

## Social Analysis Systems<sup>2</sup> OM

Concepts and Tools for  
Collaborative Research and Social Action

<http://www.sas-pm.com/>

### **Name of this technique: Social Domain**

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### **What is the goal of Social Domain?**

*Social Domain* examines how people view actors and relations between them using words and characteristics that participants themselves choose and define. It also shows how people negotiate their views of actors across social and cultural boundaries. The technique may be used to test people's views against experience, solve problems, and learn in the process.

### **What are the guiding principles of Social Domain?**

- People make constant efforts to understand and influence other people's views, beliefs and expectations in life. They do this through role interaction, communications, and strategic action. People's views and knowledge of reality are thus products of social behavior developed across cultural and social boundaries.
- Your knowledge and understanding of actors involved in a core problem or action is based on how you create and organize relations between actors and their characteristics. You can thus use *Social Domain* to examine:
  - A domain or **topic area** (such as managing natural resources in a certain area)

- **Actors** involved in a domain or topic area (such as people affecting and affected by a project to manage natural resources in a certain area)
  - **Characteristics** that you organize into continua from one pole to its opposite and that you apply to actors (such as describing some actors as being more affected by a project than others)
  - **Relations** consisting of degrees of similarity or difference between actors or characteristics (such as describing actors that are more affected by a certain project as having also less power to intervene)
- *Social Domain* is an application of *Domain Analysis*, a general technique that you can also use to analyze existing problems or actions (see *Problem Domain*), value systems (see *Value Domain*), and options for action (see *Option Domain*).
  - Your views and knowledge of actors and their characteristics may be logical and coherent, with degrees of similarity and differences that are clearly defined. At the same time your views may be flexible and may change according to context. These levels of **coherence** and **flexibility** will vary from one topic or situation to another.
  - You can test your knowledge and views against your experience of reality and develop **new relationships** among actors and their characteristics. *Social Domain* may thus reveal **learning opportunities** such as overcoming convergence, polarization, fragmentation, vagueness, disagreement, misunderstanding, confusion, instability, resistance to change, and failure to predict.

## Here's how to use Social Domain

### *Identifying the actors and their characteristics*

1. Identify a **core problem or action** where you need to use *Social Domain*. Define the problem or action as clearly as possible, and clarify the purpose of your analysis.
2. Identify all the **key actors** (individuals or groups) who may affect or be affected by this problem or action (see *Stakeholder Identification*). Note that you may include yourself

the way you are (**actual self**) or would like to be (**ideal self**) and those who are doing the analysis. You may define the representatives of a group as an actor different from those they represent. Also you may include the community of all actors in your list, as a group with its own profile. Write (or draw) the name of each actor on two separate cards.

The minimum number of actors is usually 6 and the maximum is 12. You can **supply** or **negotiate** some or all of these names or simply **ask** the participants to identify them, depending on the purpose of the exercise and your role as facilitator.

3. Create a table. Begin the table by writing '**Characteristics**' at the top of Column 1. Then, place all the actors' cards in the top row (see Step 6). To do the analysis without using a table, go to Step 10.
4. To focus the discussion, you may choose a **key aspect or question** that you can use to compare the actors and that clearly relates to the action or problem identified in Step 1. For instance, you may focus on:
  - The forms and levels of **interests** that actors have in a project;
  - The **forms and levels of organization** or **power** that actors can apply to a situation;
  - The degrees and the ways in which different actors are **trusted** or viewed as **legitimate**;
  - Differences in **institutional characteristics**;
  - The **actions or positions** that actors take in a project or a conflict;
  - The **information, skills or learning styles** that actors might apply to a situation;
  - The **kinds of conflicts** or **relations of collaboration** that exist between actors. If you select this topic, you should use Step 2 to list all one-to-one relations between actors (such as yourself and Actor A, yourself and Actor B, etc.), as opposed to listing all the actors separately (see Illustrations in *Problem Domain*).

5. Choose **three actors** from the top row at random. Identify two of them (a pair) that are the same in some way, and different from the third. Then, identify what it is these two have in common, something that is *relevant to your topic, the key question you identified in Step 4, and the purpose of your exercise*. Write down the characteristic they share (such as both hold ‘positions of authority’) on a new card and give the characteristic a score of 1. Place the card in the first column, below the second row.

Then, identify what makes the **third actor different from the pair**. Write down this opposite characteristic (such as this actor is ‘just a citizen’) on the same card that you used to write the pair characteristic, and give it a score of 5. If you don’t want middle scores that may have ambiguous meanings, use a rating scale with an even number of points (such as 1 to 4 or 1 to 6). Write down a clear definition of the characteristic and its opposite on the reverse side of the card.

Here are some tips to help you identify a characteristic and its opposite:

- You can **supply** or **negotiate** each characteristic and its opposite or **ask** the participants to identify them.
- The characteristics you identify should be **relevant** to your topic area. They should also be **focused** and **clear**, consisting of **concrete** adjectives, nouns, actions or verbs ending in ‘-ing’ rather than abstract terms, qualities or ideas.
- If the characteristics are vague or sound like clichés, use the *Laddering Down* technique to make them more meaningful and detailed. Ask ‘What do you mean by this?’, ‘Can you give an example of this?’, ‘How can you tell this?’, or ‘In what way is this true?’ (for instance, ‘In what way is this actor more powerful compared with other actors?’).
- When identifying the opposite of a characteristic, don’t use **negative phrases**, such as ‘not local’ to describe the opposite of ‘local.’ Negative phrases tend to be vague and meaningless. Use *Laddering Down* questions (such as ‘What do you mean by this?’) to get a precise expression of an opposite which may vary according to the situation or topic. For instance, the opposite of ‘local’ could be ‘regional’ or ‘national.’
- When using characteristics to describe each actors, do not interpret the descriptions as statements of facts that are either right or wrong. *Social Domain* statements should be **accurate** only in the sense of truly reflecting people’s views and knowledge of social reality.

- If a characteristic and its opposite **do not apply** to several actors, try rewording them or eliminate the characteristic and its opposite.
  - For other means to identify characteristics and their opposites, see Step 7.
6. Use the characteristic and its opposite created in Step 5 to **rate all the actors**, from 1 to 5. Discuss the score for each actor until participants reach an agreement. You can give the same score to two or several actors. Record each score on its own card. To help you interpret the results at the end of this exercise, write the reason given for a score on the reverse side of its card. If the characteristic and its opposite do not apply to an actor, don't write anything on the card. If the scores are nearly the same for all actors, redefine the characteristic and its opposite or eliminate them.

Place each score card in the second row, below the corresponding actor. Here's an example of a table with a list of 6 actors and scores that reflect a distinction between actors in 'positions of authority' and those who are 'just citizens.'

Characteristics	Actor A	Actor B	Actor C	Actor D	Actor E	Actor F
Authority (1)	1	4	2	1	5	5
Just citizen (5)						

This first distinction may be something you want to explain (such as the level of support that each actor expresses for an existing action). If this is the case, reorganize all of your actors' cards (row 1) and score cards (row 2), arranging the cards from the highest score to the lowest. This will help you interpret the table and explain what you want to explain (such as why certain actors support a certain course of action while others do not).

Don't use **averages** when people have disagreements about scores. Instead discuss the issue until you reach an agreement based on consensus or a majority vote.

If you want this exercise to be more precise, identify **indicators** that define the meaning of each number on the scale. If you don't want to use written numbers when rating the actors, use simple **phrases** first and then convert the phrases into measurable objects (from 1 to 5 twigs, stones, noodles or seeds). For instance, scores 1 and 5 will mean that 'the actor has one characteristic or its opposite only'; score 3 will

mean that the actor combines the two characteristics evenly; and scores 2 and 4 will mean that the actor combines the two characteristics unevenly, with one being more important than the other. Another option is to score each actor with the help of 5 cards colored white (value 1), light grey (value 2), medium grey (value 3), dark grey (value 4), or black (value 5).

Another rating technique (see *Tree Mapping*) consists in creating a new set of cards for all the actors and dividing the cards into two **piles** of any size: one pile that best represents the characteristic, and the other pile that best represents its opposite. Repeat the same exercise with each pile by dividing the actors into those that best represent the pile characteristic and those that fall somewhere between the characteristic and its opposite. Do this several times until you have rated all the actors along the continuum from one characteristic to its opposite.

7. Repeat the process described in Step 5 to identify **other characteristics and their opposites**.

You cannot use a characteristic together with its opposite more than once, but you can use a characteristic *or* its opposite separately more than once (such as ‘wealthy’ as opposed to ‘poor’ in one case, and then ‘wealthy’ as opposed to ‘respected’ in the other case).

If the participants cannot identify what it is that two actors have in common or what makes the third actor different from the pair, ask the question in another way, apply the *Laddering Down* technique (see Step 5), choose another three actors at random or choose two cards instead of three.

You can use other participatory techniques to identify characteristics and their opposites, without comparing actors chosen at random. A simple technique consists in asking the **catch-all question**: ‘Can you think of some new, different characteristic and its opposite?’ Another option is the **full context** procedure where you look at all actors and find out two that are the most similar and why, and then the actor that is the most different from these and ask again why. You can also use **description and storytelling** to explore your topic area (such as describing the history of a conflict over natural resources in a region), and then use this information to identify the actors and their characteristics, with the help of the *Laddering Down* technique (see Step 5).

To identify several characteristics and their opposites in a **short time**, divide all participants into groups of two or three. Ask each group to choose three actors’ cards at random and to identify a relevant characteristic and its opposite (using the process described in Step 5). Collect these new characteristics and their opposites, discuss and clarify their meaning, and group together those that are the same.

8. Repeat the process described in Step 6 to **rate all the actors** again using the new characteristics and their opposites. Add a new row for each characteristic and its

opposite and record each score and the reason given for it on the corresponding card. Place each score card in its row, below the corresponding actor.

To do the ratings in a **short time**, divide all participants into smaller groups. Then, ask each group to choose a different characteristic and its opposite and to use these to rate all the actors. Use this technique only if the participants don't need to be involved in all the ratings.

Here's an example of a table that shows the scores for 6 actors using 5 characteristics:

Characteristics	Actor A	Actor B	Actor C	Actor D	Actor E	Actor F
Authority (1) Citizens (5)	1	4	2	1	5	5
Land owners (1) Landless (5)	5	1	4	4	4	3
Old (1) Young (5)	4	2	3	3	2	1
Business (1) Labor (5)	5	5	2	4	4	2
Locals (1) Outsiders (5)	4	1	3	4	1	2

9. If you have many characteristics, you can group them into the appropriate **categories** supplied by the facilitator or created and defined by the participants (such as characteristics that concern the kind of power that actors can apply to a situation, those that concern their interests, etc.; see *Sorting*). You can rank the characteristics and their opposites within each category by order of importance. This will help you interpret the table at the end of the exercise.

*Doing the analysis without using a table*

10. If all the actors are present, you can use the *Social Domain* technique without having to record all scores in one table. Instead of creating a table, use the following method:

- Divide all participants into random groups of three. Ask each group of three to identify two of them (a pair) that are the same in some way, and different from the third. Find a characteristic that is shared by the pair, and then the characteristic that makes the third person different (see tips in Step 5).
- Make a list of the distinctions between characteristics and their opposites that you obtain from all the groups. Discuss and clarify the meaning of each distinction. Group together the distinctions that are the same. Reduce the list to 4 to 6 distinctions that matter the most in relation to the problem or action identified in Step 1. To help you interpret the results of your analysis, rank the characteristics by order of importance.
- Ask each participant to rate itself for each characteristic and its opposite, from 1 to 5 (see tips in Step 6). Ensure that participants have a common understanding of what the scale numbers mean for each characteristic and its opposite. Each actor should record its ratings on a card named after itself. All actors' cards should show the same characteristics, in the same order, and with the same format. Here's an example of an actor's card that corresponds to Actor A in the table presented in Step 8:

**Card for Actor A**

Characteristics Value 1	1	2	3	4	5	Characteristics Value 5	
Authority	X					Citizens	
Land owners						X	Landless
Old					X		Young
Business						X	Labor
Locals					X		Outsiders

- Ask each participant to find others that have cards with many row scores that are identical or similar (only one point apart) to theirs. Give special attention to similarities in the first rows, those that describe the most important characteristics.

- Each group formed around similar cards should then prepare a brief description of the *characteristics* they have *in common*. Following this, all participants should discuss the *main differences* observed between groups. For a more advanced interpretation of your results, see Steps 11 to 17.

When using this method, be aware that participants may miss some important similarities or differences. They may also use implicit characteristics that are relevant to the exercise without being recorded on the cards.

### *Interpreting the results*

11. To interpret your *Social Domain* analysis, start with a **review** of the **process** itself, including the way that participants interacted and reached decisions at each step of the process. You can also review the **substance** of the exercise, including the topic that participants selected, their purpose in doing the exercise, the actors and the characteristics they identified, the kind of information or knowledge they used to rate the actors, etc. Summarize all the main points of your review.
12. To interpret the final table (see Step 8), start with a **snapshot** discussion of column scores that describe the actors. Look for things that are obvious about the **actors**, such as: the way each of them is characterized; whether the scores tend to be in the middle or closer to the poles; if some actors have the same scores as others or come close to the ideal self (see Step 2); etc.

You can then look at row ratings to see if there's anything obvious about the **characteristics**, such as: the fact that some characteristics have scores that vary little and others a lot; some characteristics are more meaningful compared with others that are repetitive or descriptive; the ratings for one row coincide with the ratings for another row or they are nearly the opposite; etc.

Summarize all the main points of your snapshot discussion.

13. To interpret the column scores in greater detail, look for the **actors that are similar** and summarize the characteristics they share. You can **group together** these actors by

moving the columns around and placing them side by side (use masking tape to stick the column cards together). You will know that two or more actors are alike when they have similar row scores for most characteristics, including the most important ones. In the table shown in Step 8, actors A and D are alike. They hold positions of authority and do not own land, operate businesses or live in the area.

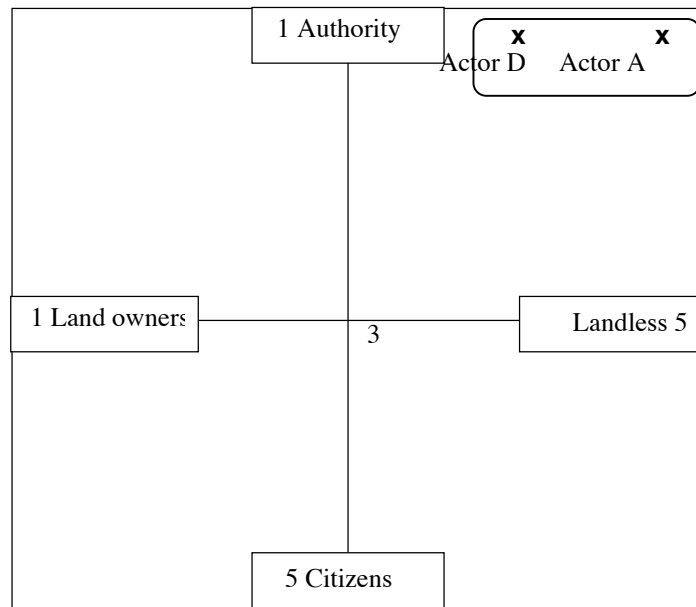
To calculate the level of difference between two columns, calculate the sum of differences (SD) between same-row scores (leave out rows that have empty squares). You then calculate the total maximum difference for all scores (this is MS, the maximum score, minus 1, multiplied by C, the number of row characteristics that got ratings). The level of difference between two actors is SD divided by the total maximum difference for all scores multiplied by 100. To turn this level of difference into a percentage similarity score, subtract it from 100. In other words:

$$100 - \frac{SD}{(MS - 1) \times C} \times 100$$

Define the points where you consider levels of similarities between actors to be high or low.

Using the table in Step 8 as an example, the sum of differences (SD) between the recorded scores for actors A and D is 3 and the total maximum difference is 20 [(5 - 1) x 5]. This results in a difference of 15% (3/20 x 100). Looking at it another way, the two actors are similar at a level of 85% (see Illustrations, Figure 1)

When comparing several actors, you can focus on those row characteristics that are more important or interesting. If you focus on **two characteristics** only, you can create a diagram by drawing a vertical line that crosses a horizontal line. This creates a cross inside a square. If your scale is 1 to 5, write 1 and 5 at opposite ends of both the horizontal line and the vertical line; indicate what these minimum and maximum scores actually mean. Write 3 where the two lines cross. Place each actor in the diagram by locating its score on the horizontal line and then its score on the vertical line. Connect the marks from the two lines, using the letter 'x' to mark the place where they meet. The closer two actors are in the diagram, the more similar they are. Here's an example of this cross-shaped diagram:



14. Now that you've identified actors with similar profiles, you can interpret the row characteristics in greater detail and look for **matching characteristics**. You can **group together** these matching characteristics by moving the rows around and placing them side by side (use masking tape to stick the row cards together). You will know that there is a **match** between two or more characteristics when you realize that 'if participants say score x in one row then they tend to say score y in the other row.' In the table shown in Step 8, people in positions of authority (with low scores in the first row) tend to be outsiders (with high scores in the last row). By contrast, those that are 'just citizens' are locals. Note that matching characteristics may help answer a key aspect of your topic area (such as the level of support that each actor expresses for an existing action; see Step 6).

To help people participate in the analysis, divide the participants into smaller groups, and ask each group to choose a different characteristic and its opposite. Then, each group should find other row characteristics with scores that are very similar or that are nearly the opposite (see explanation below).

To calculate the level of difference between two row characteristics, calculate the sum of differences (SD) between same-column scores (leave out columns that have empty squares). You then calculate the total maximum difference for all scores (this is MS, the maximum score, minus 1, multiplied by E, the number of actors that got ratings). The level of difference between two characteristics is SD divided by the total

maximum difference for all scores multiplied by 100. To turn this level of difference into a percentage similarity score, subtract it from 100. In other words:

$$100 - \frac{SD}{(MS - 1) \times E} \times 100$$

For instance, the table created in Step 8 shows that the second and third row characteristics ('Land owners' versus 'Landless', 'Old' versus 'Young') are similar. The sum of differences between the recorded scores is 8 and the total maximum difference is 24 [(5 - 1) x 6]. The level of difference is therefore 33% (8/24 x 100) and the level of similarity, 67%. See Illustrations, Figure 1.

If the level of similarity is very low, this indicates an inverse relationship between two sets of row scores. This means that 'if participants choose a characteristic at one end of the continuum in one row then they tend to choose the characteristic at the opposite end in the other row.' When this happens you can turn the inverse relationship into a positive one by reversing all the scores in one row (from 2 to 4 or from 5 to 1, in a scale from 1 to 5, for instance). Positive relationships are easier to interpret. For instance, the following table reverses the scores for the last row of the table created in Step 8. Using these reverse scores, the level of similarity between the first and last rows ('Authority' versus 'Citizen', 'Local' versus 'Outsiders') is 79%.

Characteristics	Actor A	Actor B	Actor C	Actor D	Actor E	Actor F
Authority (1) Citizens (5)	1	4	2	1	5	5
Locals (1) now 5 Outsiders (5) now 1	(4) now 2	(1) now 5	(3) now 3	(4) now 2	(1) now 5	(2) now 4

Define the points where you consider levels of similarities between characteristics to be high or low. Where you find high matches between row scores, discuss whether these characteristics and their opposites have the same **meaning** or the same cause, or if some are **examples** or **causes** of others.

When looking for matching characteristics, focus on those characteristics and relationships that are of interest to the participants, and no more. Don't over-interpret these relationships, and let the participants play an active role in the analysis.

15. You can enter your actors, your characteristics, and your ratings in RepGrid (<http://repgrid.com/SAS/>) and use the Focus and PrinGrid commands to perform the calculations described in Steps 13 and 14. The Focus command creates a table where

actors that have the most similar ratings are placed side by side. Characteristics that have the most similar ratings also appear side by side, with negative matches converted into positive relationships. A diagram with lines meeting at various points (outside the table) indicates the levels of similarity between actors and between characteristics. This is called **cluster analysis** (see Focus table in Illustrations).

The PrinGrid command creates a graph with calculations based on **principal component analysis** (called PrinCom in Illustrations). The graph shows the location of each actor in relation to other actors (dots). It also shows the location of actors in relation to a number of straight lines representing the characteristics (the longer the line is, the more the characteristic varies in its ratings). Closer distances reflect closer relationships between actors (dots), between characteristics (lines), and between actors and their characteristics. To interpret the graph, focus on the characteristics that are grouped near two imaginary lines, one vertical and the other horizontal; these principal components show percentage figures that indicate the extent to which each component explains all relationships (see Illustrations, Figure 3).

### *Rethinking your analysis*

16. You can modify your actors, your characteristics and opposites, and your scores at any time during the process.

You may want to look for a **new characteristic** and opposite if you need to split two actors that are closely matched. To do this, find the difference between the two actors that are almost the same (such as actors A and D in the table created in Step 8). Use the new characteristic and its opposite to rate all the actors and record your scores in a new row.

You may want to look for a **new actor** if you need to split two characteristics that are closely matched. To do this, find an actor that brings together the characteristics that are rarely matched (for instance, in the table created in Step 8, a local person that holds a position of authority). Insert the new actor in a new column and rate it for each characteristic and its opposite.

*Learning from your analysis*

17. *Social Domain* can help you identify **learning opportunities** that are structural (such as convergence, polarization, fragmentation or vagueness), communicational (such as disagreement, misunderstanding or confusion), temporal (such as instability or resistance to change) or adaptive (such as the failure to predict).

### **Structural learning opportunities**

#### (1) Convergence

You know there is convergence in your table when the row scores you recorded are closely matched. It will be clear that you can regroup most characteristics into two categories that are opposite each other, with the actors falling somewhere along the continuum from one set of opposites to another. For instance, in the table presented in Step 8, the younger the actors are, the more often they are outsiders that have no land and hold positions of authority.

If convergence is a problem, search for other actors that may combine the characteristics in new ways (such as younger actors that own land and don't hold positions of authority).

#### (2) Polarization

You know there is social polarization in your table when you can regroup most actors into two categories that are opposite each other. One group of actors has one set of characteristics, and the other group is opposite in all respects. For instance, in the table shown in Step 8, actors A, C and D are young outsiders that have no land and hold positions of authority. By contrast, actors B, E and F are older, 'just citizens' and locals that own land.

If polarization is a problem, look for ways to reduce social divisions. In the example above, the suggestion might be: 'Can we imagine ways of having locals in positions of authority?'

#### (3) Fragmentation

You know there is social fragmentation in your table when few actors and few characteristics are closely matched. There is no pattern in the system. Each actor is entirely different. For instance, there may be so many actors and they may be so different from each other that no explanation can be found as to why certain actors support an existing action and others do not.

If fragmentation is a problem, search for other actors or characteristics that may reveal some meaningful pattern in the system. For instance, if each actor has a unique combination of characteristics, the suggestion might be: ‘Can we ask men and women to form two groups and for each group to propose a new way to manage the forest park?’

#### (4) Vagueness

You know there is vagueness in your table when the scores for the actors do not vary much. If this is a problem, search for the likely cause. Some likely reasons include: participants have very different views of the actors and will negotiate them through average scores; they see mostly the relationships between the actors, not the differences; they have limited knowledge of the topic area; or the actors they chose are too broadly defined.

### **Communicational learning opportunities**

#### (5) Disagreement

You know there is disagreement (between the tables that different people do) when people give very different scores to the actors using the same characteristics. To measure levels of agreement and disagreement between two sets of scores, total the differences between same-square scores and divide this number by the total maximum difference between all squares (this is  $MS$ , the maximum score, minus 1, multiplied by  $E$ , the number of actors that got ratings).

Here’s an example of a disagreement at a 63% level (15/24) between two groups who rate the same actors using the same characteristic and its opposite (the power to intervene, either economic or political):

**Characteristic and its opposite:** Power to intervene, either economic (1) or political (5)

Parties	Actor A	Actor B	Actor C	Actor D	Actor E	Actor F
Group 1	2	1	4	3	5	3
Group 2	5	4	1	3	1	5
<b>Difference</b>	3	3	3	0	4	2

If disagreement is a problem, identify the key area(s) of disagreement (such as how to characterize Actor E in the table shown above) and discuss the scores until they reflect a common assessment of the situation.

There may be cases where you want to *compare many characteristics and tables* representing the views of different individuals or groups. To do this, reorder the row characteristics in each table from top to bottom, with *those at the top matching the ratings of a key characteristic* (such as the level of support for an existing action). These top matching characteristics represent what each individual or group has in mind when thinking about important aspects of the topic. Then, look for top matching characteristics that participants agree or disagree with across your sample. If the tables contain many characteristics, you can group them into categories (see Step 9), reorder the characteristics from top to bottom within each category, and then look for top match agreements and disagreements across your sample within each category.

#### (6) Misunderstanding

You know there is misunderstanding when a party (such as men) fails to predict how the other party (such as women) will rate certain actors. To measure levels of misunderstanding, each party must try to guess how the other party will rate the same actors using the same characteristic(s). Then, total the differences between the original scores and the scores each group predicted for the other. Divide this number by the total maximum difference for all squares (this is the maximum score minus 1, multiplied by the number of actors). As an example, the following table shows a high level of misunderstanding between two parties. Although both think they share similar views about the benefits that several actors derive from a project, their views are different.

**Characteristic and its opposite:** Estimated benefits, low (1) or high (5)

Parties	Actor A	Actor B	Actor C	Actor D	Actor E	Actor F
Party 1	2	1	4	3	5	3
Party 1 viewed by party 2	5	4	1	4	1	5
<b>Difference</b>	3	3	3	1	4	2
Party 2	5	4	1	5	1	5
Party 2 viewed by party 1	2	1	2	3	5	3
<b>Difference</b>	3	3	1	2	4	2

If misunderstanding is a problem, identify the key area(s) and the likely causes of misunderstanding (such as the perceived benefits for Actor E in the table shown above). Compare and discuss your scores until you gain a better understanding of each other's views.

Levels of agreement may be combined with levels of understanding to produce *six possible scenarios*:

	Misunderstanding		Understanding
Agreement	Scenario 1 The parties agree but do not know it	Scenario 2 The parties agree but one does not know it	Scenario 3 The parties agree and both know it
Disagreement	Scenario 4 The parties disagree but do not know it	Scenario 5 The parties disagree but one does not know it	Scenario 6 The parties disagree and both know it

**(7) Confusion**

You know there is confusion (between the tables that different people do) when the parties describe the same situation using a different list of actors or characteristics. If confusion is a problem, search for common actors and/or shared characteristics to create some basis for mutual understanding and agreement.

**Temporal learning opportunities****(8) Instability**

You know there is instability (in the same table over time) when the way that you view a topic and characterize actors changes quickly or frequently over time, without any clear justification. If instability is an issue, identify the factors that may explain this (see other techniques in the *Problems* module). You can look for a list of actors and characteristics that are more meaningful. You can also take more time to discuss the ratings or to gather the information you need to complete the exercise.

**(9) Resistance to change**

You know there is resistance to change (in the same table over time) when you're aware of learning opportunities and prefer to maintain the existing problems of convergence, polarization, fragmentation, vagueness, disagreement, misunderstanding, confusion, instability or failure to predict. If resistance to change is an issue, identify the factors that may explain this (see other techniques in the *Problems* module) or take more time to discuss the topic, the actors, and their characteristics. Note that the list of actors and their characteristics you identify in a certain situation (which reflects *how* people think) is generally more difficult to change compared with the actors' ratings (which reflect *what* people think).

**Adaptive learning opportunities****(10) Failure to predict**

You know there is a failure to predict when real events do not confirm the characteristics and the ratings you applied to the actors in your analysis. To assess the predictive value of

your analysis, select key characteristics and their opposites, and then identify outcome indicators that define the meaning of each number on your rating scale (involving the actors' levels of commitment to a project, for instance). Collect reliable information on these indicators in relation to each actor to see if the characteristics are relevant and the ratings are confirmed.

If the failure to predict is an issue, change your ratings or look for characteristics that have better predictive value.

### **Making this process work for you**

#### *For simpler versions*

- Work with one or two people or with small groups of people who have many common characteristics.
- Use no more than 6 actors and no more than 6 characteristics. Reduce the number of actors by eliminating some or through the *Freelisting* technique. Exclude actors who are least involved or by regrouping actors who clearly share many characteristics
- Use drawings or pictures to represent each actor and each characteristic.
- Describe the actors using a limited set of key characteristics.
- Don't group the characteristics into categories (Step 9).
- Rate the actors with a simple scale (using + or – signs, scores from 1 to 3, or simple phrases).
- To calculate the level of similarity between two sets of scores, divide the number of SAME scores (include scores that are identical or only one point apart) by the TOTAL number of scores (SAME + DIFFERENT).
- Do the qualitative interpretation described in Steps 11 and 12 and leave out all mathematical calculations and comparisons.

- Don't discuss the learning opportunities described in Step 17.

*For more advanced versions*

- Take more time to gather the information you need to complete the exercise.
- During the exercise, discuss and record the views that participants express.
- Work with a greater number of people or groups.
- Use more than 6 actors and more than 6 characteristics.
- Use surveys to find out how people characterize and rate the actors in a topic area.
- Rate the actors using a scale of 1 to 7 or 1 to 9.
- Write a detailed description for each actor and for each characteristic.
- Identify indicators to justify each rating exercise.
- Do advanced calculations and graphics using RepGrid (<http://repgrid.com/SAS/>); see Illustrations, Figures 3. Do a Focus Analysis to measure the level of similarity between actors and between characteristics. Do a Principal Component Analysis to identify the main connections within a *Social Domain* table or a 'Socio Analysis' to measure the similarities between two or more tables.
- Use *Role Dynamics*, *Network Dynamics* or *Social Dynamics* to understand the interaction between actors.

**Links and readings**

Blowers, G.H. and O'Connor, K.P. *Personal Construct Psychology in the Clinical Context*, Ottawa, University of Ottawa Press, 1996, 140pp.

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Kelly, G.A. (1955). *The Psychology of Personal Constructs*. New York, Norton.

Novak, J.D. (1998). *Learning, Creating, and Using Knowledge: Concept Maps as Facilitative Tools in Schools and Corporations*. Mahwah, Lawrence Erlbaum.

Novak, J.D. and Gowin, D.B. (1984). *Learning How To Learn*. New York, Cambridge University Press.

Shaw, M.L.G. and McKnight, C. (1981). *Think Again: Personal Problem-Solving and Decision-Making*. Cobble Hill, BC, CPCS (now only available from <http://repgrid.com> or <http://www.gallowglassbooks.com>) .

Trochim, William M.K. 'An Introduction to Concept Mapping for Planning and Evaluation' (<http://trochim.human.cornell.edu/research/epp1/epp1.htm>), 'Concept mapping' (<http://trochim.human.cornell.edu/kb/conmap.htm>), Cornell University, 2002. For powerpoint presentations, see <http://www.conceptsystems.com/kb/cshelp.htm>

#### Web sites on Personal Construct Psychology:

<http://Tiger.cpsc.ucalgary.ca/WebGrid/WebGrid.html>

based on the Personal Construct Psychology of George Kelly (1955; see <http://repgrid.com/pcp/>)

Psicología de los constructos personales (<http://www.ub.es/personal/pcp.htm>)

The Centre for Personal Construct Psychology, London  
(<http://www.centrepcp.ndirect.co.uk/>)

North American Personal Construct Network  
(<http://www2.newpaltz.edu/~raskinj/NAPCNmain.htm>)

Personal Construct Psychology Research Group (<http://www.psyc.uow.edu.au/pcp/>)

European Personal Construct Association (<http://www.pcp-net.de/epca>)

PCP list at jiscmail.ac.uk (<http://www.jiscmail.ac.uk/archives/pcp.html>)

Repertory Grid User Group (<http://groups.yahoo.com/group/RepGrid>)

The Constructivism and Discourse Processes Research Group  
(<http://fpce.blanquerna.edu/constructivisme/>)

Italian Association of Constructivist Psychology and Psychotherapy (<http://www.aippc.it>)

PCP Education and Training Ltd (<http://www.pcpet.org.uk>)

Enquire Within (<http://www.EnquireWithin.co.nz/related.htm>)

## Summary of procedures

- (1) Identify a core problem or action that requires a social analysis and clarify the purpose of your *Social Domain* analysis.
- (2) Identify all the key actors (individuals or groups) who may affect or be affected by this problem or action (see *Stakeholder Identification*). You can supply or negotiate some or all of these names or ask the participants to name the actors, depending on the purpose of the exercise and your role as facilitator. You may define the representatives of a group as an actor different from those they represent. Also you may include yourself the way you are (actual self) or would like to be (ideal self) and those who are facilitating the analysis.

Write (or draw) the name of each actor on a different card. Create a table and write ‘Characteristics’ at the top of Column 1. Place all the actors’ cards in the top row.

- (3) To focus the discussion, you may choose a key aspect or question that you can use to compare the actors and that clearly relates to the action or problem identified in Step 1 (such as the forms and levels of organization or power that actors can apply to a situation).
- (4) Choose three actors from the top row at random, identify two that are the same in some way, and different from the third. Identify what characteristic these two actors have in common, and give this characteristic a score of 1. Then, identify what makes the third actor different from the pair, and give this opposite characteristic a score of 5. Use *Laddering Down* questions (such as ‘Can you give an example?’) to ensure that the characteristic and its opposite are clear and precise. Write down the characteristic and its opposite on a card, and then a clear definition of each on the reverse side of the card.
- (5) Use this characteristic and its opposite to create a new row and to rate all the actors on a scale of 1 to 5. Record each score on its card and write the reason given for each score on the reverse side. Place each score card below the corresponding actor. Instead of numbers you can use simple phrases or objects to represent each rating. You can also

form piles and subpiles that fall somewhere along the continuum from one characteristic to its opposite.

- (6) Repeat the process described in Steps 4 and 5 to identify other characteristics, their opposites, and the ratings of each actor.

To save time, you can ask several groups to identify characteristics and their opposites using three actors chosen by each group at random. Each group can also choose a different characteristic and its opposite and use these to rate all the actors. You can use other techniques to identify the characteristics and their opposites, such as: simply asking participants to think of new characteristics, without comparing actors chosen at random; using descriptive stories and observations about the actors; finding two actors that are the most similar and why, and then the actor that is the most different from these and why. You can rank the characteristics and their opposites by order of importance. This will help you interpret the results of your analysis. You can also group all characteristics and their opposites into meaningful categories.

- (7) If all the actors are present and you prefer not to use a table, divide all participants into random groups of three. Ask each group of three to identify two of them (a pair) that are the same in some way, and different from the third. Find a characteristic that is shared by the pair, and then the characteristic that makes the third person different (see tips in Step 5). Clarify and make a list of the distinctions between characteristics and their opposites that you obtain from all the groups. Group together the distinctions that are the same, reduce the list to those that matter the most, and rank the characteristics by order of importance. Ask each participant to rate itself for each characteristic and its opposite, from 1 to 5. Each participant should record its ratings on a card named after itself. All actors' cards should show the same characteristics, in the same order, and with the same format. Then, ask each participant to find others that have cards with many row scores that are identical or similar (only one point apart) to theirs. Each group formed around similar cards should then prepare a brief description of the *characteristics* they have *in common*. Following this, all participants should discuss the *main differences* observed between groups.
- (8) To interpret your *Social Domain* analysis, start with a review of the process itself and also the substance of the exercise, including the topic, the actors, the characteristics, the

opposites, and the ratings. Look also for things that are obvious about the actors and the characteristics. Summarize all the main points of this review and snapshot analysis.

- (9) To interpret the column scores, look for actors that have similar ratings and describe what they have in common. To save time, you can divide the participants into smaller groups and ask each group to find two or more actors that have similar ratings and summarize the characteristics they share.

You can measure the level of similarity between two actors by using the following calculations:  $100 - \left( \frac{SD}{(MS-1) \times C} \right) \times 100$ , where SD is the sum of score differences, MS is the maximum score, and C is the number of row characteristics. When comparing actors you can focus on two important characteristics and their opposites; if you do, you can locate the actors in a diagram consisting of a vertical line crossing a horizontal line, where each line has a characteristic at one end (value 1) and its opposite at the other end (value 5). The closer the actors are in the diagram, the more similar they are.

- (10) Look also for matching characteristics. To save time, you can divide the participants into smaller groups and ask each group to find row ratings that are nearly the same or nearly the opposite, and then summarize the way the corresponding characteristics relate to the actors.

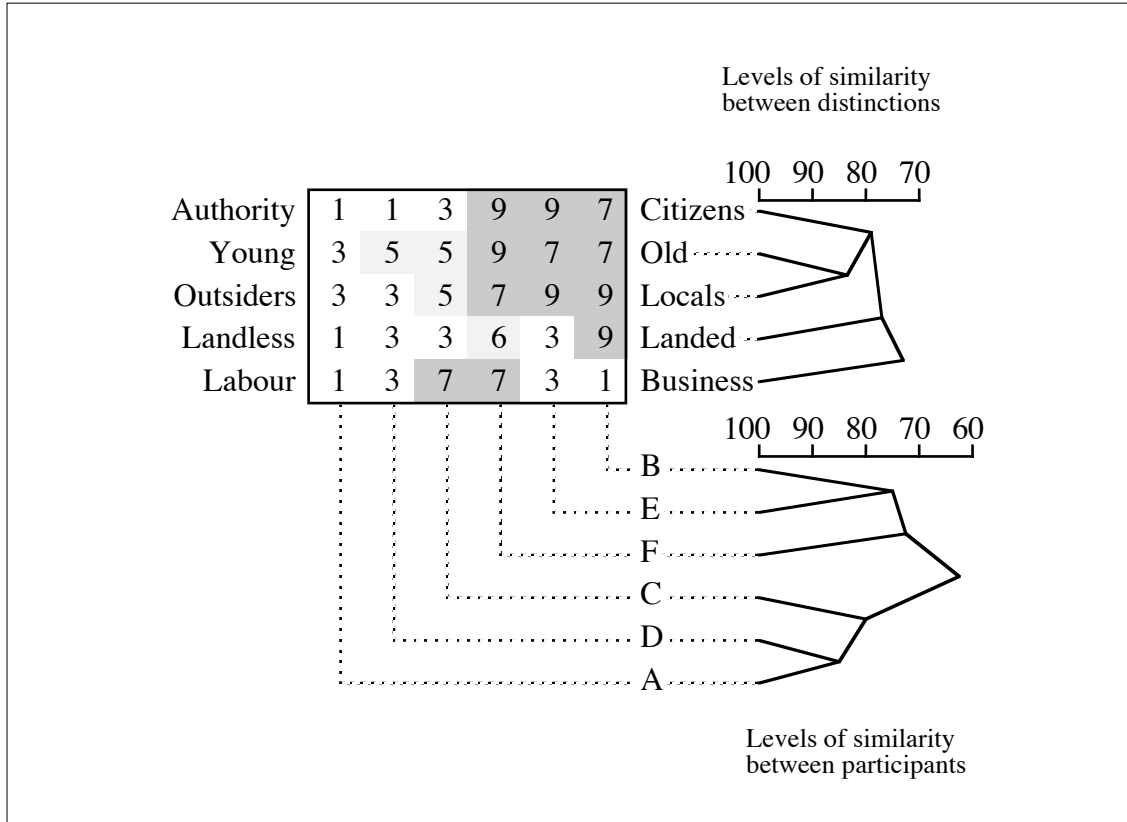
You can measure the level of similarity between characteristics by using the following calculations:  $100 - \left( \frac{SD}{(MS-1) \times E} \right) \times 100$ , where SD is the sum of score differences, MS is the maximum score, and E is the number of actors. If the level of similarity is very low, this indicates an inverse relationship between two sets of row scores. This means that 'if participants choose a characteristic at one end of the continuum in one row then they tend to choose the characteristic at the opposite end in the other row.' When this happens you can turn the inverse relationship into a positive one by reversing all the scores in one of the two rows (from 2 to 4 or from 5 to 1, in a scale from 1 to 5, for instance).

- (11) You can modify your list of actors, your characteristics and opposites, and your scores at any time during the process. You can identify a new characteristic by finding the difference between two actors that are almost the same. You can also look for new actors that bring together characteristics that are rarely matched.
- (12) Use your *Social Domain* analysis to identify learning opportunities that are structural (such as convergence, polarization, fragmentation or vagueness), communicational

(such as disagreement, misunderstanding or confusion), temporal (such as instability or resistance to change) or adaptive (such as the failure to predict).

**Illustrations**

**Figure 1: An Example of a Social Domain Analysis**



**Figure 2: Pachacamac, University for Peace, Programa Colaboración y Conflicto, October 2002**

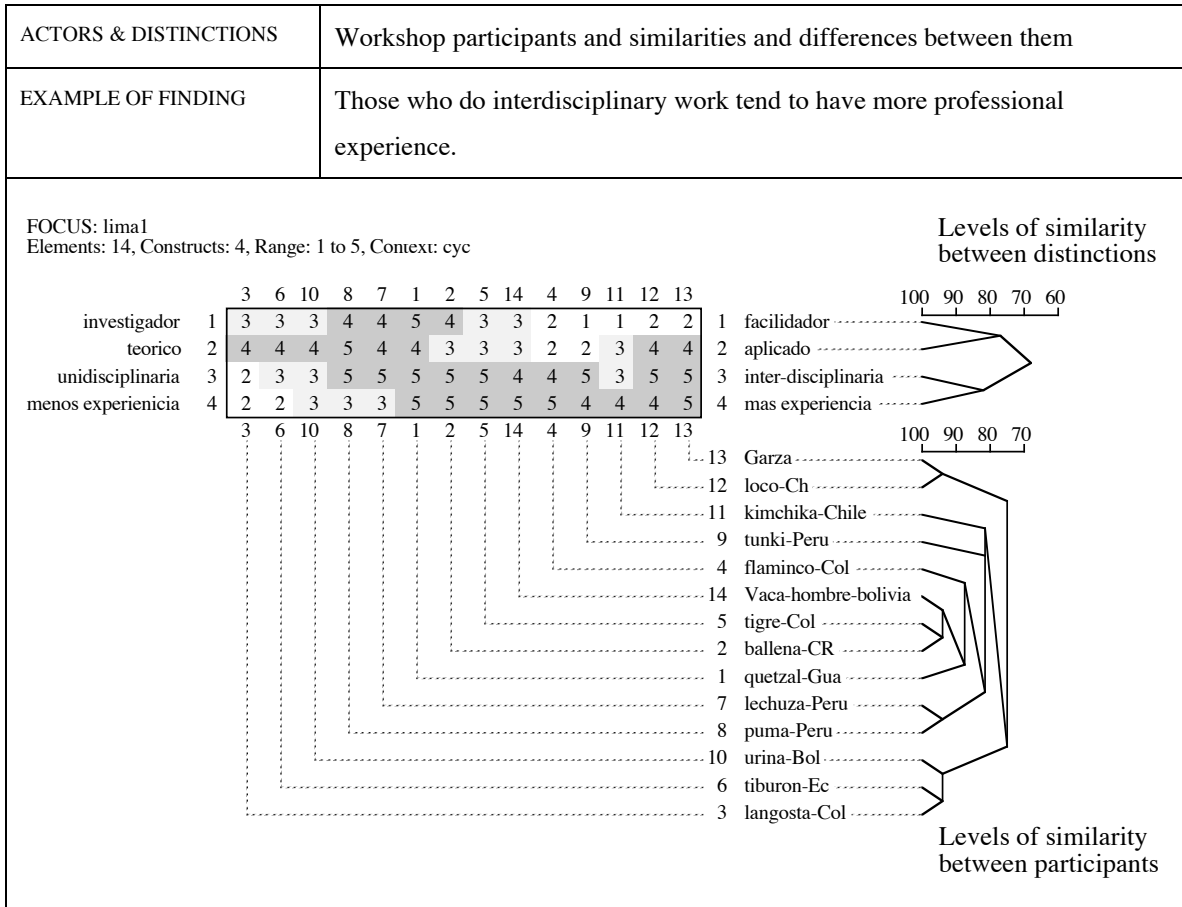


Figure 3: Social Domain, SAS-CCCI workshop, Ottawa, November 9-11

