


# Supplement

*The following Appendix has been translated from German.*

**Fig. S1: Summary of the task**

<p>Specifications: Processing time: Implementation of the methodology: 50 minutes   Questionnaire: 20 minutes</p> <p>In your group, carry out a process of weighing up and selecting planning alternatives for the subsequent use of the 'METS conversion' area.</p> <p>To do this, weigh up the following proposals against each other: A. Area for trade &amp; services; B. Renaturalisation of the area; C. Residential area</p> <p>Work out different criteria and carry out a weighing-up process.</p> <p>Document how you have proceeded and which evaluation basis and, if used, which method is the basis for your decision.</p> <p>At the end of the working time, please hand in your result and your documentation of the procedure (legibly handwritten or digital).</p> <p>[Changes to the task by using the methods NWA1, SWOT analysis, VaB]</p> <p>Make a note of your group key when you hand in your results. Upload the data to the JLUbox with the password '...' under the following link: ....</p> <p>Afterwards, please fill out a questionnaire in which assessments of the experiment are recorded. Use the QR code or the following link....</p> <p>Materials provided: Inventory for the area</p> <p>Notes: The internet may not be used unless explicitly permitted. Excel may be used to carry out the method. The experiment will not be included in your performance assessment.</p>	
<p><i>Source: Changed aerial image of the city of Mannheim (own processing 2024 according to the city of Mannheim, geoinformation system, 2021)</i></p>	

## Ex-ante questionnaire

### Personal values I: Guiding principles in my life

This part of the survey deals with your values, feelings and opinions. Please try to answer quickly and intuitively.

Firstly, we would like you to ask yourself the following question: "Which values are important to me as a guiding principle in my life, and which are less important to me?"

To summarize, the figures mean the following: The questionnaire contains two lists of values. These values come from different cultures. After each value is mentioned, a short explanation is given in brackets to help you understand the meaning of a value concept. You should assess how important each value is to you as a guiding principle in your life. Please use the following scale for your assessment:

0 means: the value is not important at all, it does not affect you as a guiding principle

3 means: the value is important

6 means: the value is very important

The higher the number, the more important the value is as a guiding principle in your life.

In addition, there are two further numbers available to you for scoring:

-1 means: the value is opposed to the values that guide you.

7 means: the value is of utmost importance to you as a guiding principle in your life.

Note: There are usually no more than two such values for one person, i.e. you may use the digits -1 and 7 once each

As a guiding principle in my life, this value is ...

#### My values:

Opposite	not important		important				very important	extremely important
-1	0	1	2	3	4	5	6	7

Now please proceed as follows:

1. Please go through the list once and first select the value that is of the greatest importance to you in life and rate it as 7. Next, select the value that is opposite to the values that are important to you and rate it as -1. You may assign the two digits once each. If no such value exists, choose the value that is least important to you and rate it 0 or 1, depending on its importance.

2. then assess the remaining values in the list. Try to distinguish as clearly as possible between the values by considering all digits. You will of course have to use numbers more than once.

Tab. S1: List of personal values I - Guiding principles in my life

Values	-1	0	1	2	3	4	5	6	7
1. <b>Equality</b> (equal opportunities for all)									
2. <b>Inner harmony</b> (at peace with myself)									
3. <b>Social power</b> (control over everything, dominance)									
4. <b>Pleasure</b> (fulfilment of desires)									
5. <b>Freedom</b> (freedom of action and thought)									
6. <b>A spiritual life</b> (emphasising spiritual, not material interests)									
7. <b>A sense of belonging</b> (the feeling that others care about me)									
8. <b>Social order</b> (stability of society)									
9. <b>A stimulating life</b> (stimulating experiences)									
10. <b>A meaning in life</b> (a purpose in life)									
11. <b>Politeness</b> (good manners)									
12. <b>Wealth</b> (material possessions, money)									
13. <b>National security</b> (protecting my nation against enemies)									
14. <b>Self-respect</b> (belief in one's own worth)									
15. <b>Compensation for favours</b> (avoidance of debt of gratitude)									
16. <b>Creativity</b> (originality, imagination)									
17. <b>A world at peace</b> (free from war and conflict)									
18. <b>Respect for tradition</b> (preserving old customs)									
19. <b>Mature love</b> (deep spiritual and emotional intimacy)									
20. <b>Self-discipline</b> (self-control, resistance to temptation)									
21. <b>A private life</b> (the right to privacy)									
22. <b>Family security</b> (security for loved ones)									
23. <b>Social recognition</b> (respect, approval by others)									
24. <b>Unity with nature</b> (fitting in with nature)									
25. <b>A varied life</b> (challenges, new things and changes)									
26. <b>Wisdom</b> (a mature understanding of life)									
27. <b>Authority</b> (the right to lead and decide)									
28. <b>True friendship</b> (close, supportive friends)									
29. <b>A world of beauty</b> (beauty of nature and the arts)									
30. <b>Social justice</b> (eliminating injustice, caring for the weak)									

## Personal values II: Forms or ways of acting

Please also rate how important the following values are to you as a guiding principle in your life. These values are formulated as forms or ways of acting that may be more or less important to you. Again, try to distinguish as clearly as possible the importance of the different values for you by considering all the numbers for evaluation.

Now please proceed as follows:

1. Please go through the list once and first select the value that is of the greatest importance to you in life and rate it as 7. Next, select the value that is opposite to the values that are important to you and rate it as -1. You may assign the two digits once each. If no such value exists, choose the value that is least important to you and rate it 0 or 1, depending on its importance.

2. then assess the remaining values in the list. Try to distinguish as clearly as possible between the values by considering all the digits. You will, of course, need to use numbers more than once.

As a guiding principle in my life, this value is...

My values:

Opposite	not important			important			very important	extremely important
-1	0	1	2	3	4	5	6	7

Please select the appropriate answer for each item:

Tab. S2: List of personal values II - Forms or ways of acting

Values	-1	0	1	2	3	4	5	6	7
31. <b>Independent</b> (self-reliant, relying on oneself)									
32. <b>Moderate</b> (avoid extreme feelings and attitudes)									
33. <b>Loyal</b> (reliable towards my friends and groups)									
34. <b>Ambitious</b> (hard working, determined)									
35. <b>Tolerant</b> (of different ideas and beliefs)									
36. <b>Humble</b> (modest, selfless)									
37. <b>Daring</b> (seeking adventure and risk)									
38. <b>Protecting the environment</b> (protect nature)									
39. <b>Influential</b> (exerting influence on people and events)									
40. <b>Deferential towards parents and older people</b> (respectful)									
41. <b>Choosing your own goals</b> (pursuing your own intentions)									
42. <b>Healthy</b> (not physically or mentally ill)									
43. <b>Capable</b> (competent, effective and efficient)									
44. <b>Accepting all sides of life</b> (accepting the circumstances of life)									
45. <b>Honest</b> (genuine, sincere)									
46. <b>Maintaining a good public image</b> (saving face)									
47. <b>Obedience</b> (fulfil duties)									
48. <b>Intelligent</b> (think logically)									
49. <b>Helpful</b> (committed to the welfare of others)									
50. <b>Enjoy life</b> (enjoy food, eroticism and pleasure, etc.)									
51. <b>Pious</b> (accepting religious beliefs)									
52. <b>Responsible</b> (reliable, dependable)									
53. <b>Curious</b> (interested in everything, exploring)									
54. <b>Forgiving</b> (willing to forgive others)									
55. <b>Successful</b> (achieve goals)									
56. <b>Clean</b> (tidy)									
57. <b>Indulge yourself</b> (do something good for yourself)									

## Institutional values I: Guiding principles for spatial planning

This part of the survey deals with values and opinions that you think are important in spatial planning. Please try to answer again quickly and intuitively.

Firstly, we would like you to ask yourself the following question: "Which values are important to me as a guiding principle in spatial planning decisions, and which are less important to me?"

As in Part A, the questionnaire contains two lists of values. These values come from different planning cultures. After naming each value, a brief explanation is given in brackets, which may help you to understand the meaning of a value concept.

You are asked to assess how important each value is to you as a guiding principle for spatial planning. Please use the following scale for your assessment:

0 means: the value is not important at all, it does not affect you as a guiding principle

3 means: the value is important

6 means: the value is very important

The higher the number, the more important the value is as a guiding principle for spatial planning.

In addition, there are two further numbers available to you for the evaluation:

-1 means: the value is opposed to the values that guide you in spatial planning.

7 means: the value is of utmost importance to you as a guiding principle for spatial planning.

Note: There are usually no more than two such values for one person, i.e. you may use the digits -1 and 7 once each.

In summary, the numbers mean the following:

As a guiding principle for spatial planning, this value is ...

### My values:

Opposite	not important			important			very important	extremely important
-1	0	1	2	3	4	5	6	7

Now please proceed as follows:

1. Please go through the list once and first select the value that is of greatest importance to you as a guiding principle for spatial planning and rate it 7. Next, select the value that is the opposite of the values that are important to you and rate it -1.

-1. If no such value exists, choose the value that is least important to you and rate it 0 or 1, depending on its importance.

2. then assess the remaining values in the list. Try to distinguish as clearly as possible between the values by considering all digits. You will of course have to use numbers more than once.

**Tab. S3: List of institutional values I - Guiding principles for spatial planning**

<b>Values</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>1. Equality</b> (equal opportunities for all)									
<b>2. Equivalent living conditions</b> (equal development of the sub-areas)									
<b>3. Social power</b> (control over planning processes and content, dominance)									
<b>4. Unrestricted freedom</b> (freedom of action and thought of the individual to pursue their own interests)									
<b>5. Restricted freedom</b> (equality and freedom are in balance)									
<b>6. Social order</b> (stability of society)									
<b>7. Change</b> (shaping social change for the purpose of continuous development)									
<b>8. Common good</b> (interest of the general public)									
<b>9. Wealth</b> (promotion of economic prosperity at different levels of scale)									
<b>10. Creativity</b> (originality and imagination in terms of ideas and instruments)									
<b>11. Respect for tradition</b> (preservation of old building fabric/culture, planning culture)									
<b>12. National security</b> (social protection from danger or harm)									
<b>13. Social recognition</b> (planning as a socially accepted and valued organisation, approval by others)									
<b>14. Unity with nature</b> (recognising/considering natural limits in order to harmonise with the natural foundations of life)									
<b>15. A world of beauty</b> (aesthetics of the city, cityscape and landscape)									
<b>16. Social justice</b> (caring for the weak, eliminating injustice)									
<b>17. Fair performance</b> (taking care of the top performers, eliminating injustices)									
<b>18. Welfare-economic justice</b> (taking care of the most, eliminating injustices)									
<b>19. Participation</b> (equal opportunities for the planned to participate in planning processes)									
<b>20. Intergenerational justice</b> (taking future generations into account in planning)									
<b>21. Diversity</b> (presence and consideration of diversity/different groups)									
<b>22. Inclusion</b> (creating an environment for the different needs and abilities of all people)									
<b>23. Integrity</b> (integrity, incorruptibility, honesty of planners)									
<b>24. Health</b> (not physically or mentally ill)									
<b>25. Situationality</b> (applicability and appropriateness in relation to the specific situation)									
<b>26. Resilience</b> (adaptability and the ability to evolve)									
<b>27. Sustainability</b> (ensuring the fulfilment of needs for future generations)									

## Institutional values II: Forms or ways of action

Please also rate how important the following values are to you as a guiding principle for spatial planning. These values are formulated as forms or ways of acting that may be more or less important to you. Again, try to distinguish as clearly as possible the importance of the different values for you by considering all the figures for evaluation.

Now please proceed as follows:

1. Please go through the list once and first select the value that is most important to you and rate it as 7. Next, select the value that is the opposite of the values that are important to you and rate it as -1. You may assign the two digits once each. If no such value exists, choose the value that is least important to you and rate it as 0 or 1, depending on its importance.

2. then assess the remaining values in the list. Try to distinguish as clearly as possible between the values by considering all the digits. You will, of course, need to use numbers more than once.

As a guiding principle for spatial planning, this value is...

My values:

Opposite	not important		important		very important		extremely important	
-1	0	1	2	3	4	5	6	7

Please select the appropriate answer for each item:

**Tab. S4: List of institutional values II - Forms or ways of acting**

Values	-1	0	1	2	3	4	5	6	7
28. <b>Independent</b> (self-reliant, relying on oneself)									
29. <b>Moderate</b> (avoid extreme attitudes)									
30. <b>Loyal</b> (reliable to the planning discipline)									
31. <b>Tolerant</b> (towards different ideas and beliefs)									
32. <b>Protecting the environment</b> (protecting nature)									
33. <b>Influential</b> (exerting influence on people and events)									
34. <b>Respectful</b> (towards individuals and groups)									
35. <b>Choosing one's own goals</b> (pursuing one's own goals and intentions, acting autonomously)									
36. <b>Capable</b> (competent, effective and efficient)									
37. <b>Obedience</b> (fulfil duties, follow legal and political requirements)									
38. <b>Forward-looking</b> (farsighted, focussed on the future)									
39. <b>Comprehensible</b> (making processes transparent)									
40. <b>Moral</b> (being aware of important values/ethical guiding principles and acting accordingly)									
41. <b>Intuitive</b> (instinctive behaviour/knowledge)									
42. <b>Collaborative</b> (working together)									
43. <b>Honest</b> (genuine, sincere)									
44. <b>Maintaining a good public image</b> (saving the face of spatial planning)									
45. <b>Public trust</b> (trust in spatial planning)									
46. <b>Helpful</b> (committed to the welfare of others)									
47. <b>Responsible</b> (reliable, dependable)									
48. <b>Curious</b> (interested in everything, exploring)									
49. <b>Successful</b> (achieving goals)									
50. <b>Market-orientated</b> (orientation towards market economy interests)									
51. <b>Courageous</b> (taking risks)									

## Ex-post questionnaire

In the following tables you will find an overview of the personal and institutional values from the

1. questionnaire as a reminder.

*Personal values Value list I & II*

*Institutional values Value list I & II*

Please name up to ten central values (personal as well as institutional) that played a significant role in solving the planning task and why these values played a central role in solving the planning task? Please explain in keywords.

[ Value

Reason]