guys, but it was Class of 2018, they received the red, green or orange letter. That is a really important letter. There was nobody that was able to take over this task of mine. This was something so specific. So I had to come back early from being sick, so to say. My daughter told me: 'How weird that nobody is able to take over this task of yours.'. I responded by saying: 'We're such a small faculty, we all have our own tasks, and all really specific tasks'. X will be my back-up, but that is more general, she can never understand all the details about the things that I am doing. That is the danger of being a small faculty, where the group of support staff is relatively small. You try to help each other as much as possible. When there are open days, for example, I am present. If X needs help or X, then you help too. The fact that we are so small also makes it easier for us to help each other out. That is an advantage though, and allows for your you to see more aspects of the faculty. But I had to come back to send the letters. That is the danger of having a small group of support staff with very specific tasks. For these things, we don't really have a back-up yet.

Story 13

There is a student who is going to start at UCG next year. I had a conversation with her through admissions. She already suggested in her motivation letter, no she made a movie. I derived from this movie that she wouldn't mind leaving the place that she currently lives in. On the one hand she was proud or something or felt comfortable there, but she was excited about leaving too. We had a conversation, and I asked her about why she wanted to leave. She responded by saying: 'My classmates are so disappointing to me, they are so empty, so single-minded, I don't fit in this group. I am losing my respect for them.' She went to travel, and she has already visited Groningen. A couple of weeks later, the Offer Holder Day took place. I saw here, and we chatted a little bit. In the end of the Offer Holder Day, we were standing outside. We chatted about this again, and at a certain point I said, more in general, 'Some people, lose respect for their classmates in high school.' One of our students said, while she was standing there too, 'That's exactly what I experienced in high school!'. With astonishing eyes, she looked as if she had the feeling that she is going feel at home next year. This was also something beautiful. Then she said: 'Wait up, something is wrong here. What is the drawback? This can't be so perfect.'

Story 14:

When I was interviewed to do the job. I had an idea what to expect, but at the same time I had no idea on how to do the job. On the first day, I was looking around. I had nothing to do, and was trying to observe that I could get to do the job. I could not find a way that I was going to perform my duties. One day I asked myself, do I have enough to do to earn my salary. At the same time, UCG was going to be renovated, and I wouldn't have enough to do. Once the work was done, the part came where we had to furnish the rooms. The furnisher came, and I

decided to supervise what they were doing. In the blink of an eye, I passed from not knowing what to do, to having too much to do in not enough time. And what is so complex about this is, you don't know how much will be on your plate. But you know the specifics tasks you will have to do. Everyday there is a task coming your way, and you start by doing the task that are related to your job, which develop and develop. But I'm not too sure whether I will be doing the same job that I envision myself doing in four years from now. In four years I might not be the UCG caretaker anymore, my tasks develop so much. Someone else might take over my job, while I will still work at UCG. I wonder if the students and staff will then stop asking me for things they were used to ask me when I was a caretaker. Each year there is a new batch of students. Some students, may carry over to the next students what all the positions and responsibilities are at UCG. There will come a time where no students sees me as a caretaker anymore. That perspective of not knowing what the future will bring me at UCG, and the fact that my tasks here keep evolving, gives me the feeling of being lost. How will it be in the new building? That will be twice as big as this one. Will my tasks be doubled, or just more simplified if more people will be working there. The moral is, I started with an empty brain, then I got too much to do, and every day brings something new.

Story 15

I think it's a really good and healthy for yourself to do something outside of UCG at a certain point of your career here. No matter what you are doing, just because you have to be able to put things into perspective. At first, I thought the bubble-feeling was different, in the sense that, like you never really see others. But it's way more that you kind of get this worldview as if everybody is all about peace and love, and everybody wants to cooperate to a better future. No, no. A lot of people don't have this at all, I don't know to what extent I have to be pessimistic though. They have a much more individualistic perspective on how things go, you don't really see that at UCG and if you do see that at UCG, it's not necessarily punished, but it will definitely be discouraged. You could definitely be called upon your behavior. In that sense, it's so open that if you close yourself off from the rest than you won't survive. I also really noticed this during my time in the board, because I had a lot of contact with people from outside UCG. This really helps you to get a view on the other faculties, but you also get a different perspective on the College. This made me think, like I haven't looked at myself like this before, it's not like we all come from rich families, or are some elite group of students. I'm just happy that I can say that I saw the rest as well, not only UCG.

Story 16

What I never understood of some people, is that when we started UCG, so many things were uncertain and we had to try it, and we knew it wouldn't be perfect, but then every time some people said: 'Yeah, I really don't understand why they haven't figured it out and why they don't know what they're doing, about the teachers, or about the course content. It's just as if they don't know like, anything, and they haven't thought it through, and they're just like, just do something.' And for me this was, like, vivid, it was expected. I knew beforehand that everything would be new, so all the courses will be experiments, we will be the guinea pigs. And, that some people already expected to attend something that was not tailored to perfection, and still had to be developed, and that they didn't realize that, that was something that I just couldn't understand. And, yeah, that's why I think I never felt the frustration as much as some others did about lack of clarity or content in our courses.

Story 17

So last year, I don't know if you know about that sort of staff intervention that happened, the letter that was written. So basically there was a few members of staff who were unhappy with things and they put together a letter of complaint for to be sent to X and X and it was then signed by other people and I had signed it, I think it was 15 people pretty much all staff signed it below or nearly all staff. So X and X responded well to it what they did was they got, ach I don't know the name of them, so there was one person from the RUG who deals with uhm does he deal with corporate governance so governance in the RUG and a lady who is sort of a mediator she's from a company outside the RUG. So they had three meetings with us. One was individual one on one, to find out what our problems were and the second one was a group meeting, so they can and split us up into groups and we sort of did like we had identified the issues and in what way they could be resolved and we did it brainstorming sort of what we could do as a team and it helped us to recognize that these problems were not just X and X, they were everybody's. And then the third meeting ah i don't know it might have been when I was away already, I don't think I went, but there was definitely a third and after each one X and uhm I can't remember her name, X was the guy from the RUG these guys who were responsible for mediating and resolving this and sent us sort of feedback and we came up with group principles on how to resolve this. So that was nice. It was more between staff and the faculty board just discontent amongst staff and that was what they decided to do. I think it was X and X maybe started the letter of concern and then other people signed it. I remember X didn't sign it and he might have and X because he felt like he was only here because this was back in February (*2016*). Wait no X so he did not sign it but everybody else did so there were only two. It was uncomfortable like I'm not from a Dutch society so I'm not used to confrontations there was a moment when everybody was in a group and there were emotions and I just wanted to run away.

Story 18

So this is an overall story, I've been here two years. In that time there has been four significant people been away or on leave. So for example, X who is head of PPE, he has been sick since this time last year (*May 2016*) and not replaced and that is the standard PPE director and I felt the effects of that. When X went on maternity, so that was two years ago, no one was brought in for maternity leave. X took most of the work on her for no extra pay or money. When I went on maternity leave nobody was brought in. Then X she's been off sick since January (*2016*), and nobody has replaced her. So thats kind of a scary in terms of stability because when you have your structure you've got X and X here and then pull people off here, it just. It really has had the pressure down to staff.

Story 19

I joined the shelter city project where I was just very hesitant towards how to work with people again because the people that you did trust before where you thought it would have been nice to work together, didn't really work out. For example, in student mentoring that I picked up this year I noticed that the first year students this year were a lot different than us. The first year students (Class of 2017) the first year that ever joined UCG are a lot different because they are less engaged, everything is so difficult for them, they always complain that they don't have time and I mean I guess I understand then to a certain extent because you

know when I was in my first year everything was very overwhelming but I still wanted to be engaged and I still wanted to be part of things whereas now you noticed from the very beginning that people were secluding themselves not only from like student mentoring but also from like social groups within the first years and I think that that's pretty problematic and that will only show in the coming years. I'm pretty happy that a lot of the first years applied for the board but I also don't think that we have an ideal board right now. Student mentoring showed me that you can make use of the things you have learned as a UCG student like I don't think if I would have been in the same position if I went to a AUR full time. We have different yet strange benefits at UCG. We did have training for student mentoring at the faculty of economics and business because we are the first year that is ever starting student mentoring but yea I think that by changing entrance requirements for the college you will attract different people even if the quantity now finally makes sense.

Story 20

A big highlight at UCG in the two years that I have been here has been to be able to organize St. Patrick's Day and it's very multicultural like pretty much every, there's representatives from every culture at UCG there, you know Dutch and German, and it is very popular surprisingly and we wouldn't do that without the support from X and X and actually everyone, X and all the students and I think it is a good example of everyone working together to have fun not just have a good grade you know. Because it is very enjoyable or it has been in both years that I have been here.

Story 21

I have experienced the development of UCG from close by, together with X. What I have always found important are the cooperation and relations between staff and the Faculty Board. Also, how this cooperation and these relations develop. When I reflect on this, I notice that this development is cyclical. It has ups and downs. Some things go well, and some things go less well. The first period of UCG had a really enthusiastic group of people, and wanted all sorts of things. We brainstormed a lot and there were a lot of ideas. But after a while you notice that everybody seems to get stuck in this. I have always found it difficult to follow-up these brainstorms and collection of ideas. I regard it as my task to make sure that people talk to each other and deliver good work while enjoying it. X focuses more on the bigger ideas and the execution of these ideas. Sometimes I find it difficult that the way in which I cooperate with staff members differs per person, and also my relationship differs with staff members differ per person. Sometimes cooperation could be really close, and you notice that people take a little bit of a distance because they also find it difficult to work so intimately. This made me wonder how these things can be optimized, and what people do you need in which phase of development, and how can you motivate these people to work. This is a question that X and I, and the College still thinks of. With a College that has principles of being inclusive and regarding everybody as equals, managing this is sometimes difficult, the model is complicated. For instance, what X wrote in his essay, the collective participation, and a collective say, those things are and sound very nice, but are very difficult in practice. How do you do this? What happens when you give everybody a voice? Everybody wants to achieve something in the College. Do you conduct this or leave people completely free in what they do? My ideal picture of the College would be to make the College work properly without any direct leadership, and making sure that everybody is able to voice their opinions.

At the same time, I notice that people do not really put intentions into practice within such a system. I am not sure whether this is because of me, or that they just find it difficult to convert their intentions into concrete actions. In my ideal picture of the College it should be possible to make this a collective and inclusive College.

Story 22

We have a relatively young teachers team. Many people in partnerships, they find opportunities elsewhere to go away. The high fluctuation is really not good for such an institution. I mean, it's okay if we sometimes get someone new, but we shouldn't each year have half of the staff off new, we will not have stability. Staff, of course, are important, and that they are happy. Everyone knows this is important. Also that the students are happy, and not all go to other faculties. I think the fact that the Dean is not a loser in balancing this, I think he is quite good at balancing this (that everybody is happy). Of course some people go away, and there are reasons for that. I have relatively little children, so if I want to move away, then I should not wait too long anymore. Because, once they are adolescents, then it's not nice for them to change. So the climate at the institution is depending on its growth. But maybe it's the same challenge that management has everywhere when clients (students) complain, and have to give them the feeling that their complaints are taken seriously, but you must also protect your staff.

Story 23

What you see now is that that what actually matters at the University is education and contact with students, which I never had, but what I do have now since three years. You guys were the first years of course. You notice that your relationships with the first students are different from the current first years. You guys were at first a group of 33 students that arrived. And, now there are 26 left. I remember X entered the building on a Monday morning together with her father. They took the bus for two days to come all the way to the Netherlands. She was 17 years and I was surprised about this. My daughter is 17, you know. But of course, it's better for you to go from Ukraine to the Netherlands than the other way around. But I was surprised about her taking this long trip, 17 years, really young and such a small girl. She is still cute of course.

Story 24

X who was in the faculty board from 2015-2016 asked me to join interviews with future staff members. We needed not only new tutors but also teachers because we were going to have such a large influx of new students and at first I wasn't really sure what exactly to do because I've been through a lot of application processes but always from a different side like where i was the one that was being interviewed but I thought that it was a really good thing that UCG puts in a lot of effort in trying to see what the students like in order to find the right teachers that way and i also tried to put in an effort to show the students what kind of teachers are in the pool because we first had to go through a hundred CV's and applications and then we made a pool for all the different majors and all the different positions. We were just sitting together and every round there was either the head of the major and X or X and me. We sat together and we each had our moments to ask questions and to see like what is important and

for that I tried to consult the students beforehand so that I know what to look for in the interviews. The point that I wanted to make was that at a certain point we were having interviews with all kinds of physics people and X and were clashing constantly on certain topics and I was just sitting there not knowing what to do. They were discussing things like the thesis set up with the concept of one supervisor being from within UCG and one from outside. For me it was just a super uncomfortable environment to sit with them while they were arguing.

Story 25

Homeless guy and connection with stealing bikes. Bikes were never stolen when he was outside. He arrived, he started making his corner. It was really trashy in that corner. We did not want to send him away because we kind of felt sorry for him not having a place to go. We encouraged him to seek help though, and gave him a time limit for him to stay. He kept overstaying. We noticed that he stole bikes: wheels, padlocks, etcetera. He had the equipment to steal bikes and parts of bikes. Because of all that trash in there, we sped up the process of sending him away. He was storing the stolen bikes in the corner. This made us move forward to ask him to leave. However, when he was around, he never stole bikes from UCG. When he left, surprisingly, two or three bicycles were stolen. The person that stole was visible on cameras. In this sense, the homeless guy seemed almost a caretaker of the bikes. It felt as though he was the one that was keeping the bicycles safe. We wanted to get rid of him because he was trashing the place, he wasn't tidy, but the bicycles were safe. When he left two bicycles were stolen.

Story 26

When I was in the study association board that was 2015-2016 academic year, I was working together with X, X, X and X. Together we were just trying to continue the study association and set up a lot of future and basic things for the study association since it was very new. Since we started pretty much right from the beginning some people were more engaged than others and so it pretty much was the case that X, X and I were working really hard and X was always very neutral about all situations and X didn't really care and did not put in the time as well. This then caused a lot of problems not only personality clashes but also problems with the Caerus was functioning with other partner associations as well as the Faculty Board. It came down to the point where X had to show our financial document to X and X did not really understand what was going on, which put a bad image on everybody else in the board because it kind of made it seem like we were all doing a very messy job. In the end after trying to give him certain chances to like move away from the board of like prove himself in a way he always said he would and in the end he even chose himself over people that were working really hard and caused the entire board to collapse because not only was the chair voted out because of the problem but it was also him who got voted out and other people who did not want to continue anymore and then other people had to step in. That was quite nice though that other people also saw it as their responsibility to keep our association running. It just hindered the entire process for the plans we had set for the association and looking back at it now like the position which the position the study association could have been in if we would have continued with the engaged people. I learned a lot from it but it was just really unfortunate that it caused so many problems because so many other parties were involved that it wasn't just X and his problem but X made his problem everybody else's problem.

Story 27

I never spoke English, because it was not necessary. When I arrived here (UCG), I was worried about X really wanting me for this job. English? I spoke really basic English. I remember when I had to take the minutes of the first meeting of the Faculty Board with the University Council. We didn't even have space here yet. This meeting was in English, thus the minutes also had to be written in English. When I was listening to the meeting, I did not even know what they were talking about. There were a bunch of students from the SOG and other parties. After this meeting, I felt that I should be happy if they still wanted to keep me. X was also there, and he helped me with writing the report and stuff. But I never needed the English. The advantage of the current staff is the diversity of it, all day long you will be talking in English. You even think in English. At a certain point we had job interviews, and when I got back home I forgot the Dutch translation of the term 'job interviews'.

Story 28

So earlier this year a member of the faculty board student assessor I kind of saw the management side of it I suppose. So the student community wanted to have this food machine to get snacks drinks whatever because sometimes we don't have mini breaks which is a totally fair inquiry. Faculty board did not talk much about it; it was just basically decision being like okay the students want a machine so we give them one. 'X, you organize the food' etc. etc. A week later I think we had holidays and then the machine stood there all of a sudden and a huge uproar came from the community it was like okay why is there no green food inside of there, why are there no apples inside of there, why is there water inside of there, we have a tap. Basically people just like being mad about this vending machine so the whole discussion came back in the faculty board and we had to have another discussion on what the content of the machine would have to be. So I was like yea we can put in Tony's Chocolonely and we put in apples and try to make people happy in the end, but we thought it was already enough to buy the vending machine so that was kind of a weird thing.

Story 29

The first IC2I course, that was the first class I had at UCG. IC2I is now known also as skills and projects block one year one (*2015*) so we were still this bunch of random people at the front of the classroom and then groups were made and in this course we had to invent creative solutions to the three main problems which were talked about which were healthy ageing, sustainable society and something else and basically this whole course was just a mess. Like no one knew what was going on, it was just about bullshitting your way through these three key assignments and at the end there was a price to win. That was it basically and the content was that it just didn't make sense the implementations of the projects were literally impossible like none of them were in any way feasible and the best of it was that the teacher of it was this guy from social sciences or psychology or something crazy guy who believed in the Mayan calendar but fun fact. That guy is never going to come back to UCG, UCG is done with the Triality Game. That guy he was nuts and like his feedback was just like 'yea i like your project' or I like your idea 'but I'll still give you just a seven' and for every project it was good like he was just saying it was good, its good, its good but like he just hands out random grades and that was kind of the first course at UCG and that made me think ok you'll make it in three years, if one third of your classes are like that.

Story 30

When I gave the basic statistics course to your class, you were also there. Then I put in quite some effort and used the Feedback Fruits for the first time. I was also quite happy, I think, with how your class did. But for block 1, the evaluation was relatively bad. And there were some really relatively personal criticisms about that I was so boring. So I had to decide how to react, right. So should I just more or less continue with what I had started, and try to keep in mind a bit, the suggestions? Or should I radically change something? That has always the risk that it is not the right change and also the problem that if you as students feel that a teacher radically changes something, then this conveys a feeling of uncertainty that makes everything worse. I still had block 2 left to do right. So I then went for adjusting, changed the assignments. You had longer assignments, more time to work on those. So basically more of what you did was done in the assignments. That was sort of answering the question. Then I did an additional, specifically designed evaluation, designed by myself. Not an official one, but just something to monitor the class, in the midst of the block. That seemed… It was still partly critical, but it was encouraging relative concerning the changes that I had made. In the end of the semester, again I got an evaluation that was not what I had hoped. I tried to change the situation. In the beginning I would have thought, using these test to monitor what the students have prepared at home and chatting about it, and being able to address everything, but not unnecessary stuff, so it would be very efficient. It was not that big of a success, although, I think in the end better than how students felt about it in the intermediate time. I still think often about 'I handled this well, or what I should have done differently?'. So we have now moved statistics to the first year, and there, they are taught similar material, not everything the same. There it was evaluated much better. And I didn't use Feedback Fruits. On the other hand, I don't know, there's research findings that say that evaluation quality correlates almost not at all with how much students have learned. Ultimately, of course, I want everyone to have fun, I am not against it. But, I'm also happy if you really have learned something. What was a good idea to do was the additional evaluation, I think that again, it created a bit the atmosphere like 'wow, X feels that things are not going so well'. It was an impression of uncertainty.

Story 31

I have been a bit more conservative in spirit, concerning new ideas, or new methods, or new content. I think what we owe you students foremost, is giving you a solid education. Lots of fun, the methods are modern and so, that's fine. Some of it should also be in the package, but that you learn what everyone expects that you would be able to later. So, academic methods-wise, and approach-wise, that's I think more important than everything else. So it's not an option, I think, to just leave out some of the dryer material, because there is so much else that is more interesting to do. What is expected of you, that you must do here. If the students find it a bit boring, then, come on… When we think that the curriculum is not ideal, we could either try small adjustment, or just evolve it completely. Unless a small adjustment makes it very ugly, I'm much more happy to make small adjustments and not re-structure it all the time. So it's also a kind of conservatism that I think is important for the material to be taken seriously.

Story 32

The first year was the nicest year of being in the board. In the second year you kind of start to notice that you're getting stuck in the routine, like: meeting, meeting, meeting, blablablabla, convincing people. At a certain point things start to refresh, like boards of study associations, boards of student associations, everything refreshes and you stay at the same spot. Then you really start to notice the gap out of the blue, like 'yes, I know, you guys are getting trained how to do everything because it's new, but you can only develop until a certain level because you leave in a year'. So there is a little bit of a discrepancy there. So the first year was obviously more educational, newer and more exciting and active. I really enjoyed it for two years, but after a one and a half year you more or less feel like 'Okay, now I get it'. Your position also doesn't really develop itself anymore, because you can't really invest more time into it, you can, but you don't because you still have to study, and because your role stays the same so do the expectations of others. You're not going to promote being an assessor, it doesn't work like that. You did have that a lot more in the first year, though. So what's interesting about that is how fast you, given that you have to be socially comfortable, are a part of the community of UCG as a staff member. I was a first year student, so nobody really had to necessarily listen to what I was saying if they didn't want to, but in reality they did. Also, one thing that I really enjoyed, a mutual respect developed between the staff and I. That makes work a lot more comfortable to do, because it's more enjoyable together, but you are working professionally at the same time. The only disadvantage is that it feels like you are converting your social life into professional life. That was really nice, it was really easy to get immersed in the community as long as you made sure to show that you were able to be a responsible person.

APPENDIX C – SENSEMAKING: GROUP SESSIONS

This appendix contains five story landscapes and the indicated characteristics per story. The landscapes contain story numbers, so number one on the landscape refers to story number one, and so on. The first four landscapes, indicated by 'Group session X – team X' depict the completed landscape of each of the different teams. The fifth and last landscape depicts the combined landscape of all the separate landscapes.
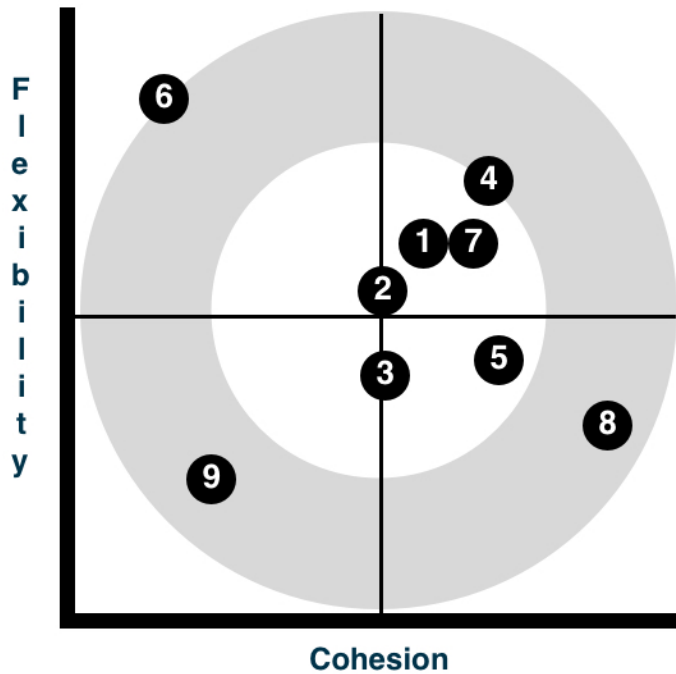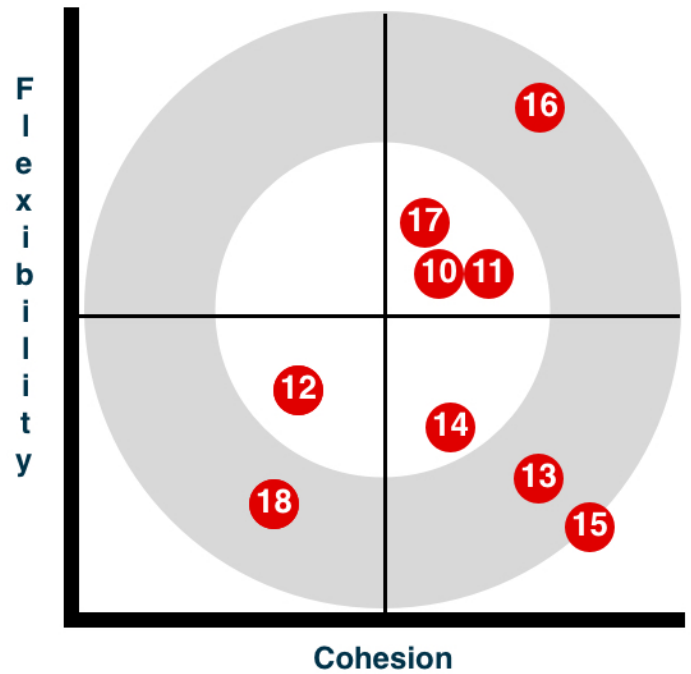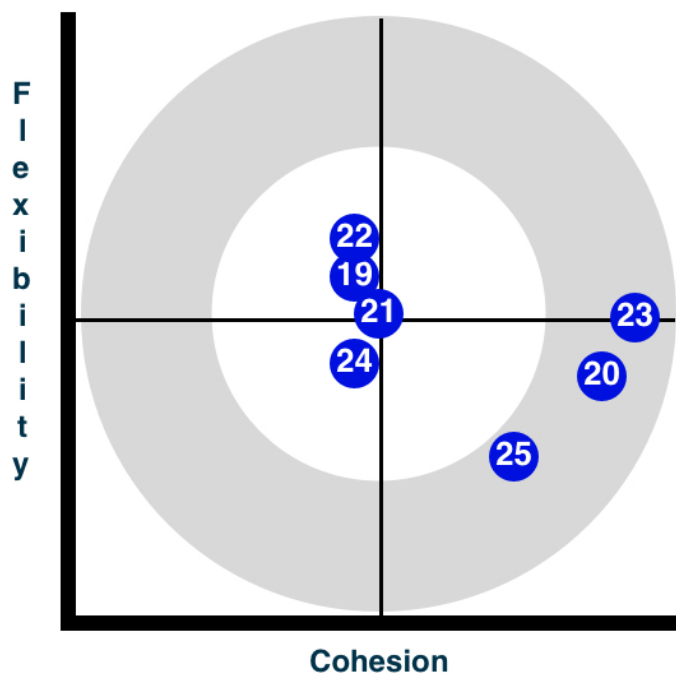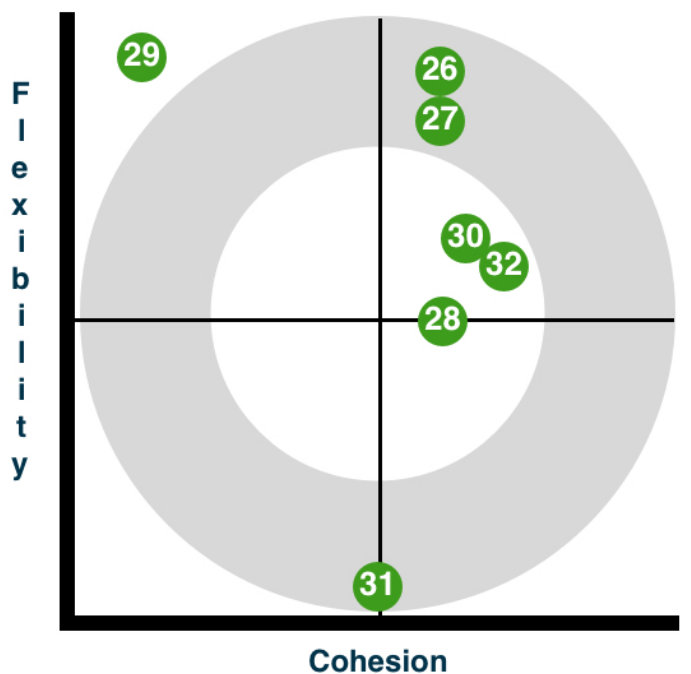
Total combined landscape
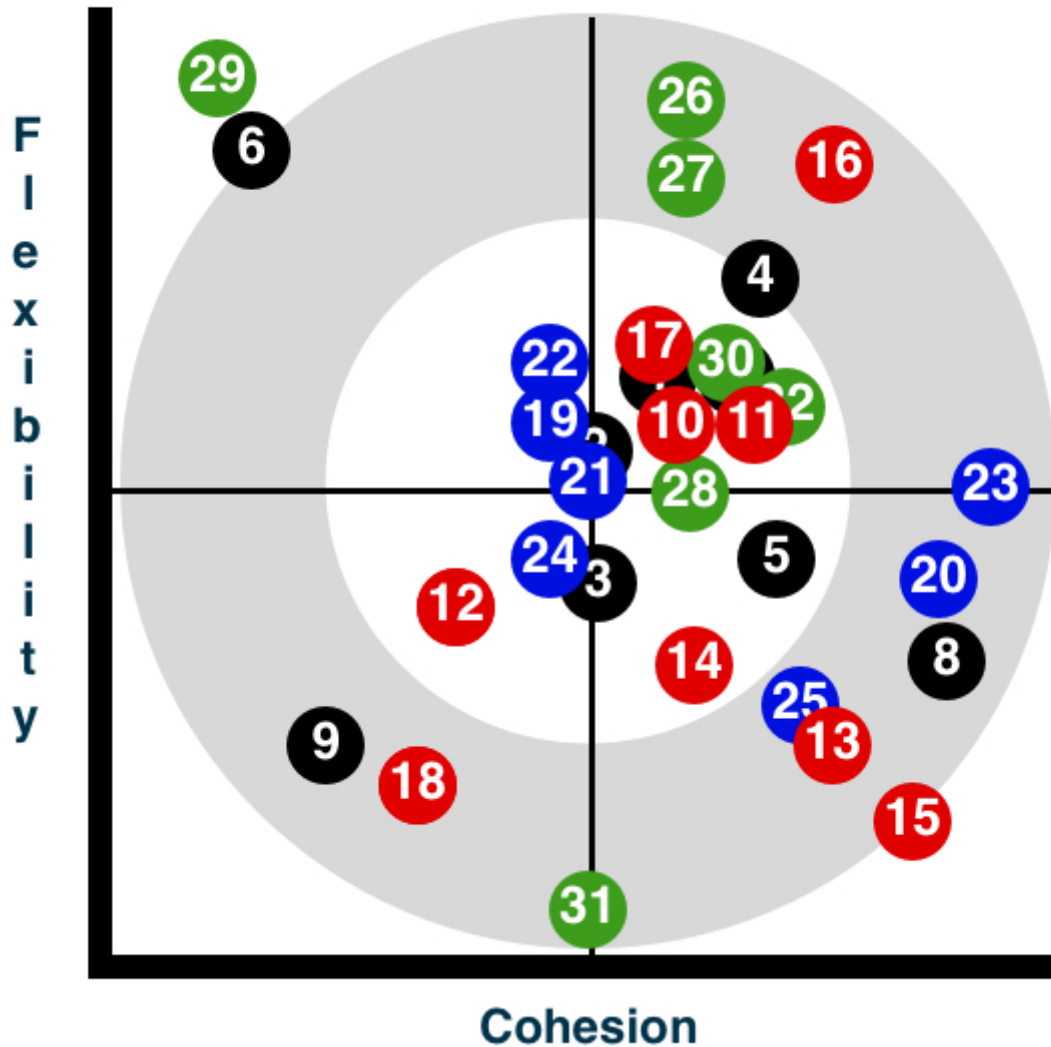
Table 2 on the following two pages shows the characteristics of UCG, or the atmosphere at UCG, indicated by each team per story. Afterward, Table 3 gives an indication of whether each story reveals positive or negative communication. Positive communication is indicated by '1' and negative communication is indicated by '0'. In case communication did not play a role in the story, the cell is left blank.

| Story number	Characteristic 1	2	3	4	5	6
1	Open	Tension	Excitement	Confusion	Different perspectives	
2	Dialogical	Committed	Sense of community	Pioneering		
3	Diversity	Awareness	Responsibility			
4	Care	Decreasing student staff relationship	Trust			
5	Enthusiasm	Excitement	Passion	Satisfaction	Pride	Connected
6	Disrespectful	Entitlement	Fuitiative	Regulated		
7	Balance	Development	Uncertainty	Hold	Initiative	Responsibility
8	Sense of community	Challenge	Crisis	Overcoming barriers	Ambition	Reflection
9	Unprofessional	Embarrassment	Damage	Learning process		
10	Conflicted	Inclusive	Flexible	Shared-leadership	Mutual concern	
11	Mutual concern	Democratic	Connected			
12	Structurally independent	Personally dependent	Unstructured communication			
13	Sense of community	Connected	Encouraging	Structurally stable		
14	Uncertainty	Loyalty	Closeness	Democratic		
15	Rigidness in openness	Content in change				
16	Chaotic	Changing	Disconnected			
17	High engagement	Connected	Flexible structure			
18	Lack of stability	Rigidness	No Change			
19	Generational difference	Lack of engagement (first years)				
20	Sense of community	Intercultural exchange	Faculty support			
21	Modes of leadership	Different communication per person	Equality	Structure vs. Inclusiveness	Ideas realized	
22	Building staff	Keeping everybody happy	Listening to students	Protecting staff	Maintaining stability	Staff turnover
23	Decreasing student staff relationship					
24	Student engagement	Involvement	Student staff relationship	Staff disagreements	Staff conflicts	
25	Openness	Engagement	Tolerance	Boundaries		
26	Developing	Responsibility	Motivated	Desire for community		

27	Room for improvement	Helping people	Challenging	Putting non-qualified people at jobs	
28	Flexibility	Responsiveness	Demanding students	Proactive students	Caring students
29	Unorganized	Unclear content	Lack of feedback		
30	Critical students	Responsiveness	Feedback	Inclusive	Flexibility
31	Conservative	Rigidness	Not responsive	Close-minded	
32	Opportunities	Student staff relationship	Connected	Easy to find your place	No hierarchy

communication at UCG

0 = poor communication, 1 = positive communication, blank = no indication of communication

Story	Communication
1	1
2	1
3	1
4	1
5	1
6	**0**
7	1
8	1
9	**0**
10	1
11	1
12	1
13	1
14	
15	1
16	0
17	1
18	**0**
19	0
20	1
21	
22	
23	
24	1
25	
26	**0**
27	**0**
28	0
29	**0**
30	1
31	
32	1

Table 4: Stories per area in Circumplex Model

	1	2	3	4	5	7	10	11	12	14	17	19	21	22	24	28	30	32	
Balanced	1	2	3	4	5	7	10	11	12	14	17	19	21	22	24	28	30	32	**18**
Mid-range		6	8	9	13	15	16	18	20	23	25	26	27	31					**13**
Unbalanced	29																		**1**

Table 5: Characteristics of stories in the balanced range, per sub-area

BALANCED - CHARACTERISTICS PER AREA						
FLEXIBLY CONNECTED						
1	Open	Tension	Excitement	Confusion	Different perspectives	
2	Dialogical	Committed	Sense of community	Pioneering		
4	Care	Decreasing student staff relationship	Trust			
7	Balance	Development	Uncertainty	Hold	Initiative	Responsibility
10	Conflicted	Inclusive	Flexible	Shared-leadership	Mutual concern	
11	Mutual concern	Democratic	Connected			
17	High engagement	Connected	Flexible structure			
21	Modes of leadership	Different communication per person	Equality	Structure vs. Inclusiveness	Ideas realized	
28	Flexibility	Responsiveness	Demanding students	Proactive students	Caring students	
30	Critical students	Responsiveness	Feedback	Inclusive	Flexibility	
32	Opportunities	Student staff relationship	Connected	Easy to find your place	No hierarchy	Shared-leadership
STRUCTURALLY CONNECTED						
3	Diversity	Awareness	Responsibility			
5	Enthusiasm	Excitement	Passion	Satisfaction	Pride	Connected
14	Uncertainty	Loyalty	Closeness	Democratic		
21	Modes of leadership	Different communication per person	Equality	Structure vs. Inclusiveness	Ideas realized	

28	Flexibility	Responsiveness	Demanding students	Proactive students	Caring students	
STRUCTURALLY SEPARATED						
3	Diversity	Awareness	Responsibility			
12	Structurally independent	Personally dependent	Unstructured communication			
21	Modes of leadership	Different communication per person	Equality	Structure vs. Inclusiveness	Ideas realized	
24	Student engagement	Involvement	Student staff relationship	Staff disagreements	Staff conflicts	
FLEXIBLY SEPARATED						
2	Dialogical	Committed	Sense of community	Pioneering		
19	Generational difference	Lack of engagement (first years)				
21	Modes of leadership	Different communication per person	Equality	Structure vs. Inclusiveness	Ideas realized	
22	Building staff	Keeping everybody happy	Listening to students	Protecting staff	Maintaining stability	Staff turnover

Table 6: Characteristics of stories in the mid-range, per sub-area

MIDRANGE - CHARACTERISTICS PER AREA					
CHAOTICALLY SEPARATED					
6	Disrespectful	Entitlement	Fuitiative	Regulated	
CHAOTICALLY CONNECTED					
16	Chaotic	Changing	Disconnected		
26	Developing	Responsibility	Motivated	Desire for community	
27	Room for improvement	Helping people	Challenging	Putting non-qualified people at jobs	
FLEXIBLY ENMESHED					
23	Decreasing student staff relationship				
STRUCTURALLY ENMESHED					

8	Sense of community	Challenge	Crisis	Overcoming barriers	Ambition	Reflection
20	Sense of community	Intercultural exchange	Faculty support			
23	Decreasing student staff relationship					
RIGIDLY CONNECTED						
13	Sense of community	Connected	Encouraging	Structurally stable		
15	Rigidness in openness	Content in change				
25	Openness	Engagement	Tolerance	Boundaries		
31	Conservative	Rigidness	Not responsive	Close-minded		
RIGIDLY SEPARATED						
9	Unprofessional	Embarrassment	Damage	Learning process		
18	Lack of stability	Rigidness	No Change			
31	Conservative	Rigidness	Not responsive	Close-minded		
STRUCTURALLY DISENGAGED						
FLEXIBLY DISENGAGED						
6	Disrespectful	Entitlement	Fuitiative	Regulated		
CHAOTICALLY SEPARATED						
6	Disrespectful	Entitlement	Fuitiative	Regulated		

Table 7: Characteristics of stories in the unbalanced range per sub-area

UNBALANCED					
CHAOTICALLY DISENGAGED					
29	Unorganized	Unclear content	Lack of feedback		