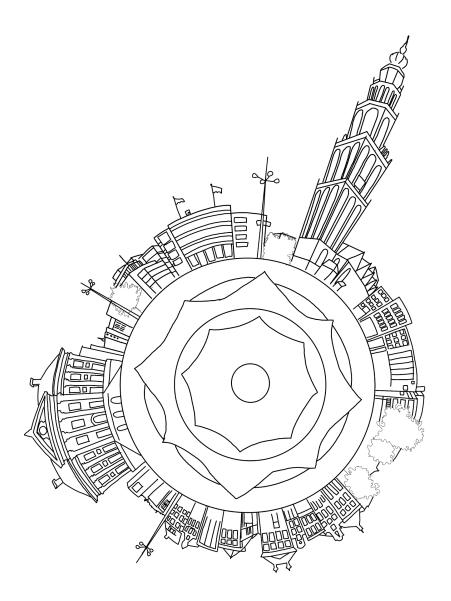


The Influence of Temporary Urbanism on the Grote Markt A Student's Perspective



Havana-Kay Carmel Menezes

Abstract

Cities are constantly evolving and modifying over time to adapt to trends and accommodate transient population growth. As the world becomes increasingly globalised and technological developments make it easier for us to venture less into the inner-city there is a desperate need to revitalise and take an active part in transforming our urban spaces to serve current needs. This thesis explores the young concept of temporary urbanism from a student's perspective. How can temporary urbanism influence a public space's spatial quality? How do users interact with various types of temporariness? These are the questions that rose when exploring the Grote Markt, the central public space in Groningen, The Netherlands. This thesis looks at three differently driven forms of temporary urbanism and compares their value and user experience to a control Grote Markt void of temporary urbanism. A market is chosen for its added economic value to the public square and its regularity for the space's character. A festival enriches the cultural dimension of the square and can be a kick-starter to the city's branding. Lastly, a protest is symbolic and depicts the citizen's right to express themselves. All three bring different points of interest to the spatial planning table and analysing them in one paper, at one location can provide an insight into handling temporary urbanism in a central public space. These insights can lend to the current plans to make the inner city of Groningen pedestrian friendly and inform the spatial quality of the space.

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1. Introduction

A city is never at a standstill. It is always in a state of transformation and change. Inner cities have widespread potential as they are ideally situated, have a constant local demand and opportunities to capitalise on surrounding regional clusters. These positive aspects are, however, weighed against some handicaps. Inner cities can be fragile locations and in the past revitalisation efforts have failed (Porter, 1995). The cost of land for new building possibilities and rent makes it tricky for small businesses to survive. A solution to this, which has recently been popularised, is temporary urbanism (TU). The concept is rapidly growing in spatial research. It is seen as a way to accommodate people's needs and feelings of inclusion temporarily without the requirement of the investment of long-term infrastructure. It brings with it the possibility to act as a catalyst for citizen engagement with city transformation on a ground level (Andres, 2013).

TU can occur in a variety of venues within the city including public squares. Urban squares have existed for centuries and evolve with cities both culturally and socially. They are the backbone of a city and by interpreting the relationship between space and people the quality of life can be revealed. This can then lead to successful urban design and improved user satisfaction (Acar et al. 2020). Furthermore, the prominent position of squares within cities indicates that they are a means of attraction and dynamism (Moughtin, 2003). The popularity of this space is a useful indication as to how the inner-city is being utilised and possibilities for the future.

1.1 Case Study

Groningen city, the capital in the north of The Netherlands, is currently making a transition towards being a pedestrian-friendly inner-city. The municipality envisions this through a project named 'Destination: City Centre', started in 2015 that will see completion by 2025 with plans to make the city more attractive (Gemeente Groningen, 2021). A major feature of this plan is the Grote Markt, the city's main square. It is often dubbed 'the living room' of the city and is surrounded by prominent landmarks such as the town hall and Martini Tower (shown in figure 1 below). This urban square serves a multifunctional purpose throughout the year and is wreathed by infrastructure that provides residential, cultural, economic as well as service needs. The name 'Grote Markt' translates as big market, derived from the historical employment of the central space. Now, it is also a space for TU such as protests and festivals (Gemeente Groningen, 2016).

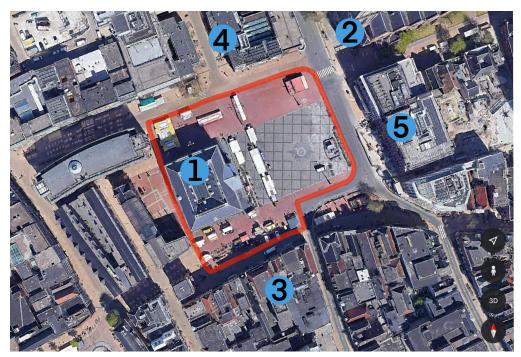


Figure 1: Map showing the Grote Markt outlined in red. Five significant establishments that surround it are; 1) town hall, 2) Martini Tower, 3) Hospitality venues, 4) ABN AMRO bank and 5) The Market Hotel.

1.2 Relevance

Hajer and Zonneveld (2000) describe five core tasks, namely concentration of urbanisation, spatial cohesion, spatial differentiation, spatial hierarchy and spatial justice, that make up Dutch spatial planning. Of the five, concentrating urbanisation, or rather creating the compact city is a focal point of the 'Destination: City Centre' plan for Groningen. TU of public spaces such as the Grote Markt could be a useful asset in cementing this idea for the city. The compact city idea encourages walking and providing the population with various forms of social interaction that keep 'the eyes on the street'. In that regard, TU, through the informality, creativity and encouragement of community engagement can propel the dynamisation of a city while also promoting a new way of working the city centre and promoting inner-city leisure (Stevens, 2020).

To reiterate TU is still a young topic, literature questions whether it represents "an integral feature of professional planners' thinking or just a passing fad" (McCarthy, 2020 p. 217).

An academic book; 'Transforming Cities Through Temporary Urbanism' released last year. It has collated various articles from around the world and utilises them as case studies to explore TU. Many of these papers focus on an individual variety of TU in a single space. However, multiple forms of TU on a sole space was not covered in the book and a study analysing the spatial quality of temporary uses of the Grote Markt in a single paper is yet to be undertaken. Considering Groningen's growth this would be a useful assessment of public space to continue to improve the attractiveness of the city. "It also provides the possibility of multiple uses for the same space, a kind of inward and on-site expansion through multiplication". (Madanipour, 2017, p. 49).

1.3 Research Objective

Understanding how citizens use the Grote Markt can allow city planners to adapt plans such as the 'Destination: City Centre' to better accommodate peoples requirements and desires. This thesis aims to investigate users' experience of the Grote Markt during various temporary scenarios that

provide a range of values such as economic, cultural or symbolic to the space. This will ultimately lead to a conversation that invites a critical view on the importance of TU in central public spaces, such as an urban square. To determine if there is a causal relationship between TU and the quality of public space the main research question for this paper is:

How does the temporary urbanism on the Grote Markt in Groningen influence the users' experiences of its spatial quality?

This question is further broken down into two theoretical and two empirical sub-questions:-

- How can temporary urbanism be useful in transforming an inner-city?
- What aspects of user experience can contribute to a spatial planner's understanding of the spatial quality of an urban square?
- What are users' experiences of the Grote Markt during various forms of temporary urbanism and how does this inform their perceived spatial quality?
- What type of temporary urbanism in this case study is most appreciated by users?

1.4 Reading Guide

The following chapters in this research paper are aimed at answering the main question. It begins with a theoretical framework which informs the conceptual model and the empirical part of this thesis. This is then followed by the methodology that outlines how the quantitative questionnaire will be used to answer the latter two sub questions. TAn overview of the data analysis will also be done here. Subsequently there will be a comprehensive discussion about the results, conclusions and recommendations.

2. Theoretical Framework

Analysing past literature lays the foundation for conducting empirical research in this study. While doing so it will also answer the first two sub-questions:

- How can TU be useful in transforming an inner-city?
- What aspects of user experience can contribute to a spatial planner's understanding of spatial quality of an urban square?

2.1 Temporary Urbanism as a Tool for Planners

A city's urban design is constantly evolving. Over time urban areas have changed physically, conceptually and socially which will continue indefinitely. With this in consideration, how can we categorise TU as all cities are temporary to a certain extent? Time is a factor for all urban transformations but Madanipour (2017) divides TU into three forms of temporality that differ from regular urban planning. Instrumental temporality focuses on productivity and profitability while existential temporality is intuitive and intercedes based on the city. Lastly, experimental temporality focuses on the future and is driven by what spaces could become through TU (Madanipour, 2017). All three of these temporalities are touched upon in the empirical part of this study. These three all have specific aims in common and durations based on them.

The TU timeline is conscious in comparison to broader city transformation (Stevens, 2020). "Temporary urbanism is at once a reflection of and a driver for accelerated mobility and intensified connectivity and the efforts to fill the gaps created by structural change" (Madanipour, 2017, p. 40). The recognition of this limited duration means actors are able to make shorter commitments to projects. The availability of resources is often given a special precedence for periods of temporariness in the planning process. However, TU doesn't always need to be so flexible. It can also be regulated such as a weekly pop-up market, which is physically temporary but has become a permanent characteristic of the city (Madanipour, 2017).

TU is usually localised giving it a small-scale disposition that brings a range of complexities (Zhang and Andres, 2020). This focus has been identified as an important domain in urban governance for innovations in spatial planning and social impact in the city (Crump, 2020). Perfectly argued by Haydn and Temel (2006), TU can be "interesting both for planning and the economy as well as for groups of users who usually have little to do with planning or economy on the large scale" (p. 17). Stevens (2020) also states "Temporariness is a necessary instrument to enable action and innovation" (p. 25). One of the economic benefits of TU is the flexibility of work it has. Contrastingly to the fixed routines of manufacturing production TU is partly a response to structural change in the economy. Technological advances, for example, have brought online shopping to the foreground leaving high streets in despair. This transition has a ripple effect with citizen engagement and attraction to the whole inner-city. TU then becomes an opportunity to connect the supply and demand of space within cities and can create new urban experiences that will assist the inner-city in thriving. Another benefit from TU is therefore, that an inner cities branding can be boosted into creating a new image of it to attract users and investors (Madanipour, 2020).

Tactical urbanism is a variation of TU. The difference is that tactical urbanism is short-term but the main objective is for it to have long-term impacts on the surroundings and actors. Lydon (2012) created a tactical urban spectrum (shown in figure 2) that illustrates the variations that TU

could have depending on the situation. The graph has formality on one axis ranging from unsanctioned to sanctioned and planning type on the other with top-down at one end and bottom-up on the other. The spectrum displays 25 different variations on TU however; the empirical section of this study will only look at three. The yellow boxes (figure 2) highlight their positioning on the spectrum.

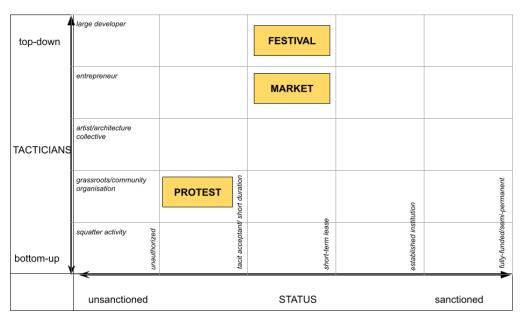


Figure 2. The tactical urban spectrum. Adapted from Tactical Urbanism 2 (Lydon, 2012).

The protest scenario falls towards the unsanctioned status meaning it has a short duration but is authorised by the municipality authorities. The organisers and main actors of this type of TU are usually community organisations. It leans towards bottom-up TU, which takes place outside formalised frameworks of planning and are often initiated by individuals or collectives. The market scenario is located on the opposite side of the horizontal axis in the 'semi-permanent' box. This is because, as mentioned before, some forms of TU are recurring and have become part of a city's character. A market is operated by entrepreneurs that can take advantage of setting up their businesses in the inner-city whose permanent infrastructure is expensive. Lastly, there is the festival scenario. These have short-term leases and are organised by large developers. Both market and festival are categorised as top-down TU. This means that they are largely planned by authorities and encompass a larger vision for cities.

These TUs are aligned by three concepts, adaptability, activation and trajectory. Adaptability creates new opportunities that lead to change. This is often mentioned in economic and resilience literature. Activation highlights the response of TU to the crisis and the dysfunctions in the planning system. Finally, the trajectory focuses on the outcomes from TU. It is a strategic move towards making an area more attractive but could also be a coping mechanism to meet the basic needs of citizens (Andres, 2021).

2.2 Understanding Spatial Quality Through User Experience

"Space has, therefore, a major role in the integration or segregation of urban society. It is a manifestation of social relationships while affecting and shaping the geometries of these relationships" (Madanipour 1998, p.208).

Madanipours' statement sums up why social relationships are integral for shaping spaces. However, the quality of the space itself can impact the relationships it fosters. Jan Gehl (2011) argues that planners and architects can influence the public's opportunities for engagement and although they cannot predict the direct outcome of quality they can accommodate the starting point for physical contact. The success of a public space can be determined by citizens in terms of liveability, vitality and well-being. Understanding users can ensure satisfaction and ultimately lead to an increased use of the space (Alwah et al. 2021).

For the empirical part of this study the six-dimensional model, also known as the T-concepts, by Nenonen and Kojo (2013) will be used to present users' experiences and connect them to spatial quality. The physical prerequisites lay the foundations of what kind of activities can be carried out in a space within its boundaries. A users' experience also entails interaction with its products, services and company. The emotions and behavioural changes of a person are central to their experiences (Nenonen and Kojo 2013). These dimensions are summarised in the table below. The box for the related T-concept of the time dimension has been left blank as it is the focus of this paper. TU places time at the forefront, acting as the independent variable. Illustrating the forms of the various TU scenarios used.

Table 1: Explanation of the six-dimensional model and associated T-concepts (Nenonen and Kojo 2013; Tahtinen, S et. al. 2016).

Dimensions	Related T-concept	Explanation
Time	-	Indicates how long experiences last from the assigned time-frame. For this study, time is the independent variable in the form of the three temporary scenarios and control scenarios.
Intensity	Tie Familiarity	Intensity of a scenario can be gauged by a person's attention capacity and whether they repeat the experience regularly.
Interactivity	Tune Atmosphere	This dimension scrutinises the level of engagement people experience when in the space. This can be active interaction with others or passive, when people are passing by each other.
Consistency	Tale Narrative	Indicates an understanding of the strategies and messaging behind the experience.
Triggers	Task Functionality	The outcome is to produce new solutions that result from users' preferences.
Significance	Theme Significance	Displays the meaning and experience the user could take away and the extent to which a user would be attracted to the place.

The table above explains criteria that can aid urban planners to understand perceived user experience. However, the user's experience still needs to be linked to spatial quality. In order to do this a paper by Kozlova and Kozlov (2018) is used that identifies ten criteria for spatial quality in public spaces. They refer to Lynch's flexibility indicators that demonstrate the variability an urban environment has. The adaptability, elasticity and manipulability of a place conveys how open to development it is as well as its ability to change according to use and also return to its original state. This is an important aspect of TU's choice of space. Convenience is also an indicator that Lynch (1960) explains as, "The ease with which parts of the urban landscape are recognised and formed into an orderly picture" (p.16).

The following three criteria relate specifically to the human and their impact on a space. The commonly known term, "Eyes on the street" introduced by Jane Jacobs, is an indication of the perception of safety. With more people present there is a notion that it is less likely for something negative to occur. An interactive public space with measured involvement from citizens goes hand in hand with this. Creating an area for the human scale in mind makes a space proportional to its use. With the correct spatial boundaries, detailing and dimensions a visitor to the public space would feel more invited. The accessibility of a place regardless of a person's impairment, physical or mental, also plays a role in spatial quality. A place should also act multifunctional and allow for diversity. Now, more so than ever an emphasis is also placed on the sustainability of a place and its accommodation of an environmentally friendly outlook. In conclusion, space should be identifiable. The local character and spatial context compliments the quality of a public space through this uniqueness (Kozlova & Kozlov 2018).

2.3 Conceptual Model

The significance of TU in the inner-city is ultimately up to the users and their experience. This will indicate the spatial quality of the Grote Markt during different temporary uses. Figure 3 presents the conceptual model. The dotted lines connecting TU and spatial quality are yet to be solidified for the case of Groningen Grote Markt. TU can serve various forms of value and the three demonstrated will be what is focused on in this paper. These TU's bring value economically, culturally and symbolically in the form of a market, festival and protest respectively.

Temporary Urbanism User Experience T-Concepts Spatial Quality Economic-Market Cultural-Festival Symbolic-Protest

Figure 3: Conceptual model that supports the theoretical framework and is the basis for the empirical section of this thesis.

3. Methodology

To reiterate the main research question: How does the temporary urbanism (TU)on the Grote Markt in Groningen influence users' experiences of its spatial quality?

To understand whether there is a causal relationship between spatial quality and TU, the experience of the users' need to be understood. This is where the latter sub-questions will be answered. For this, a quantitative research approach will be taken in the form of a survey. This will apply the T-concepts from the previous section to fully understand the perceptions of quality from a sample of the population. The two sub-questions that will be answered through empirical research are:

- What are users' experiences of the Grote Markt in various forms of temporary use?
- What type of TU is most appreciated by Grote Markt users?

3.1 Data Collection

To attain answers for the two sub-questions a quantitative survey was used which can be seen in appendix 2. This study is measuring multiple scenarios and participants are asked to answer questions about all of them. This makes bias prevention an important consideration. Asking participants to consider all scenarios also means that an abridged sample size is necessary. One way to reduce biases was to randomise the order of the questions for each participant. This survey uses four different scenarios that participants may not have attended recently due to the pandemic restrictions. To combat this photographs were used to evoke memories and to help participants understand what the TU may look like on the Grote Markt. The former considerations were made due to the limitations imposed on data collection by the COVID-19 pandemic restrictions. Therefore, the survey will be more targeted and only distributed online.

An online survey will skew which demographics have access to it and so a conscious decision was made to specifically target students as participants. Students make up a quarter of the urban inhabitants which is the highest proportion in any Dutch city (groningen.nl, 2020). Although this will make the results biased towards students' desires and preferences Madanipour states that "temporary places, therefore, may mean completely different things for different actors, depending on their position in urban processes of change" (Madanipour 2020, p. 456). This statement indicates that the socio-economic positioning of a respondent will affect the conclusions that are made. It is important therefore, to have a clear target group and keep them in mind when drawing conclusions.

The survey was hosted via Qualtrics allowing for a wide variety of question formats. This was useful in keeping the questions interesting while still making sure there was a uniformity to the type of results for the different scenarios. Social media platforms such as Whatsapp, Facebook and Instagram were the main distribution platforms used through March and April of 2021.

3.2 Data Analysis

Once all the data was collected it was downloaded onto the IBM SPSS (version 26) programme. This was used to conduct statistical tests and analyse the data. Three statistical tests were carried out to test for significance. For the Likert scale questions Spearman's rho and a sign test were used and the agreement questions used a chi-squared test. This test will result in being able to interpret the significance as well as the size of the effect it has. Additionally, it will be useful when

concluding which TU is most valuable according to students. These evaluations were used as they also provide information on a correlation between scenarios. The significant outcomes for the T-concepts have also been tallied to detect which scenarios were lacking in what T-concept area. The questions concerning the Grote Markt without any form of TU were used as a control variable. The other scenarios were independent variables that were tested against the control. All of the scenarios with or without TU had questions relating to the T-concepts which acted as the dependent variables.

3.3 Ethical Considerations

Since this was a quantitative questionnaire that was held online there was no need to collect participants personal details or for the researcher to interact with the participant. The questions were closed and generic for all participants. The questionnaire was available in English and Dutch to accommodate as many participants as possible and reduce bias.

4. Results

This section takes a closer look at the outcome of the online survey. The format will follow the five T-concepts comparing the four chosen scenarios which are a protest, market, festival and a Grote Markt with no TU. To maintain the flow of the results, all the associated graphs for each T-concept question can be seen in appendix 6. A complete overview of the outcomes from the statistical tests can be seen in appendix 3, 4 and 5.

In total, the survey received 83 responses of which 54 were completed. The other 29 surveys were empty or only partially completed so were discarded as they would not contribute meaningfully to the data analysis and may cause anomalies.

From the completed responses the share of male to female respondents was 50% and 46.3% respectively and the remaining 3.7% identified as non-binary. The age range of respondents was between 18 and 27 with a majority at age 22. This was as expected due to the target group being university students. Taking into consideration that Groningen does have a significant proportion of international students which made up 60% of responses, the remaining 40% of respondents said they originated from the Netherlands.

4.1 Tune Atmosphere

These T-concept questions aimed to understand people's overall perception of the Grote Markt during the TU's. Respondents were asked: "select the words that you think fit each event that takes place on the Grote Markt" and the related words were enjoyable and attractive. Both words are positive adjectives and participants could choose to (dis)agree with the word.

The most notable result for the set of responses relating to the word enjoyable is the percentage of no responses for the protest scenario (48%) which was significantly higher than the festival (13%) and market (16.7%). Compared to the Grote Markt with no TU the ratio between (dis)agreements with the festival and market were marginal.

Similarly, for the word attractive the number of negative responses to the protest scenario (46%) is almost twice as many as the empty Grote Markt (24%). The results for these sets of questions were fairly similar to the prior. However, the word attractive produced significant chi-square tests for the festival (p=0.045) and market (p=0.02) scenario. This means that these two scenarios do have a small to medium positive effect on how people perceive the Grote Markt during these TU's compared to a square without TU.

4.2 Tune Functionality

This T-concept had a similar layout to tune atmosphere in the format of the questions and the related words practical and organised. Tune functionality outlines whether a selected space has the capacity and features to conduct temporary activities on it or not. By understanding users' experiences relating to this question planners can create solutions accordingly.

The festival received the highest number of responses for not being a practical scenario (53.7%) however received a much more positive response for it being organised (81.5%). The market, on the other hand, had a more positive outcome with close to 91% of respondents agreeing that it is practical and organised. It also received a significant chi-square test (p=0.06) with a positive effect indicating that it ranks higher than the empty Grote Markt for this t-concept category.

4.3 Tie Familiarity

This T-concept discusses the extent to which people comprehend and enter a space with ease. When there is a presence of people in a square and there are buildings surrounding it usually assures users that it is a hospitable environment (Acar et. al. 2020). Therefore, the statement used for this question was "I feel comfortable here". In this case, the market scenario (76%) was the most agreeable followed by the festival (47%/). However, even though the festival received a high number of agreements it also produced the largest proportion of disagreements (20.4%). This makes it the least comfortable according to participants. Adding to this it can also be noted that the control variable did not receive any disagreeing responses. The market scenario received a significant result for both the statistical tests completed (p= 0.00 & 0.004).

4.4 Tale Narrative

To understand whether participants consider the TU's to fit in with the storyline of the Grote Markt and represent Groningen's brand the statement "this scenario fits well with the city" was used. Results indicate that a festival and market were seen favourably with both doubling the 'agree' responses in comparison with the control and protest. Once again the protest scenario received the greatest amount of disagreement (22.7%) as well as neutrality (26.4%). For this T-concept, the market scenario received one significant result (p=0.004) from the sign test again with a higher ranking than the control variable.

4.5 Theme Significance

The degree of connectedness a person feels towards a specific space can make them more likely to return and also take an active role in its development. Success is measured by the people attracted towards its inner-city which is also the case for Groningen. This connection to the city is of importance to the municipality of Groningen as it prepares to transform the Grote Markt and other parts of the city centre.

The results from the statement 'I feel connected to the Grote Markt' reveal that the control variable had 34% of the respondents slightly disagree with this statement, far outweighing the disagreement in any of the other scenarios. All three TU's had a similar agreement percentage but the market scenario had the highest amount of slightly agreed responses (37%). All three scenarios also had significant results from the Spearman's Correlation and sign tests.

It is compelling that another statement within the same set of questions took a broader perspective and was asking participants about their connection to the city as a whole. This revealed far more positive responses for all scenarios, especially festivals and markets. There was also a noticeable decrease in 'slightly disagree' answers for the control variable. This statement question also produced meaningful results for the protest scenario, the only T-concept to display significance in this case.

4.6 Connecting the Scenarios and their Spatial Quality

The final question statement was concerning the spatial quality of the Grote Markt and whether it improved with the presence of TU. To connect the spatial quality and the results from the user experience the T-concepts will be tallied and scrutinised for each scenario.

The protest scenario only received significant results in the theme significance category which infers that this TU left users with an attachment to the Grote Markt. Historically, and still today, urban squares were specially recognised from the protests and revolts that occurred there (Hendriks, 2010). This scenario had an intuitive temporality and was also closer to a bottom-up approach. Out of the quality criteria mentioned in the theoretical framework, this TU contributes

most to the Grote Markt reflecting local character as well as improving the interactivity of the space.

The festival scenario received significant results in two of the T-concepts, tune atmosphere and theme significance. Similarly to the protest scenario, the festival made users feel attached to the square. It also had an increased amount of engagement between people in space. This scenario had an experimental temporality and was a top-down TU.

All temporary scenarios present a lower ratio of negative responses in comparison to the control variable. However, the Market scenario was the only TU to receive significant results from the statistical tests done in all five of the T-concepts. The effect from the chi-squared test was medium for both tune atmosphere and task functionality. Users experienced increased engagement and they think that a market will reinforce new solutions that are in line with users preferences. It is not surprising that the market presents significant results for tie familiarity as it occurs regularly in comparison to a festival or protest. This TU has an instrumental temporality and has the most power to change the economic dynamics of the public space. The economic value brought by a market also makes the Grote Markt a valuable business location (Porter, 1995). It was also the only scenario to receive significant results from the spatial quality question in the survey.

5. Conclusion

Temporary urbanisms are displays of flexibility and social adaptability that are created around a specific need (Andres et. al 2021). Each scenario chosen for this study has a specific purpose; economic, symbolic and cultural. The survey that was used to understand users' experience of these temporary scenarios reveals that some had a more positive effect than others. Coming back to the main research question for this study; how does the TU on the Grote Markt in Groningen influence users' experiences of its spatial quality?

This question is answered strictly from a students perspective as they were the chosen pool of respondents. The answer to this would be to qualify that different scenarios have better results in some aspects compared to others and that the spatial quality of the Grote Markt is improved with TU. Notably, the market scenario had a positive significance in all five of the T-concepts and was also the only temporary scenario to be significant for the spatial quality question. This TU is a regular event that increases the number of eyes on the street, reflects Groningen's local character, increases interactivity and is catered to a human scale.

The festival scenarios were significant in the tune atmosphere and theme significance categories while the protest scenario only had significant results for theme significance. This communicates that each scenario excelled depending on their main goal.

These various forms of TU aid some of the spatial quality criteria brought to light by Kozlova and Kozlov (2018). Firstly, TU has a direct impact on the interactivity, safety, human scale and multifunctionality of the Grote Markt in a positive way. The TU on the Grote Markt that was looked at in this study revealed that users felt connected to the space, they felt comfortable and that their experience on the Grote Markt was heightened because of the TU. To a lesser extent, TU improved the sustainability of the square as it satisfied various needs that participants had.

In essence, this study revealed that the versatility of urban squares such as the Grote Markt to accommodate various forms of temporary events not only diversifies the city and makes it a compelling space but also indicates that inner-city transformation can occur daily with a limited timeframe. Zhang (2020) summarised by stating that "Temporary Urbanisms are as much about such activities, practices and uses in any of urban spaces as about the relationship that different urban actors construct with time and the temporality of urban spaces in such circumstances" (p. 232).

6. Discussion and Recommendations

This final section discusses the challenges experienced during data collection, the drawbacks from the context that this research surrounded, the lessons that can be taken away into the planning practice and finally recommendations for a road-map for future research.

6.1 Methodological Challenges

Throughout this thesis project, there were several challenges with regards to data collection. Firstly, the survey exposure was limited to online distribution which could have resulted in a larger pool of participants if there was the possibility to conduct in-person surveys on the Grote Markt or during temporary scenarios. An unpreventable reason for this was the COVID-19 regulations which hindered a safe distribution of surveys in person. This meant that an online survey had to be adopted and questions were asked to each participant about all TU's. In order to ensure participants understood what the questions entailed, pictures of the TU's were added. This was the most suitable method considering the circumstances but does not provide the amount or quality of results that would be ideal for this study.

Secondly, there was a financial limitation to this survey with no compensation to participants. This would have had effects on the number of people taking part and their motivation to complete the survey. With the absence of monetary reward, the survey was also made as concise as possible to increase the feasibility of participants completing the survey fully. This meant that the number of questions assigned to each T-concept did not cover the complete range of questions to make the survey foolproof. The lack of questions therefore also had ripple effects for how the scenarios were perceived as we saw higher negative responses towards a protest which may not have been the case if there was a larger pool of questions.

6.2 Recommendations for Future Research

This was a small-scale study that focused on one square in the city of Groningen and targeted a specific group in the population. A similar albeit more extensive research project that covers urban squares across the Netherlands targeting a larger proportion of the population could prove to yield interesting results. Based on results ascertained, future participating cities and towns would find it interesting to see what aspects of temporary use could be improved through policy and physical interventions. Furthermore, once the 2025 plans for the city have culminated another similar survey should be carried out to understand if the spatial alterations made affected people's experiences towards temporary uses in the city especially on the Grote Markt. When discussing TU this research did not look at whether change brought about by TU will last which needs to still be done for Groningen.

The results from this research exhibits user experience for a particular group of the population and although students do make up an important part of the population it cannot account for the entire population and their preferences. Therefore, research done on a larger scale would be beneficial to account for the range of age groups that use the Grote Markt. The final recommendation would be for the Municipality of Groningen to seek out other locations that have temporary uses and maximise their utility. As this research displays in the market scenario, TU surrounding an economic nature improves the quality of space and has a positive user experience for students according to this research.

7. References

Acar, H., Yavuz, A., Acar, C., Eroglu, E., Sancar, C., & Degermenci, A. S. (2020) Analysis of Activity, Space and User Relations in Urban Squares, Indoor and Built Environment

Alwah, A. A., Li, W., Alwah, M. A., & Shahrah, S. (2021). Developing a quantitative tool to measure the extent to which public spaces meet user needs. Urban Forestry & Urban Greening, 62, 127152.

Andres, L. (2013) Differential Spaces, Power Hierarchy and Collaborative Planning: A Critique of the Role of Temporary Uses in Shaping and Making Places, Urban Studies, 50(4), pp. 759–775

Andres, L., Bakare, H., Bryson, J. R., Khaemba, W., Melgaço, L., & Mwaniki, G. R. (2021). Planning, temporary urbanism and citizen-led alternative-substitute place-making in the Global South. Regional Studies, 55(1), 29-39.

Andres, L., & Zhang, A. Y. (2020) Introduction—Setting-Up a Research Agenda for Temporary Urbanism. In Transforming Cities Through Temporary Urbanism (pp. 1-10). Springer, Cham.

Andres, L, Kraftl, L.(2021) New directions in the theorisation of temporary urbanisms: adaptability, activation and trajectory. Progress in Human Geography

Crump, L. (2020) Reimagining Urban Planning: From Institution to Innovation—A Comparative Exploration of Temporary Urbanism and the Future of City-Making. In Transforming Cities Through Temporary Urbanism (pp. 107-125). Springer, Cham.

Evenementenlocatie Grote Markt, Gemeente Groningen 2016

Gehl, J (2011) Three types of outdoor activities, Life Between Buildings: Using Public Space, The City Reader (6), pg 612, Routledge, New York

Groningen.nl, 2020. Groningen: Studentenstad. Retrieved from https://groningen.nl/studeren/ontdek-het-studentenleven/groningen-studentenstad on 5/3/2021

Hajer, M. and Zonneveld, W. (2000) Spatial Planning in the Network Society-Rethinking the Principles of Planning in the Netherlands, EUROPEAN PLANNING STUDIES, 8, pp. 337–356.

Haydn F, Temel R (2006) Temporary urban spaces: concepts for the use of city spaces. Birkhäuser,

Basel

Hendriks, B. (2010). Urban livelihoods: "spaces" and their impacts on quality of life, influence and political rights. Amsterdam University Press.

Kozlova, L., & Kozlov, V. (2018). Ten quality criteria of the public spaces in a large city. In MATEC Web of Conferences (Vol. 212, p. 04012). EDP Sciences.

Lydon, M. (2012) Tactical Urbanism 2: Short-term Action, Long-term Change, The Street Plans Collaborative, Street Plans: Miami

Lynch, K (1960) The Image of the City, (Stroyizdat, Moskow, 1982)

Madanipour, A (1998) Social Exclusion and Space. The City Reader (6). Routledge: NY

Madanipour, A. (2017). Cities in Time: Temporary Urbanism and the Future of the city. Bloomsbury Publishing.

Madanipour, A. (2020). Temporary places: Moving people and changing spaces. In The Routledge Handbook of Place (pp. 449-457). Routledge.

McCarthy, L. (2020). Temporary Urbanism in a Public Park: The Case of Postman Square, Milwaukee, Wisconsin. In Transforming Cities Through Temporary Urbanism (pp. 215-229). Springer, Cham.

Moughtin, C. (2003) Urban design: street and square. 3rd edn. Amsterdam: Architectural Press

Nenonen, S. and Kojo, I. (2013), "Experience of places – six dimensional model for capturing the user experience", Proceedings of ECFM13, Prague, Czech Republic, 22-24 May 2013

Optimum use of the city centre Destination: City Centre Gemeente Groningen (2021)

Porter, M (1995) The competitive advantage of the inner city. Harvard Business Review, The City Reader

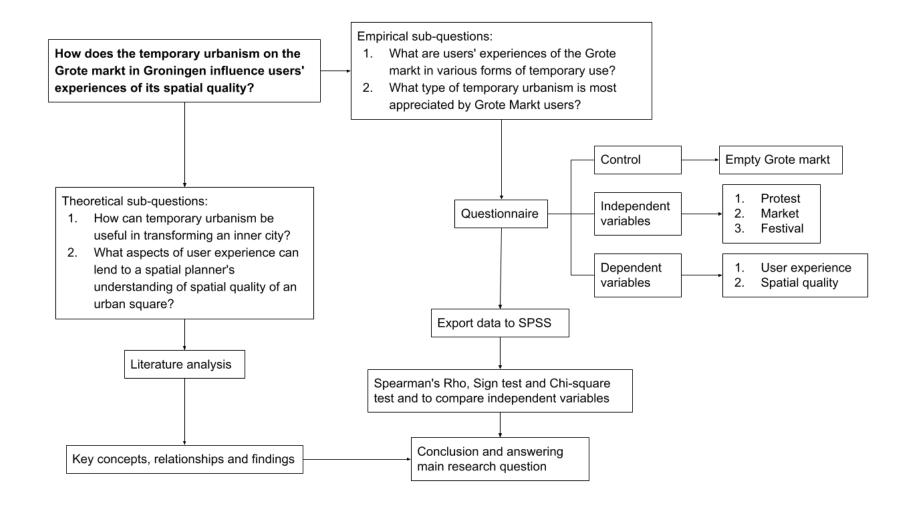
Stevens, Q. (2020). Temporariness Takes Command: How Temporary Urbanism Re-Assembles the City. In: Andres L., Zhang A.Y. (eds) Transforming Cities Through Temporary Urbanism. (pp. 13-27). The Urban Book Series. Springer, Cham.

Tahtinen S, Kojo I and Nenonen S (2016) "User Experience of Creative Class District: Punavuori Neighborhood," Facilities, 34(9-10), pp. 580–594.

Zhang, A. Y., & Andres, L. (2020). Conclusion: Transforming Cities Through Temporary Urbanisms. In Transforming Cities Through Temporary Urbanism (pp. 231-239). Springer, Cham.

8. Appendix

Appendix 1: Overview of Research Design



Appendix 2: Questionnaire Design

The table below shows the questions from the survey and the correlating tests and values that have been attributed to them.

Question statement	Question statement		Answer Options	What does the question aim to identify?	Test
1.0 Select gender		Nominal	Male, Female, Non-binary, Prefer not to say	These questions are to gather general data about the sample. It	
1.1 Age		Nominal	Participants entered manually	will allow us to see which part of the student population responded and how representative it is as a	
1.2 Country of origin		Nominal	Netherlands, Other (participants could enter the country name manually)	whole.	
Indicate how much you agree with these	a. I feel comfortable here	Ordinal	Disagree (0), Slightly disagree (25), neutral (50),	These questions aim to understand user experience on the grote markt	Spearman's Rho Sign test
statements 2. Empty Grote markt 3. Market 4. Protest	b. This scenario fits well with the rest of the city		slightly agree (75), agree (100)	in different scenarios. Using the likert scale and multiple statements that have been derived from et. al (20)	
5. Festival	c. I feel connected to the Grote Markt				
	d. I feel connected to the city of Groningen				
	e. This improves the quality of the city			This subquestion aims to understand students current perception of the spatial quality in temporary scenarios.	
Select the words that	a. Organised	Nominal	Yes, No	This question is a continuation to	Chi-square test

you think fit each event that takes place on the Grote Markt 6.0 Empty Grote Markt 6.1 Market 6.2 Protest 6.3 Festival	b. Practical c. Attractive d. Enjoyable			understanding user experience and the questions are also taken from et.al (20).	
7.0 Rank from highest to lowest which scenario you are most likely to be present at		Ordinal	1 (most likely to be present) ,2,3,4 (least likely to be present)	This question was used as a conclusion to the survey and will not be used for analysis purposes.	

Appendix 3: Demographics Results

Questions relating to part 1 of the survey

Statistics

Gend	ler	
Ν	Valid	54
	Missing	0

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	25	46,3	46,3	46,3
	Female	27	50,0	50,0	96,3
	Non-binary / third gender	2	3,7	3,7	100,0
	Total	54	100,0	100,0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18,00	1	1,9	1,9	1,9
	19,00	7	13,0	13,0	14,8
	20,00	10	18,5	18,5	33,3
	21,00	6	11,1	11,1	44,4
	22,00	13	24,1	24,1	68,5
	23,00	8	14,8	14,8	83,3
	24,00	3	5,6	5,6	88,9
	25,00	2	3,7	3,7	92,6
	26,00	2	3,7	3,7	96,3
	27,00	2	3,7	3,7	100,0
	Total	54	100,0	100,0	

What is your country of origin - Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The Netherlands	21	38,9	38,9	38,9
	Other	33	61,1	61,1	100,0
	Total	54	100,0	100,0	

Appendix 4: T-concepts tie familiarity and functionality

Frequencies

	Empty grote n	narkt	protest		festival		market	
	YES	NO	YES	NO	YES	NO	YES	NO
enjoyable	41	12	27	26	47	7	44	9
attractive	40	13	28	25	44	10	41	12
practical	44	10	39	14	24	29	49	5
organised	30	23	48	6	44	9	45	8

Percent

Crecit	Empty grote n	narkt	protest		festival		market	
	YES	NO	YES	NO	YES	NO	YES	NO
enjoyable	75.9	22.2	50	48.1	87	13	81.5	16.7
attractive	74.1	24.1	51.9	46.3	81.5	18.5	75.9	22.2
practical	81.5	18.5	72.2	25.9	44.4	53.7	90.7	9.3
organised	55.6	42.6	88.9	11.1	81.5	16.7	83.3	14.8

Appendix 5: Statistical Results for T-concept Questions

Overview of outcome from statistical tests done. Highlighted cells had significant outcomes.

T-concept	Relevant questions/statements	Protest	Festival	Market		
Tune	enjoyable	Chi-square test				
atmosphere		NA	NA	NA		
	attractive		Chi-square test			
		NA	effect is small	effect is medium		
Task			Chi-square test			
functionality	practical	NA	NA	NA		
	organised		Chi-square test			
		NA	NA	effect is medium		
T: 0 :1: :		Spearman's	s Correlation significa	nce (2-tailed)		
Tie familiarity		0.249	0.225	0.000		
	I feel comfortable on the Grote markt	Sign test significance (2-tailed)				
		0.472	0.868	0.004		
Tale narrative	This scenario fits well with the city	Spearman's Correlation significance (2-tailed)				
		0.573	0.166	0.154		
		Sign test significance (2-tailed)				
		0.405	0.324	0.004		
Theme	I feel connected to the	Spearman's	S Correlation significa	nce (2-tailed)		
significance	Grote markt	0.021	0.173	0.000		
		Sign test significance (2-tailed)				
		0.100	0.049	0.000		
	I feel connected to the city	Spearman's	s Correlation significa	nce (2-tailed)		
	of Groningen.	0.000	0.535	0.591		
		Sign test significance (2-tailed)				
		0.000	0.472	0.186		
	This improves the quality	Spearman's	Correlation significa	nce (2-tailed)		
	of the city	0.315	0.372	0.000		

Sign test significance (2-tailed)			
0.626 0.212 0.003			

Q: Likert scale question: I feel comfortable here

	Empty_l feel comfortable here	Protest_I feel comfortable here	Festival_I feel comfortable here	Market_l feel comfortable here
Disagree	0,0%	5,6%	7,4%	3,7%
Slightly disagree	5,6%	9,3%	13,0%	1,9%
Neutral	25,9%	33,3%	22,2%	18,5%
Slightly agree	48,1%	35,2%	27,8%	25,9%
Agree	20,4%	16,7%	29,6%	50,0%

Correlations

			Empty_l feel comfortable here	Protest_I feel comfortable here	Festival_I feel comfortable here	Market_l feel comfortable here
Spearman's rho	Empty_I feel comfortable	Correlation Coefficient	1,000	,152	,165	,450**
	here	Sig. (2-tailed)		,249	,225	,000
		N	69	59	56	61
	Protest_I feel comfortable	Correlation Coefficient	,152	1,000	,108	,145
	here	Sig. (2-tailed)	,249		,434	,283
		N	59	59	55	57
	Festival_I feel	Correlation Coefficient	,165	,108	1,000	,393**
	comfortable here	Sig. (2-tailed)	,225	,434		,003
		N	56	55	56	55
	Market_I feel comfortable	Correlation Coefficient	,450**	,145	,393**	1,000
	here	Sig. (2-tailed)	,000	,283	,003	
		N	61	57	55	61

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Q: Likert scale question: This scenario fits well with the rest of the city

	Empty_This scenario fits well with the rest of the city	Protest_This scenario fits well with the rest of the city	Festival_This scenario fits well with the rest of the city	Market_This scenario fits well with the rest of the city
Disagree	0,0%	5,7%	5,6%	1,9%
Slightly disagree	9,3%	17,0%	5,6%	3,8%
Neutral	24,1%	26,4%	16,7%	9,4%
Slightly agree	46,3%	30,2%	33,3%	34,0%
Agree	20,4%	20,8%	38,9%	50,9%

Correlations

			Empty_This scenario fits well with the rest of the city	Protest_This scenario fits well with the rest of the city	Festival_This scenario fits well with the rest of the city	Market_This scenario fits well with the rest of the city
Spearman's rho	Empty_This scenario fits	Correlation Coefficient	1,000	,079	,191	,199
	well with the rest of the city	Sig. (2-tailed)		,573	,166	,154
	on,	N	54	53	54	53
	Protest_This scenario fits	Correlation Coefficient	,079	1,000	,257	,147
	well with the rest of the city	Sig. (2-tailed)	,573		,063	,297
	,	N	53	53	53	52
	Festival_This scenario	Correlation Coefficient	,191	,257	1,000	,442**
	fits well with the rest of the city	Sig. (2-tailed)	,166	,063		,001
	and only	N	54	53	54	53
	Market_This scenario fits	Correlation Coefficient	,199	,147	,442**	1,000
	well with the rest of the city	Sig. (2-tailed)	,154	,297	,001	
		N	53	52	53	53

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Q: Likert scale question: I feel connected to the Grote markt

	Empty_I feel connected to the Grote markt	Protest_I feel connected to the Grote markt	Festival_I feel connected to the Grote Markt	Market_I feel connected to the Grote Markt
Disagree	0,0%	9,6%	7,4%	5,6%
Slightly disagree	34,0%	11,5%	13,0%	9,3%
Neutral	26,0%	36,5%	29,6%	16,7%
Slightly agree	28,0%	15,4%	18,5%	37,0%
Agree	12,0%	26,9%	31,5%	31,5%

Correlations

			Empty_I feel connected to the Grote markt	Protest_I feel connected to the Grote markt	Festival_I feel connected to the Grote Markt	Market_I feel connected to the Grote Markt
Spearman's rho	Empty_I feel connected to	Correlation Coefficient	1,000	,330*	,196	,484**
	the Grote markt	Sig. (2-tailed)		,021	,173	,000
		N	50	49	50	50
	Protest_I feel connected to the Grote markt	Correlation Coefficient	,330*	1,000	,318*	,391**
		Sig. (2-tailed)	,021		,022	,004
		N	49	52	52	52
	Festival_I feel connected	Correlation Coefficient	,196	,318*	1,000	,412**
	to the Grote Markt	Sig. (2-tailed)	,173	,022		,002
	Market_I feel connected	N	50	52	54	54
		Correlation Coefficient	,484**	,391**	,412**	1,000
	to the Grote Markt	Sig. (2-tailed)	,000	,004	,002	
		N	50	52	54	54

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Q: Likert scale question: I feel connected to the city of Groningen

^{**.} Correlation is significant at the 0.01 level (2-tailed).

	Empty_I feel connected to the city of Groningen	Protest_I feel connected to the city of Groningen	Festival_I feel connected to the city of Groningen	Market_I feel connected to the city of Groningen
Disagree	0,0%	3,8%	5,6%	3,7%
Slightly disagree	16,7%	18,9%	9,3%	16,7%
Neutral	16,7%	18,9%	20,4%	11,1%
Slightly agree	37,0%	28,3%	20,4%	22,2%
Agree	29,6%	30,2%	44,4%	46,3%

Correlations

			Empty_I feeI connected to the city of Groningen	Protest_I feel connected to the city of Groningen	Festival_I feel connected to the city of Groningen	Market_I feeI connected to the city of Groningen
Spearman's rho	Empty_I feel connected to	Correlation Coefficient	1,000	,601**	,535**	,591**
	the city of Groningen	Sig. (2-tailed)		,000	,000	,000
		N	54	53	54	54
	Protest_I feel connected	Correlation Coefficient	,601**	1,000	,463**	,554**
	to the city of Groningen	Sig. (2-tailed)	,000		,000	,000
		N	53	53	53	53
	Festival_I feel connected	Correlation Coefficient	,535**	,463**	1,000	,590**
	to the city of Groningen	Sig. (2-tailed)	,000	,000		,000
		N	54	53	54	54
	Market_I feel connected	Correlation Coefficient	,591**	,554**	,590**	1,000
	to the city of Groningen	Sig. (2-tailed)	,000	,000	,000	
		N	54	53	54	54

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Q: Likert scale question: This improves the quality of the city

		Festival_This improves the quality of the city	Market_This improves the quality of the city	Empty_This improves the quality of the city	Protest_This improves the quality of the city
Disagree	Row N %	3,7%	5,6%	1,9%	5,8%
Slightly disagree	Row N %	7,4%	0,0%	14,8%	7,7%
Neutral	Row N %	18,5%	14,8%	22,2%	21,2%
Slightly agree	Row N %	33,3%	24,1%	29,6%	44,2%
Agree	Row N %	37,0%	55,6%	31,5%	21,2%

Correlations

			Empty_This improves the quality of the city	Protest_This improves the quality of the city	Festival_This improves the quality of the city	Market_This improves the quality of the city
Spearman's rho	Empty_This improves the	Correlation Coefficient	1,000	,142	,123	,469**
	quality of the city	Sig. (2-tailed)		,315	,377	,000
		N	54	52	54	54
	Protest_This improves	Correlation Coefficient	,142	1,000	,346*	,132
	the quality of the city	Sig. (2-tailed)	,315		,012	,352
		N	52	52	52	52
	Festival_This improves	Correlation Coefficient	,123	,346*	1,000	,413**
	the quality of the city	Sig. (2-tailed)	,377	,012		,002
		N	54	52	54	54
	Market_This improves the	Correlation Coefficient	,469**	,132	,413**	1,000
	quality of the city	Sig. (2-tailed)	,000	,352	,002	
		N	54	52	54	54

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Significant results from chi-square tests

Festival -Attractive

	Chi-Square Tests						
			Asymptotic				
			Significance	Exact Sig.	Exact Sig.		
	Value	df	(2-sided)	(2-sided)	(1-sided)		
Pearson Chi-Square	4,006 ^a	1	,045				
Continuity Correction ^b	2,539	1	,111				
Likelihood Ratio	6,349	1	,012				
Fisher's Exact Test				,096	,043		
Linear-by-Linear	3,930	1	,047				
Association							
N of Valid Cases	53						

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 2,45.

b. Computed only for a 2x2 table

Symmetric Measures						
			Approximate			
		Value	Significance			
Nominal by Nominal	Phi	-,275	,045			
	Cramer's V	,275	,045			

^{*.} Correlation is significant at the 0.05 level (2-tailed).

N of Valid Cases	53	

Market- Attractive

Chi-Square Tests					
			Asymptotic		
			Significance	Exact Sig.	Exact Sig.
	Value	df	(2-sided)	(2-sided)	(1-sided)
Pearson Chi-Square	5,437ª	1	,020		
Continuity Correction ^b	3,804	1	,051		
Likelihood Ratio	4,939	1	,026		
Fisher's Exact Test				,050	,029
Linear-by-Linear	5,334	1	,021		
Association					
N of Valid Cases	53				

a. 1 cells (25,0%) have expected count less than 5. The minimum expected count is 2,94.

b. Computed only for a 2x2 table

Symmetric Measures				
			Approximate	
		Value	Significance	
Nominal by Nominal	Phi	,320	,020	
	Cramer's V	,320	,020	
N of Valid Cases		53		

Market- Organised

Chi-Square Tests					
			Asymptotic		
			Significance	Exact Sig.	Exact Sig.
	Value	df	(2-sided)	(2-sided)	(1-sided)
Pearson Chi-Square	7,461ª	1	,006		
Continuity Correction ^b	5,496	1	,019		
Likelihood Ratio	7,944	1	,005		
Fisher's Exact Test				,015	,009
Linear-by-Linear	7,320	1	,007		
Association					
N of Valid Cases	53				

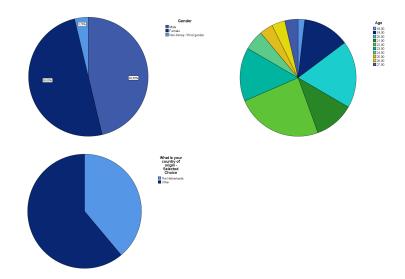
a. 2 cells (50,0%) have expected count less than 5. The minimum expected count is 3,47.

b. Computed only for a 2x2 table

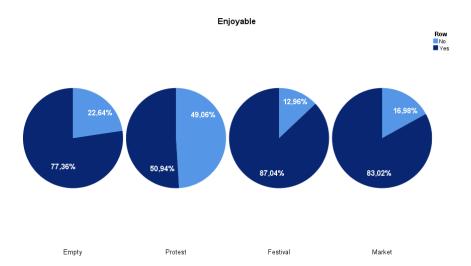
Symmetric Measures					
			Approximate		
		Value	Significance		
Nominal by Nominal	Phi	,375	,006		
	Cramer's V	,375	,006		
N of Valid Cases		53			

Appendix 6: Visualisations of Results

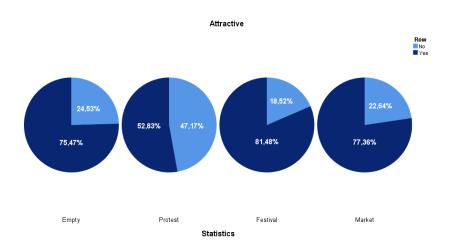
Pie charts displaying results of gender, age and country of origin.



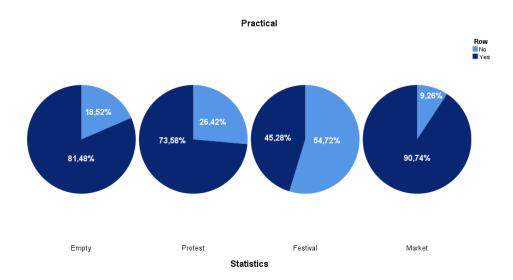
Set of four pie charts, each a different scenario, showing the distribution of 'yes' and 'no' responses for the question word 'enjoyable'.



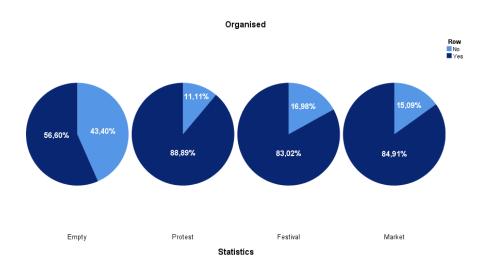
Set of four pie charts, each a different scenario, showing the distribution of 'yes' and 'no' responses for the question word 'attractive'.



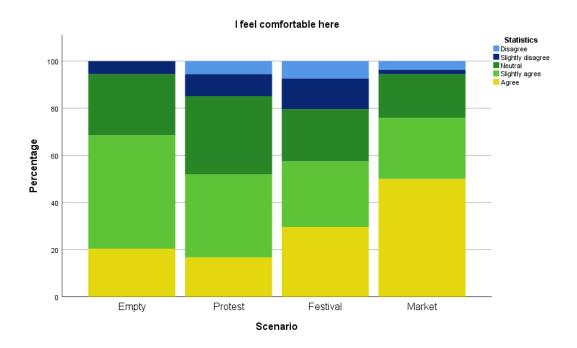
Set of four pie charts, each a different scenario, showing the distribution of 'yes' and 'no' responses for the question word 'practical'.



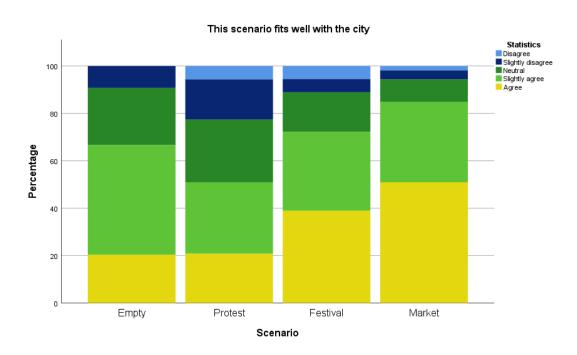
Set of four pie charts, each a different scenario, showing the distribution of 'yes' and 'no' responses for the question word 'organised'.



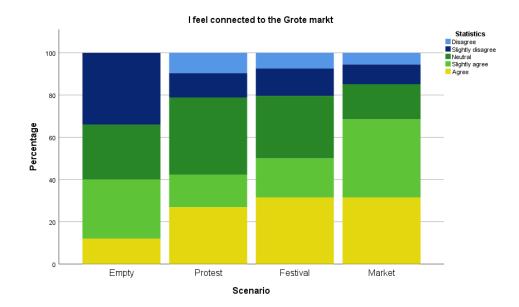
Stacked bar chart illustrating results from statement question: I feel comfortable here.



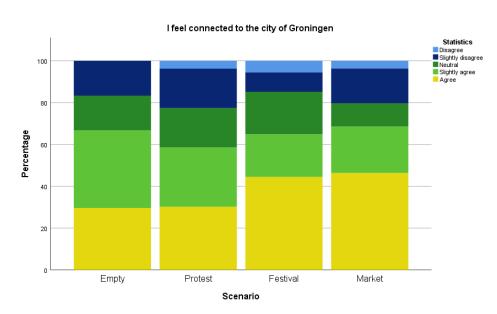
Stacked bar chart illustrating results from statement question: This scenario fits well with the city.



Stacked bar chart illustrating results from statement question: I feel connected to the Grote markt



Stacked bar chart illustrating results from statement question: I feel connected to the city of Groningen.



Stacked bar chart illustrating results from statement question: This improves the quality of the city.

