



THE MEANING OF SENSE OF PLACE AND GREEN SPACE IN THE COMMUNITY OF THE VREDEFORT DOME AND PARYS, FREE STATE PROVINCE

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1. Introduction

- Largest and oldest meteorite impact crater
- United Nations Educational, Scientific and Cultural Organization (UNESCO) - 14 July 2005
- 'Outstanding universal value to human kind' – geology (UNEP, 2006)
- Memorandum of agreement signed between government and landowners - 26 May 2012
- However, the proclamation has been put off because of concerns raised by the landowners (Engelbrecht, 2012)

1. Introduction continue

Reasons for the delayed proclamation:

- Disrupt resident's peace and quiet
- Residents are limited
- Misunderstandings and miscommunication – different landowners, residents, municipalities and government
- A lack of trust
- Some residents felt that the 'meteorite-story' is just a theory to make money

1. Introduction continue

- Increase in tourist numbers and facilities (development) serving tourism (UNEP, 2006)
- Development is needed in the area
- Well-being of the environment and perspectives
- Natural and rural areas are under constant pressure to develop (Puren, Drewes & Roos, 2006)
- Over-development, tourism, pollution and globalisation may possibly impact the sense of place (SOP) of the area

1. Introduction continue

What is sense of place?

- *“That which is unique to a place and which gives a certain character or identity to it”* (Puren, 2010:15)
- *“The manner in which humans relate or feel about an environment”* (Nanzer, 2004)

Related terms:

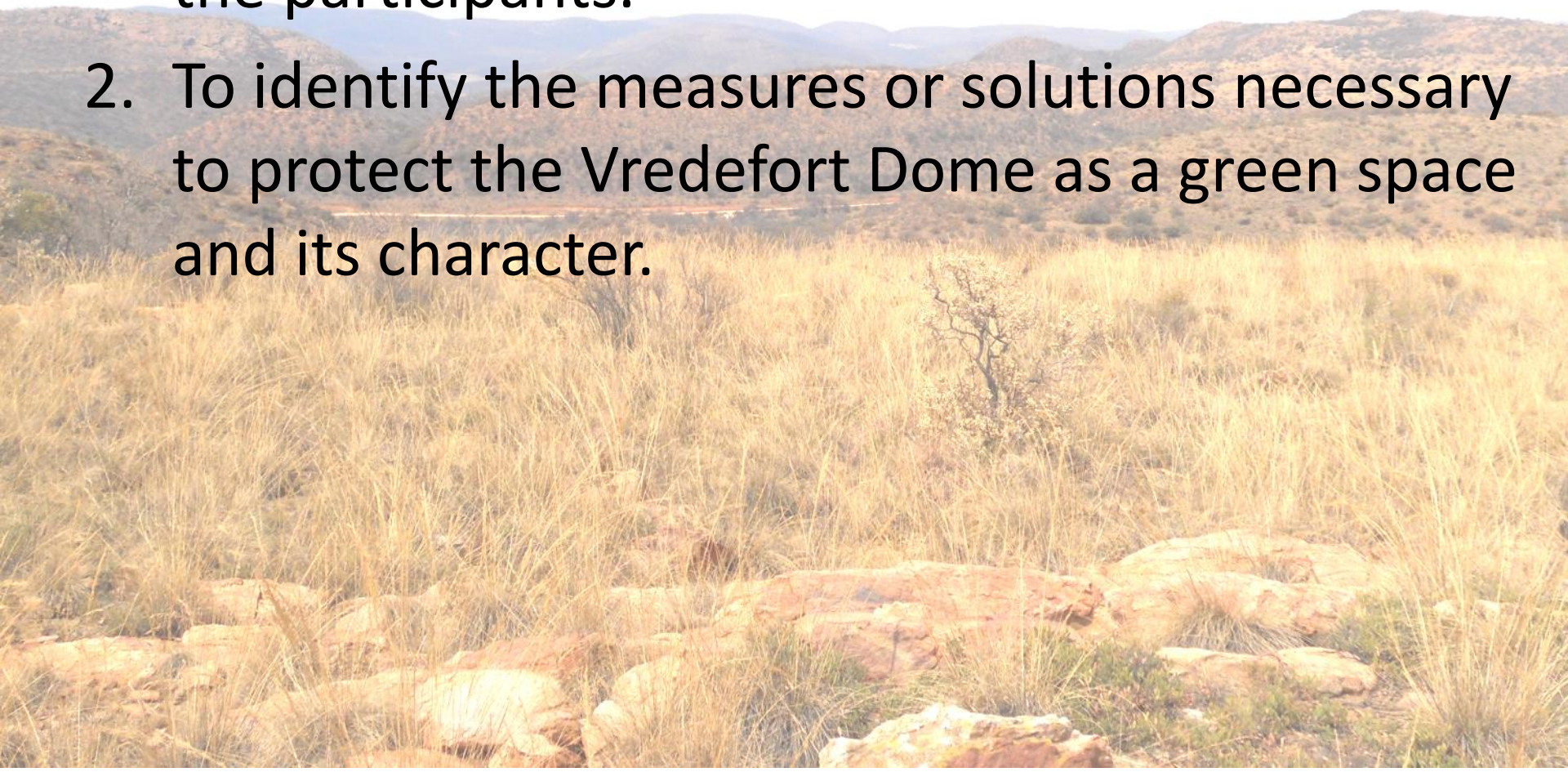
- Place attachment
- Place dependence
- Place identity
- Place image (marketing purposes)

1. Introduction continue

- The experience of 'place' is likely to be private and distinctive from one person to the next (Bell, Greene, Fisher & Baum, 1996).
- Modernity and urbanisation created physical and psychological divisions between people and nature.
- Access to 'green space' is highly valued by communities, contributing not only to better health, but also to happiness, relaxation and feeling close to nature (Coles & Bussey, 2000).
- Demand for access to protected areas close to urban areas (like the Vredefort Dome) is increasing (Rossi, Pickering & Byrne, 2016:1).
- Therefore, this study focused on the sense of place (character) and its importance for the Vredefort Dome as a green space.

2. Research objectives

1. To determine the meaning of sense of place to the participants.
2. To identify the measures or solutions necessary to protect the Vredefort Dome as a green space and its character.



3. Study area

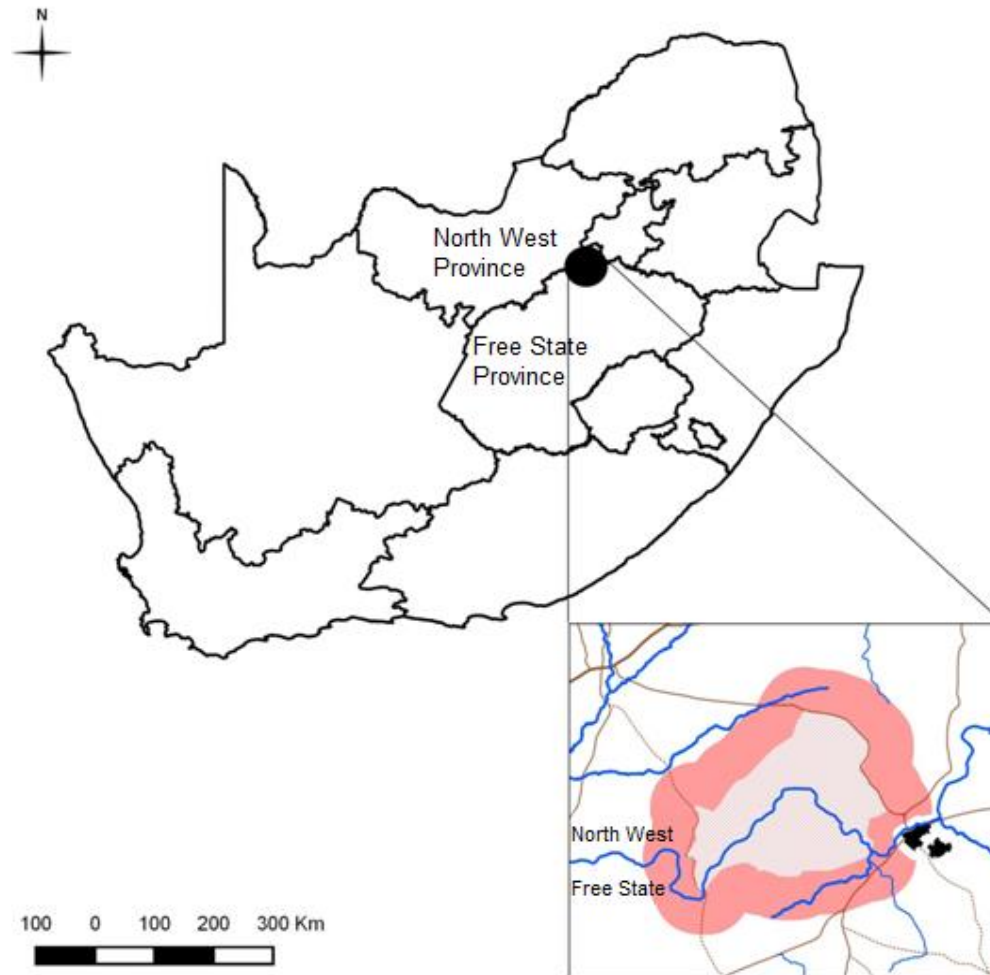


FIGURE 1: The location of the study area relative to South Africa

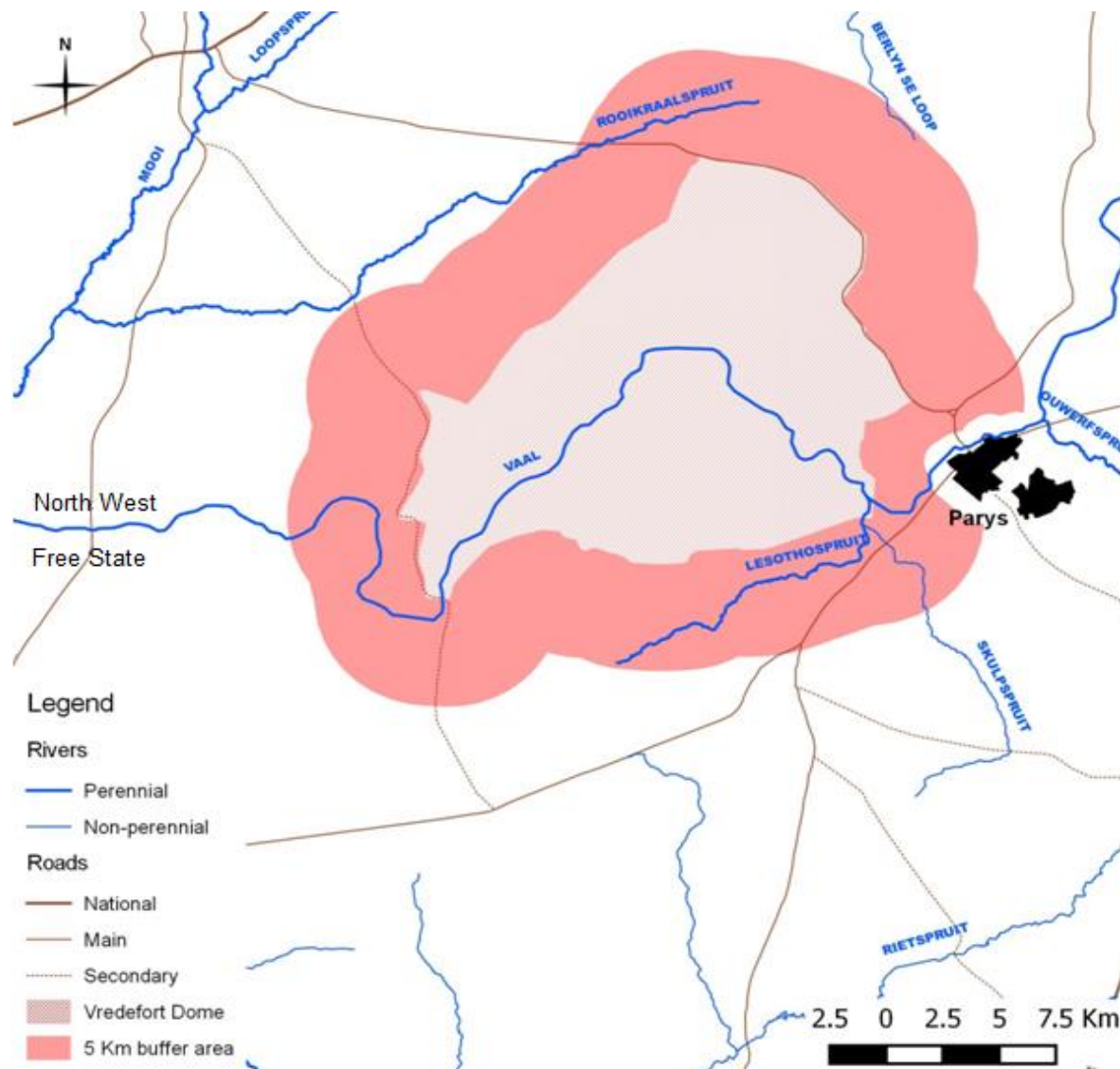


FIGURE 2: The location of Parys and the edge of the Vredefort Dome impact crater along the Vaal River

4. Research methodology

- **Research design:** Qualitative
- **Population:** Participants for this study consisted of 4 groups – Residents of Parys and the Vredefort Dome; Tourists to Parys and the Vredefort Dome.
- **Sampling:** Convenience, Purposive and Snowball/Network
- **Methods and instruments:** Interviews, Questionnaires, Visual – Photographs, Fieldworkers
- **Data analysis:** Coding and content analysis
- **Ethical clearance** obtained from TUT
- Data was collected until **saturation** was reached (when no additional or significant data emerged)

5. Results and Discussion – Objective 1

Objective 1: To determine the meaning of sense of place to the participants.

Related dimensions of sense of place in previous research in the study area have been identified (Gouws, 2013:435). These were:

- (1) the **objective**, or cognitive dimension which includes the visual quality and character of the environment; and
- (2) the **subjective**, or affective dimension that refers to the feelings and experiences in the environment which is more symbolic or psychological in nature.

5. Results and Discussion – Objective 1

Similarly, three themes were identified in this research:

Theme 1: Affective (Subjective)

All groups

Theme 2: Anthropogenic (Objective)

All groups, especially the residents of Parys and Vredefort Dome

Theme 3: Physical environment (Objective)

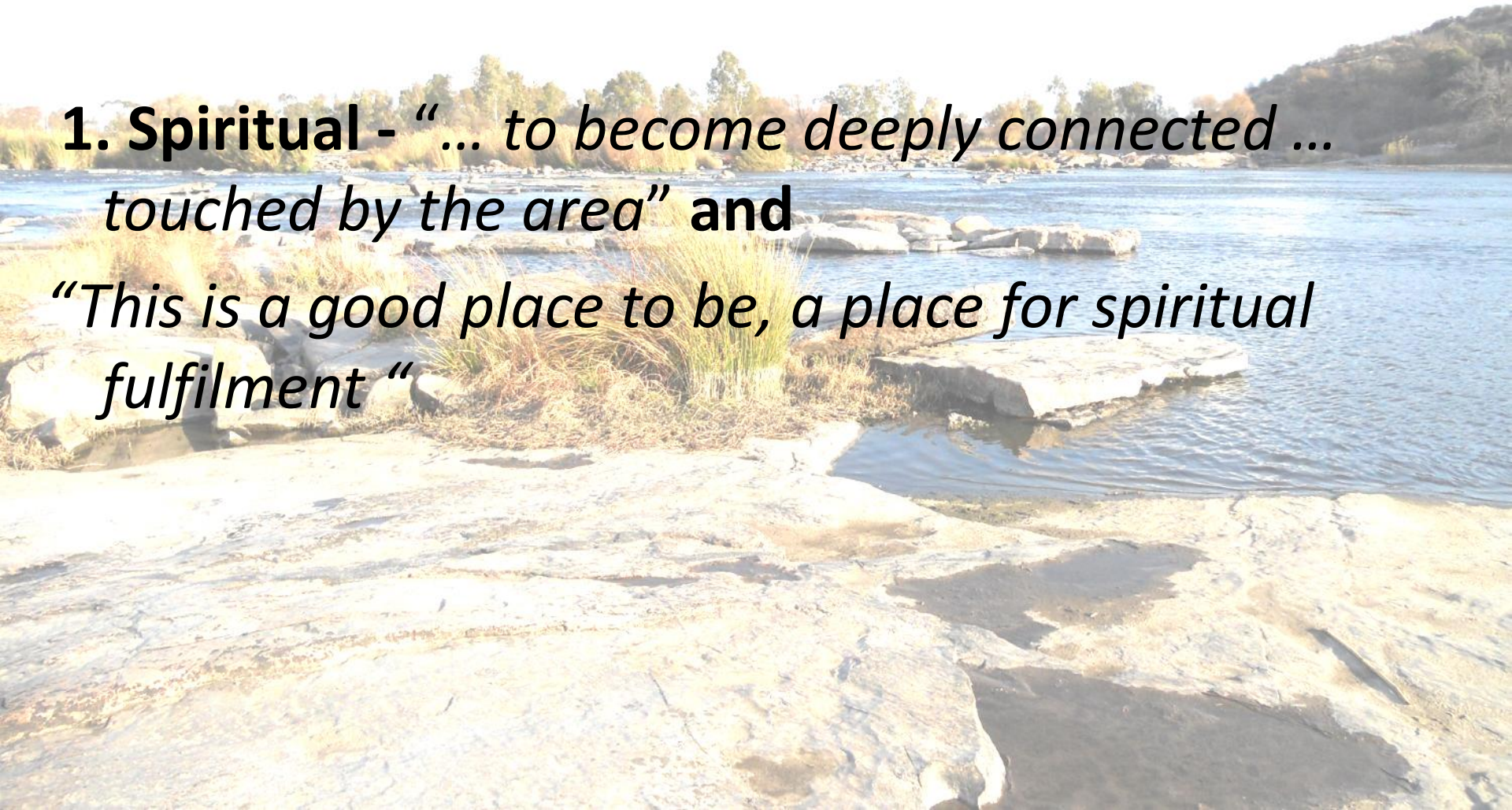
All groups, especially residents of Vredefort Dome

5. Results and Discussion – Objective 1

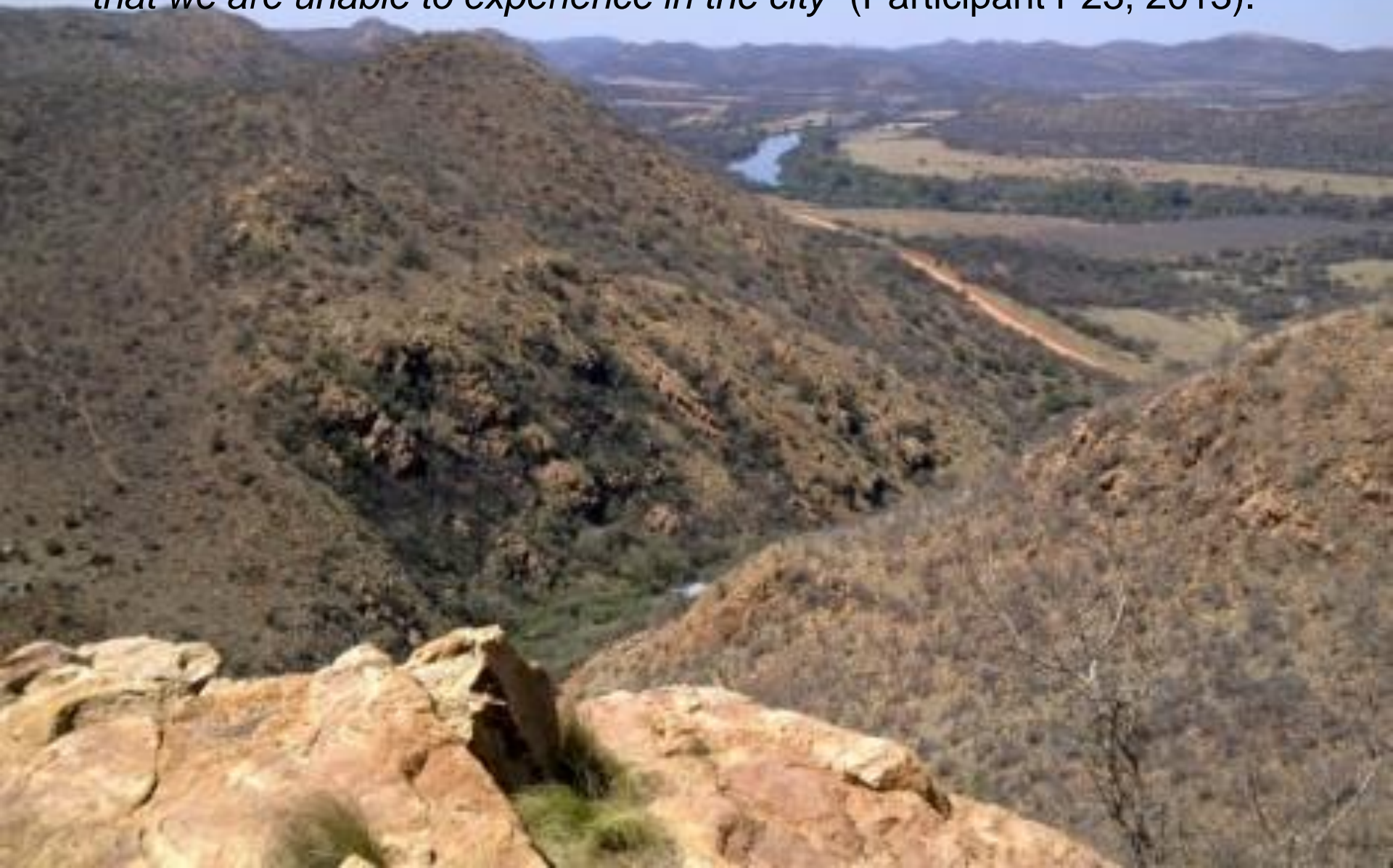
Theme 1: Affective

1. Spiritual - *“... to become deeply connected ... touched by the area”* and

“This is a good place to be, a place for spiritual fulfilment”



*“How can one be in a pristine, beautiful and unspoiled area and not be **touched by the spirit of nature**? How can one not hear the beautiful songs of the birds? **We all should be touched by all these things** that we are unable to experience in the city” (Participant P23, 2013).*

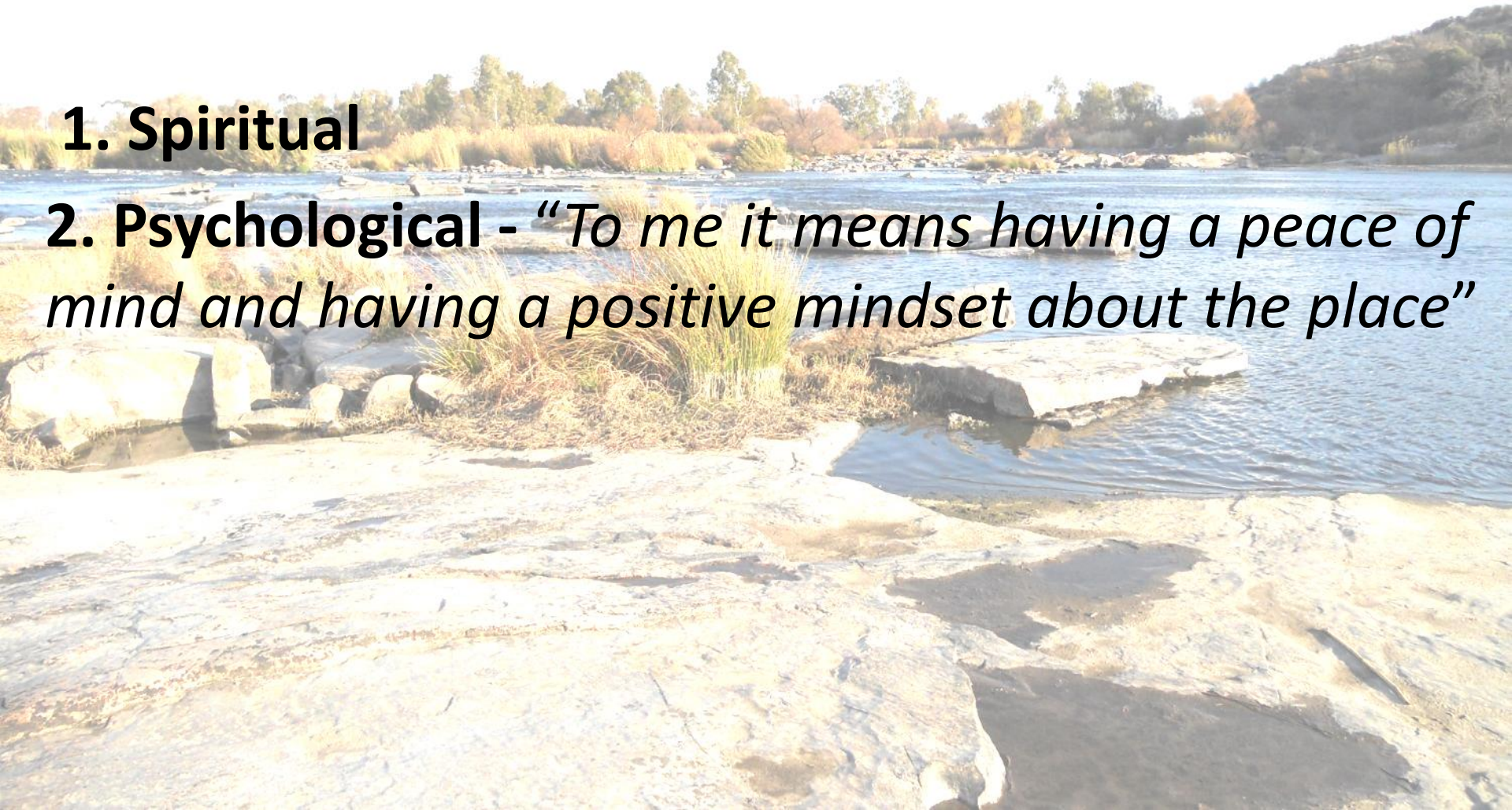


5. Results and Discussion – Objective 1

Theme 1: Affective

1. Spiritual

2. Psychological - *“To me it means having a peace of mind and having a positive mindset about the place”*



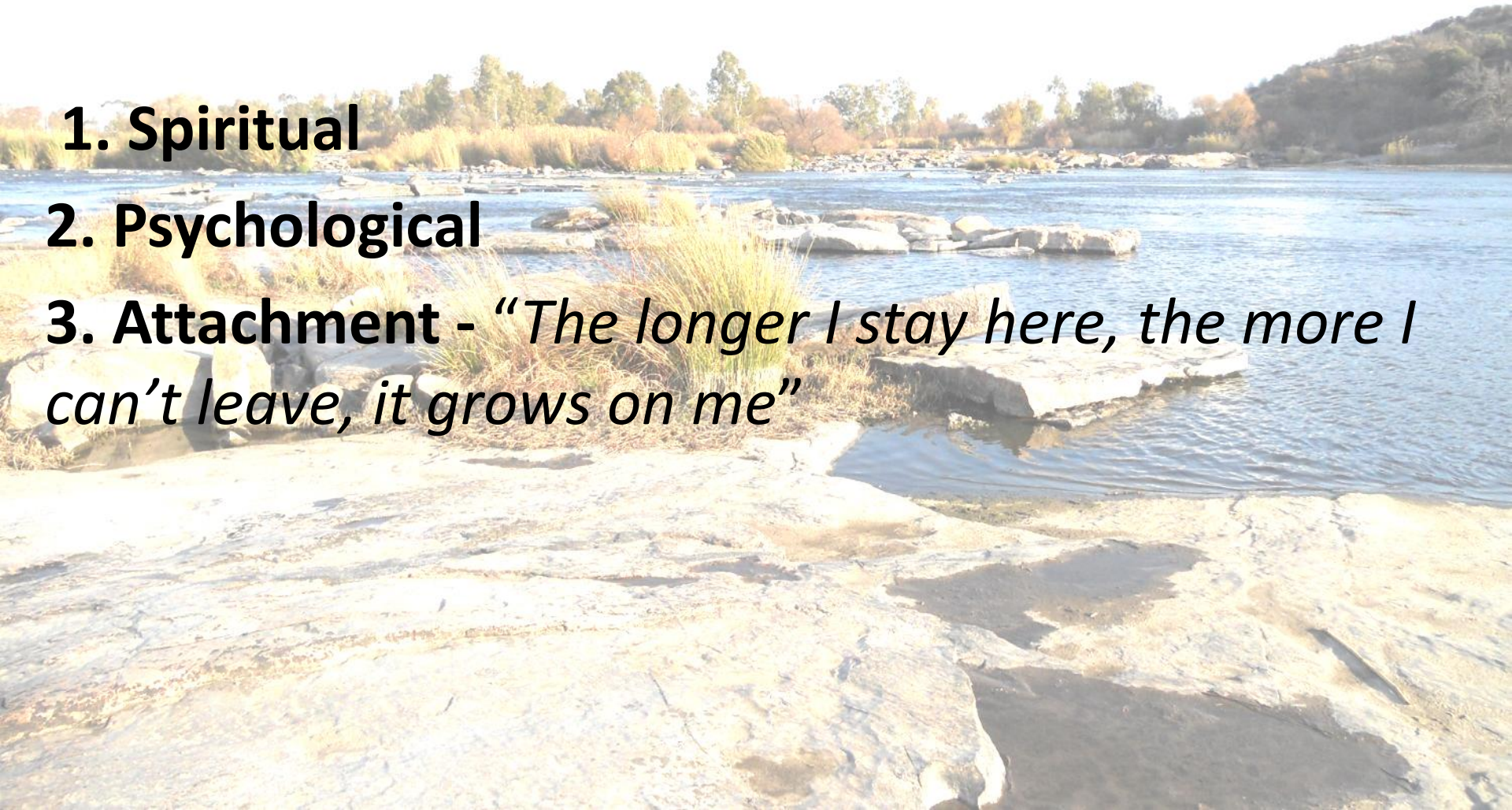
5. Results and Discussion – Objective 1

Theme 1: Affective

1. Spiritual

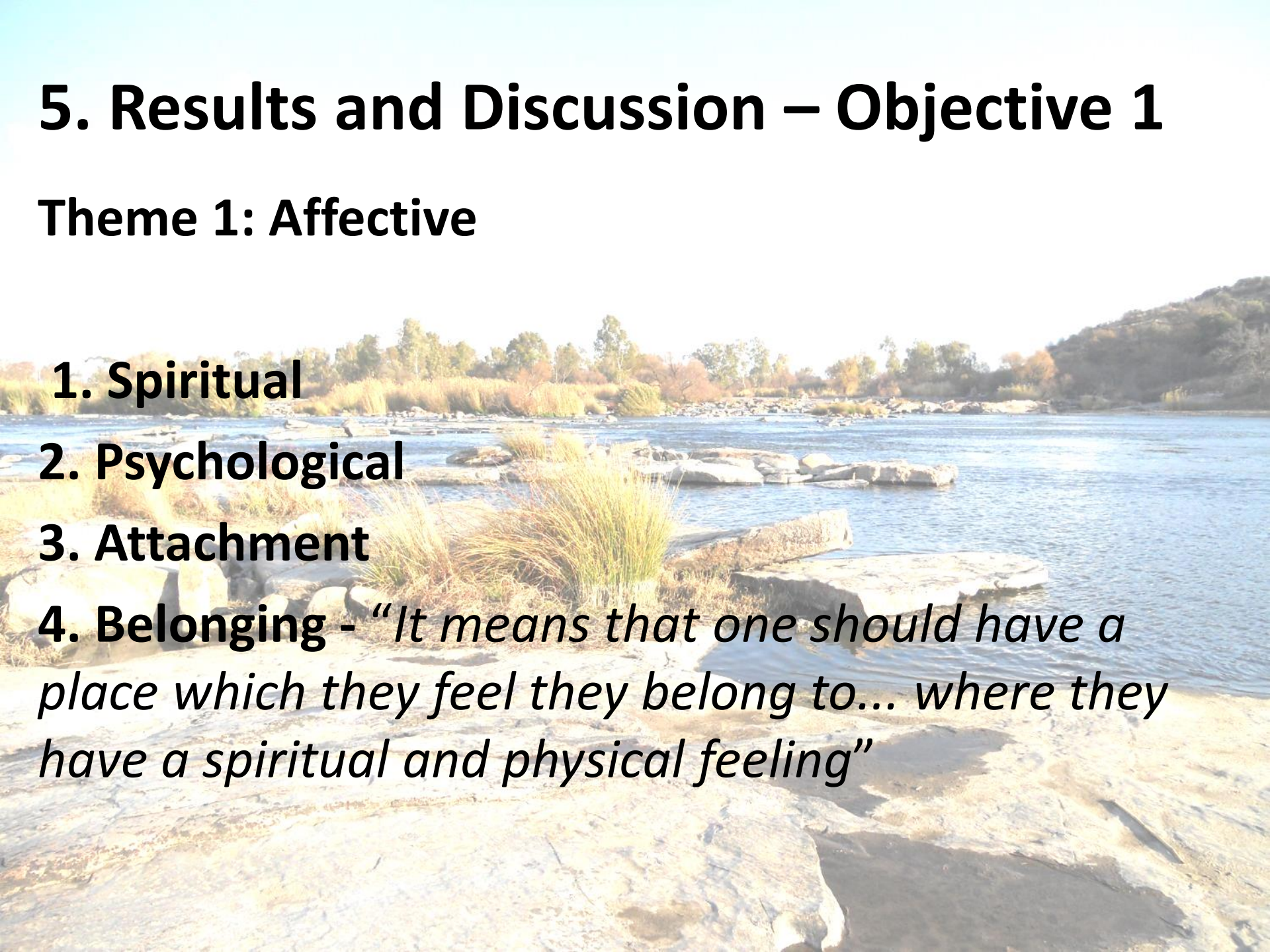
2. Psychological

3. Attachment - *“The longer I stay here, the more I can’t leave, it grows on me”*



5. Results and Discussion – Objective 1

Theme 1: Affective

- 
- A scenic landscape featuring a river with several large, flat rocks protruding from the water. The banks are covered with tall, dry grasses and trees with autumn foliage in shades of yellow, orange, and brown. The sky is a pale, clear blue.
1. Spiritual
 2. Psychological
 3. Attachment
 4. Belonging - *“It means that one should have a place which they feel they belong to... where they have a spiritual and physical feeling”*

5. Results and Discussion – Objective 1

Theme 2: Anthropogenic

1. Development - *“The main aspect of sense of place is to keep the development invisible. Tourism development needs to come, but must be unobtrusive”*

A scenic view of a rocky shoreline with a body of water and a forested hill in the background. The foreground shows large, flat, light-colored rocks. A small patch of dry grass and reeds grows on the shore. The water is calm and blue. In the background, a line of trees with autumn foliage is visible against a clear sky.







**Nederduitse Gereformeerde
Moederkerk**

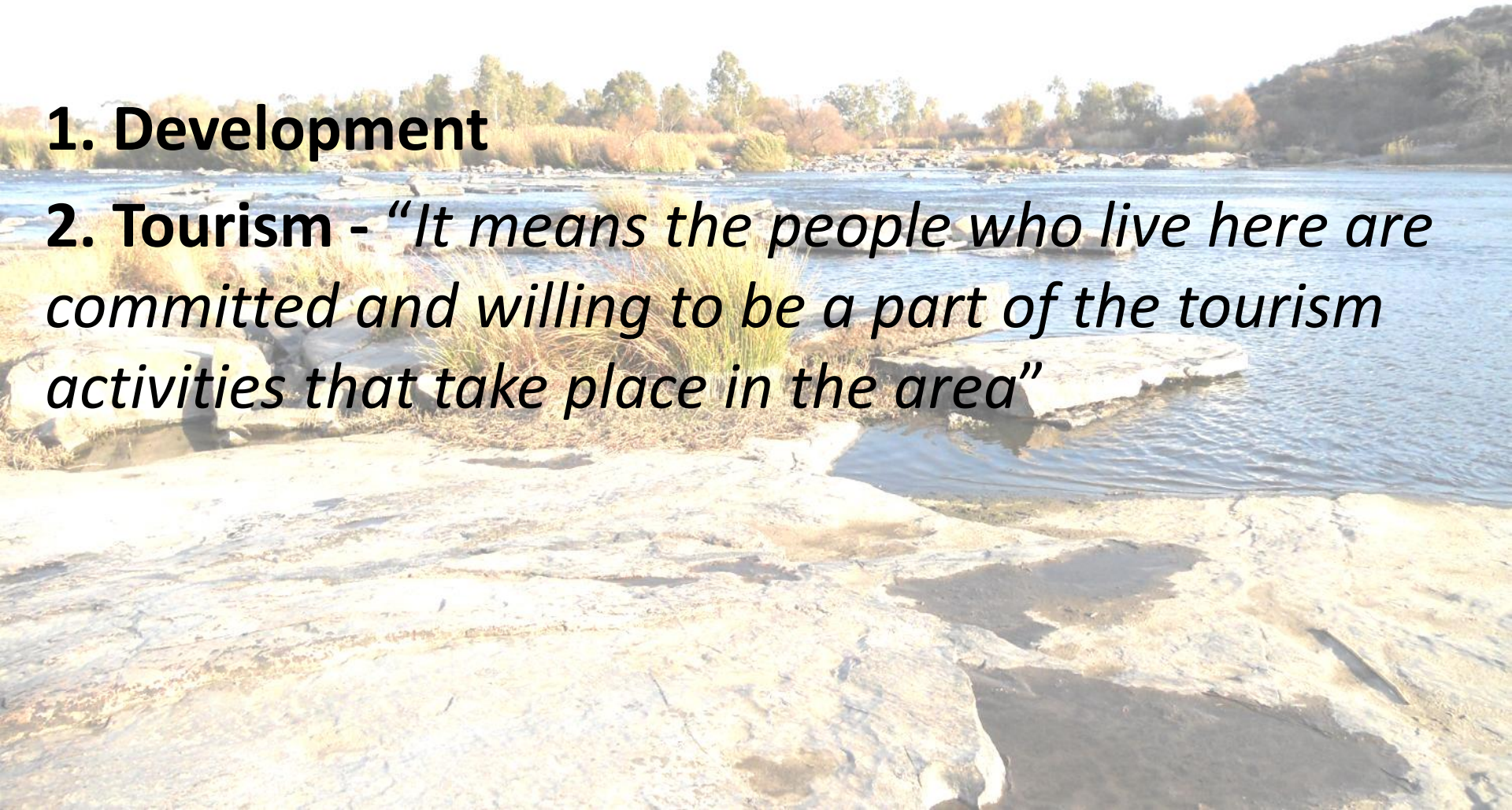
*“This picture is important to me because of its **significant value in Parys**. The structure of the church is beautiful and it hasn’t been ruined or changed since it was built. I would like to attend this kind of church with such a history” (Participant P42, 2013).*

5. Results and Discussion – Objective 1

Theme 2: Anthropogenic

1. Development

2. Tourism - *“It means the people who live here are committed and willing to be a part of the tourism activities that take place in the area”*



*“When I took the photo I felt happy because it is bright in colour and it is **formed in a unique way**. The upturned quartz rock is an **important physical evidence of the meteorite impact**. It is an attraction that the tourists would like to **learn more about**”*
(Participant P22, 2013).



5. Results and Discussion – Objective 1

Theme 2: Anthropogenic

1. Development

2. Tourism

3. Historical - *“They must spend time to conserve the old history of this part of the country as part of the World Heritage Site”*



*“The engraving of the San people on the rock shows **that not only did people live in the area, but also animals and water was available.** It shows that these people communicated with each other by engraving pictures on the rocks. It brings much peace in me that they were depending on nature and the fact that this place is still protected today” (Participant P25, 2013).*









5. Results and Discussion – Objective 1

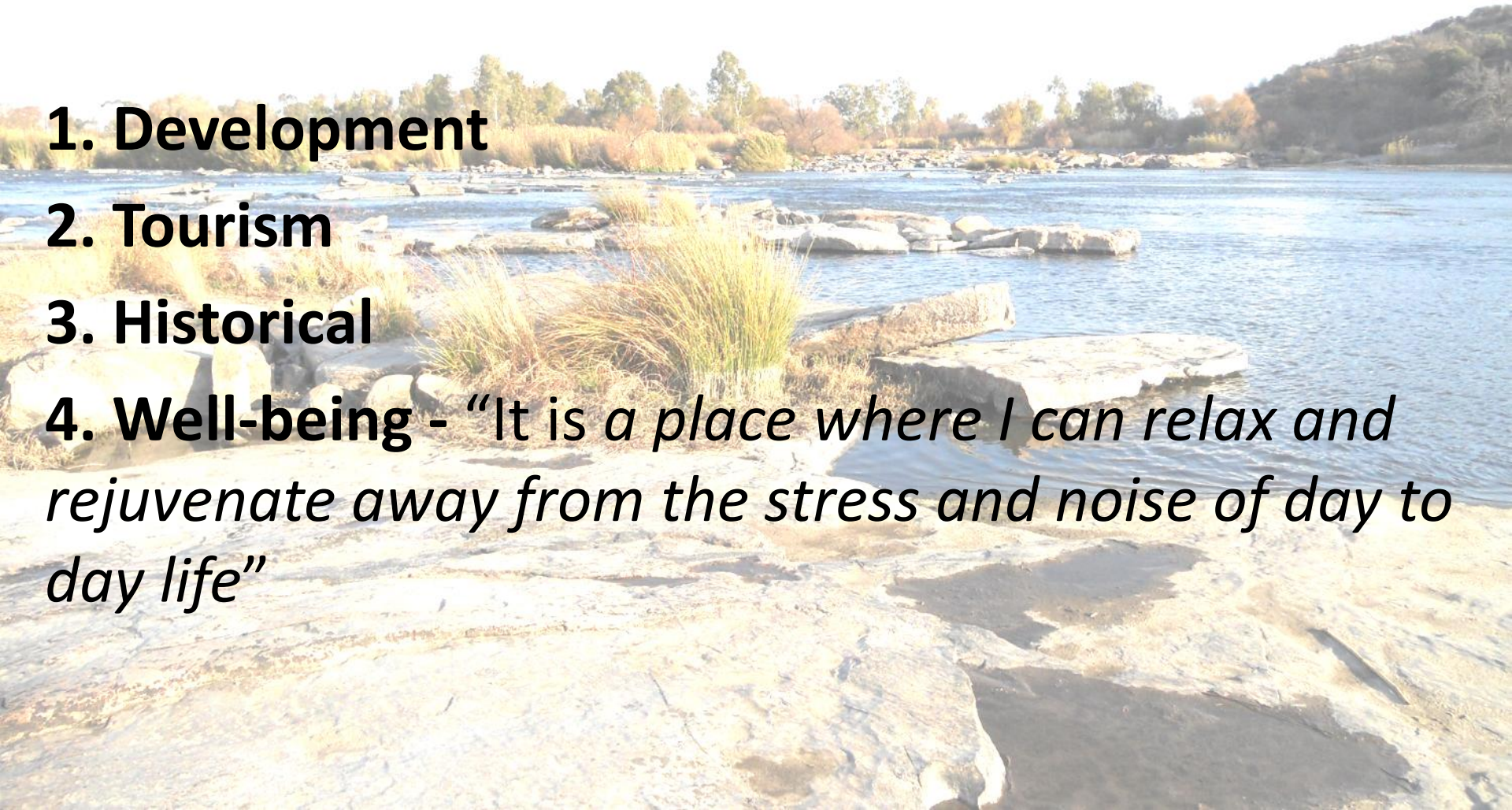
Theme 2: Anthropogenic

1. Development

2. Tourism

3. Historical

4. Well-being - *“It is a place where I can relax and rejuvenate away from the stress and noise of day to day life”*



5. Results and Discussion – Objective 1

Theme 2: Anthropogenic

1. Development

2. Tourism

3. Historical

4. Well-being

5. Human interaction - *“...it’s not only about the natural way the place looks like, but also about who you meet here, whether it is a tractor on the road or donkeys next to the fence”*

5. Results and Discussion – Objective 1

Theme 3: Physical environment

1. Care for environment - *“The respect you show towards the area you live in and appreciate its natural beauty”*



*“It is of great significance that the Vaal River passes through the Vredefort Dome. I took this picture because of the landscape it portrays. It’s amazing how nature is interlinked; therefore **I somehow wish that other people could just respect what nature gives to them because when people perish, nature will still remain long after.** I have positive emotions about this picture, just seeing how beautiful it is and how it can change a person’s perspective and life by just experiencing it. **Nature is precious and we must take care of it**” (Participant P11, 2013).*



5. Results and Discussion – Objective 1

Theme 3: Physical environment

1. Care for environment

2. Natural features - *“You can hear the birds during the day and during the night time the frogs and the owls and night birds. That is what makes this place so special”*



5. Results and Discussion – Objective 1

Theme 3: Physical environment

1. Care for environment

2. Natural features

3. Use of senses - *“There is a harmony between what is ‘inside’ me and what I see around with my eyes and hear with my ears”*



*“The most interesting thing for me was that the river was flowing and making a **loud sound** through the bridge. There were **a lot of birds** ... a spoonbill, herons and egrets. One could **feel the fresh air** and relax **listening to the sound of flowing water** and **different bird calls**. You could feel that you are in true nature”* (Participant P20, 2013).



5. Results and Discussion – Objective 1

Theme 3: Physical environment

1. Care for environment

2. Natural features

3. Use of senses

4. General - *“I love Parys and its small town character” and “to feel safe and holistically to be proud of my home and the surrounding environment”*

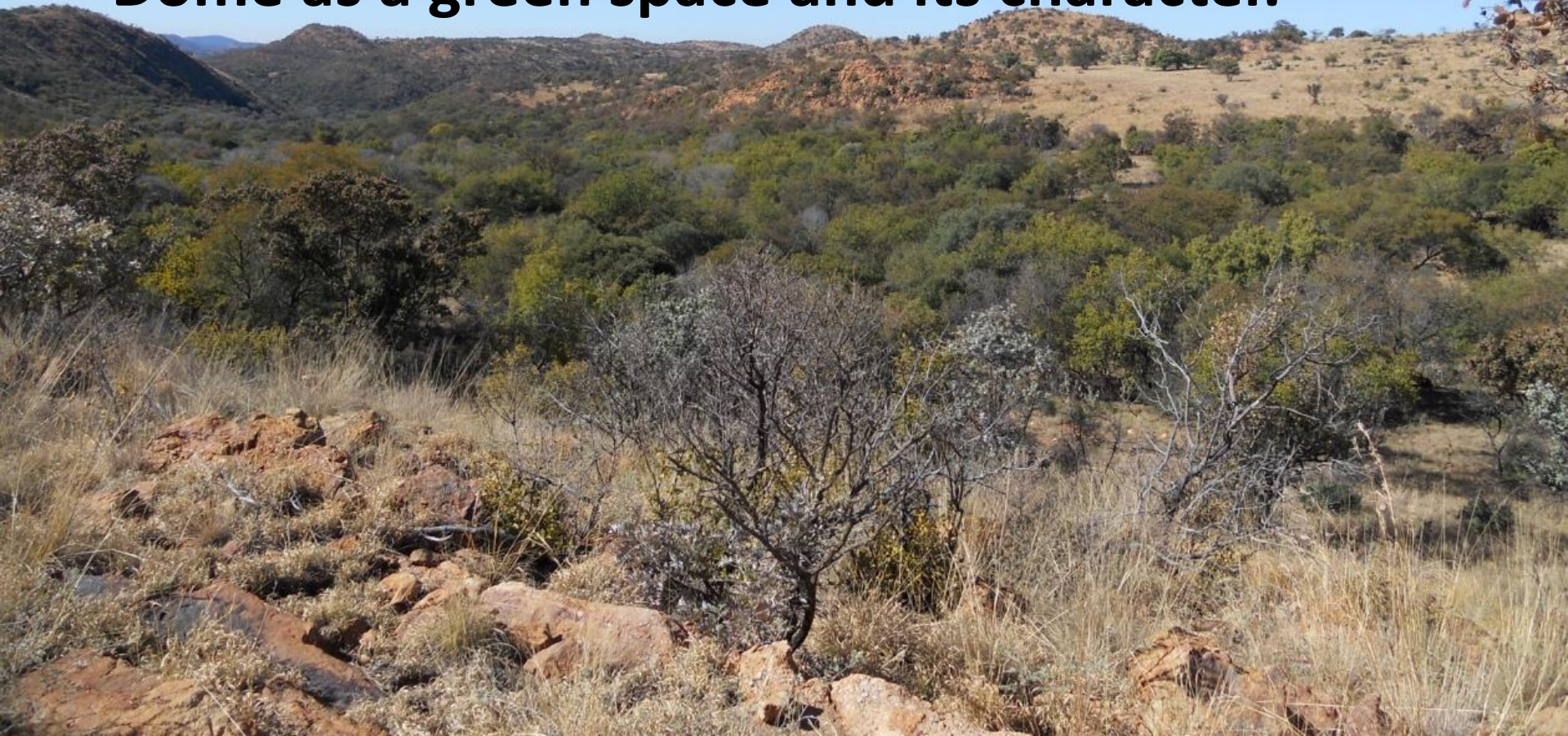


5. Results and Discussion – Objective 1

- The complexity of the concept ‘sense of place’ becomes apparent.
- The participants expressed themselves affectively (subjectively) or objectively, while certain participants merged the features in their depictions.
- From these sense of place meanings, participants were asked to identify solutions on protecting the Vredefort Dome as a green space and its character.

5. Results and Discussion – Objective 2

Objective 2: To identify the measures or solutions necessary to protect the Vredefort Dome as a green space and its character.



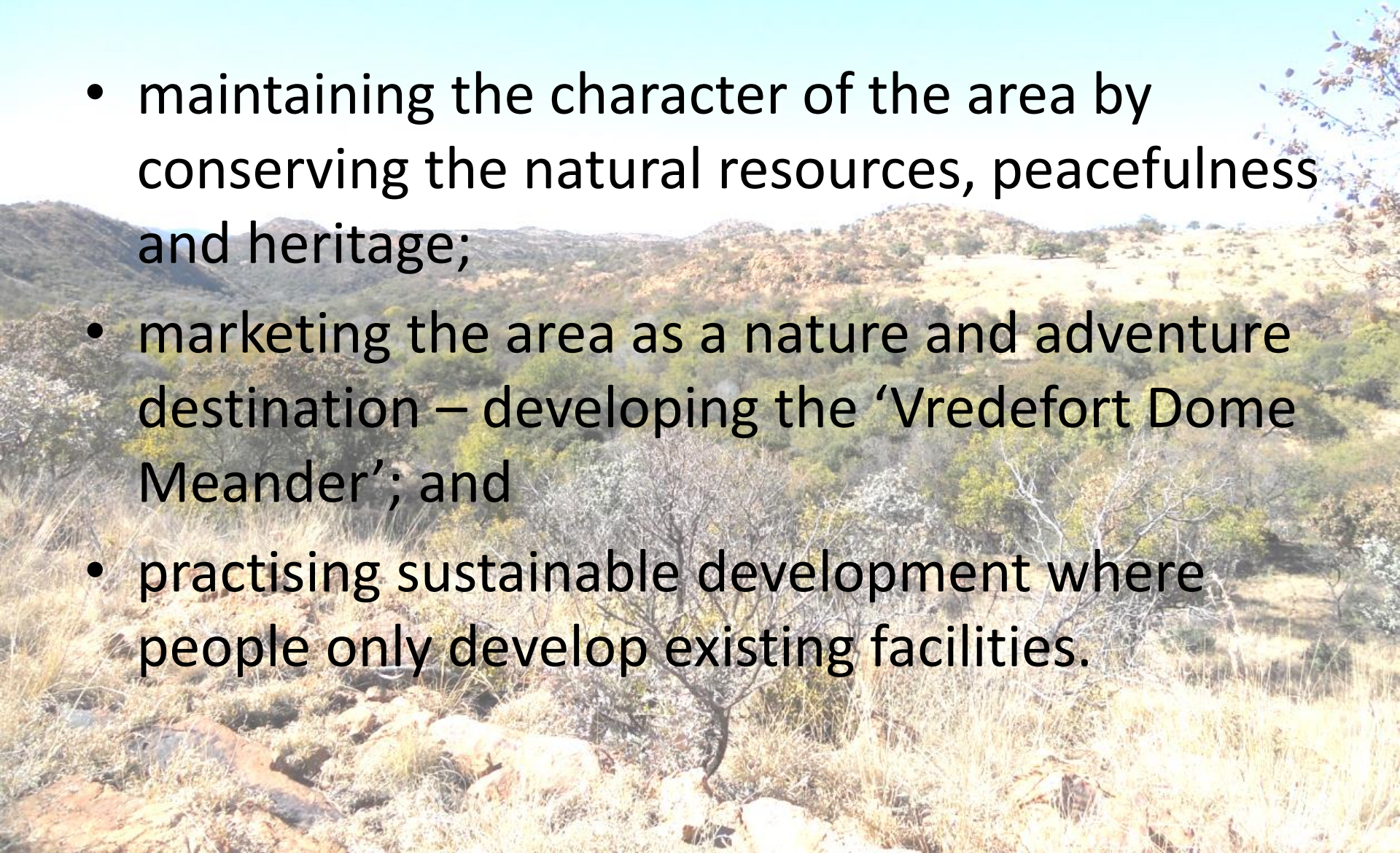
5. Results and Discussion – Objective 2

These solutions are summarised:

- improving existing infrastructure - roads;
- focusing on sustainable tourism (eco- and adventure tourism);
- improving municipal services by employing competent staff;
- having positive economic growth through improved education and more employment opportunities;

5. Results and Discussion – Objective 2

- maintaining the character of the area by conserving the natural resources, peacefulness and heritage;
- marketing the area as a nature and adventure destination – developing the ‘Vredefort Dome Meander’; and
- practising sustainable development where people only develop existing facilities.



6. Conclusion

- It can be concluded that all the participants mainly ascribed an affective meaning to sense of place.
- Emotional attachments to a place represent a unique sense of place involving unusually strong sentiments about places and increasing concerns about their management - strong conservation driven attitude.
- Residents of the Vredefort Dome is most vulnerable to future development – open to, but wary of tourism.
- The participants value the simplistic country atmosphere of the area.
- It is evident that green space and the naturalness of the area is of fundamental importance to the participants.
- The character of the areas must remain!
- Subsequently, all planned development and marketing should be integrated with the area.

7. Recommendations

- As a tourist attraction, it is recommended that the community be **educated**, **various zones of engagement be identified**, the **number of visitors and entry into the area be regulated** and the **type of recreational activities** be monitored.
- Enhanced **cooperation and involvement** are needed from the **government**, the **municipalities** and the **landowners** to ensure that the future of the area is secured and can finally be proclaimed.
- Sense of place is rarely considered when development is contemplated in an area which should be part of every **Heritage Report** and **EIA's (Environmental Impact Assessments)** regarding future development.

8. Acknowledgments

- My Heavenly Father for strength, wisdom and energy;
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Thank you!



9. References

Primary sources

PARTICIPANT P2. 2013. Photograph. VDWHS. (Notes in possession of author).

PARTICIPANT P11. 2013. Photograph. VDWHS. (Notes in possession of author).

PARTICIPANT P20. 2013. Photograph. VDWHS. (Notes in possession of author).

PARTICIPANT P22. 2013. Photograph. VDWHS. (Notes in possession of author).

PARTICIPANT P23. 2013. Photograph. VDWHS. (Notes in possession of author).

PARTICIPANT P25. 2013. Photograph. VDWHS. (Notes in possession of author).

PARTICIPANT P42. 2013. Photograph. Parys. (Notes in possession of author).

9. References

Secondary sources

- BELL, P.A., GREENE, T.C., FISHER, J.D. & BAUM, A. 1996. *Environmental psychology*. 4th ed. USA: Harcourt Brace College Publishers.
- COLES, R.W. & BUSSEY, S.C. 2000. Urban forest landscapes in the UK - progressing the social agenda. *Landscape and Urban Planning*, 52(2):181-188.
- ENGELBRECHT, L. 2012. Vredefort Dome: a step closer to being protected. In: MASHISHI, Y. (Ed.). Bojanala. South Africa: Department Environmental Affairs: 16-17.
- GOUWS, C. 2013. Vestiging langs die Vaalrivier in die omgewing van die Vredefortkoepel, 1840 - 2012. PhD, Vaaldriehoek, Noordwes-Universiteit.
- NANZER, B. 2004. Measuring sense of place: a scale for Michigan. *Administrative Theory and Praxis*, 26(3):362-382.
- PUREN, K. 2010 Sense of place. What does it mean for the Dome? *Impact*, 15-16.
- PUREN, K., DREWES, E. & ROOS, V. 2006. An exploration of sense of place as informative for spatial planning guidelines: a case study of the Vredefort Dome World Heritage Site, South Africa. *International Journal of Human and Social Sciences*, 1(3):190-197.
- ROSSI, S.D., PICKERING, C.M. & BYRNE, J.A. 2016. Not in our park! Local community perceptions of recreational activities in peri-urban national parks. *Australasian Journal of Environmental Management* :1-20.
- UNEP. 2006. *Vredefort Dome – South Africa* [Online]. Available from: <http://www.unep-wcmc.org/sites/wh/pdf/Vredefort%20dome.pdf> [Accessed: 17/03/2011].