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Heintz, John L.; Aranda-Mena, Guillermo

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*Volume III*

Building up business operations and their logic

Shaping materials and technologies

Edited by  
Arto Saari  
Pekka Huovinen



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## Building Up Business Operations and Their Logic

## Shaping Materials and Technologies

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# A Technique for Developing Strategic Differentiation for Small Architectural Firms

John L. Heintz.

Faculty of Architecture, Delft University of Technology

j.l.heintz@tudelft.nl

Guillermo Aranda-Mena,

School of Property, Construction & Project Management, RMIT University

guillermo.aranda-mena@rmit.edu.au

## Abstract

Since the crash in 2007, the number of small architectural firms has risen dramatically as both recently graduated and recently laid off architects decide to go out on their own. In such a crowded market firms will need to find some way to distinguish themselves from their many competitors. Arguing from the Resource Based Strategy theory the authors assert that to be successful architectural firms must build and promote competences which are both scarce and in demand in order to compete successfully. This should especially be the case in a ‘buyers’ market’. Architect starting their own firms must provide something more than standard package of architectural services will not be enough to permit new firms to gain clients. A series of case studies was used to compare this theoretical proposition with the experience of recently established architectural firms (+-5 years). The case studies gathered firm histories including the original goals of the principle architect(s), their entrance strategies and marketing approaches, their client list and portfolios of acquired and completed projects. This permitted a comparison to be made between the firm profile the architects originally desired to establish, and the profiles eventually realized. In particular, the perceived selling points which the principle architects believed would provide them with the ability to acquire projects with the services they eventually were able to sell. The case studies supported the assertion that a clear differentiation strategy is one means of successfully launching a firm and gaining a client base.

**Keywords:** Architectural Firm, Strategy, Differentiation, Competences

## **1. Introduction**

This paper described the results of a preliminary study of the use of the Personal Construct Theory (PCT) and the Repertory Grid Technique (RGT) (Kelly, 1955) to elicit values which characterise a small architectural firm and can be used to guide a strategy of differentiation. The tool has two uses: as a research tool the Repertory Grid is intended as a standardised means of eliciting differentiating values from small firms and establishing a field of values within which small firms typically position themselves. Establishing this field of values would be helpful to principals of small firms in determining their own position, and to researchers in achieving a better understanding of the strategic context in which small architectural firms operate. The second use for the tool is as a consulting or diagnostic tool for individual small firms. The tool is intended not only to elicit characteristic values, but also to contrast the firm with its nearest competitors in terms of these values and thus enable a clearer differentiation of the firm.

## **2. Small fish in a big market**

### **2.1 The problem facing the many small firms in a very competitive market**

The architectural field is characterized by a very large number of very small firms chasing relatively few commissions. Ironically, the crash in 2007 has led to a significant increase in the number of these very small firms. Massive layoffs amounting to as much as 40% of the architectural workforce in countries such as the UK, and the Netherlands, although the impact of the global financial crises (GFC) was to a lesser impact in Australia the number of staff turnover increased considerably moving across practices or contractual amendments – ie. work-week of four days instead of five. In the Netherlands, for example, between layoffs and a pattern of continued newly minted architectural graduates has meant that for many architects the only way to practice has been to freelance or attempt to set up their own firm. This has resulted in a 9% increase in the number of boutique firms and a 47% increase in the number of freelancers between 2007 and 2014 (Consultancy.nl, 2014). All of these new firms fiercely compete with existing and well-established architectural firms for what until very recently has been in most countries a declining amount of architectural work on offer. To be successful in such a hostile market environment one might expect that a firm would need a carefully considered strategy – one in which the firm is carefully positioned in the market between potential clients and their competitors.

#### **2.1.1 The Coxe strategy**

What might be considered the standard approach to strategy for architectural firms was developed by the Coxe Group in the 1980s and focuses on conformance to six viable architectural firm types (Coxe, 1987). However, we would like to argue that this approach is no longer adequate to the needs of architectural firms (Heintz, 2012). While the Coxe Groups' fundamental point of knowing who and what a firm is, helps firms to structure themselves well and remains valid, the current situation calls for more. Specifically, the current situation calls for a method for architectural firms to differentiate themselves from their nearest competitor firms, normally firms of the same Coxe type.

The architectural market, especially at the small end, is an unusual market in the sense that there are comparatively many sellers and comparatively few buyers. Clients enjoy a relatively strong position in

the architectural market; there are always many architectural firms ready to compete for any commission offered. In terms of the types developed by the Coxe Group, the majority of an architectural firm's competition will be firms of the same type. The vast majority of small firms still offer a "wide range" of design services, claiming competence in all types of building and for all types of clients. These will most commonly be type C Strong Service business-centred-practices (Coxe, 1987). Hence, while the Coxe type strategy may be very helpful in ensuring that a firm is well structured, it is of little use in differentiating a firm from its nearest competitors. For that a firm needs to discover how it can stand out from those most similar to it.

Heintz & Aranda-Mena (2012) concluded in a previous paper (Montreal paper) that more appropriate methods should be used to investigate the topic of business strategies for architectural firms, especially those start-ups or in transition from small to medium or medium to large. Many of the practices would begin with a design agenda or design-oriented, growth and transition would require a business mind-set. Moments of crises emerge when the core value systems might seem compromised by the principals. In other words, to trade the design or artistic values for commercial values, pride in architecture often emerges when a project is 'not compromised' when moving into the Resource Based View (RBV) or similar model. At the conclusion of their earlier paper the authors identified a lack of real-world and empirical evidence on the models of Business for architectural firms and concluding with their paper suggested a more psychological approach to the research in order to better understand the views and values held by a range of practices suggesting then reading on Personal Construct Psychology and the Repertory Grid Technique (Kelly, 1955).

### **2.1.2 The need for differentiation**

The *Resource Based View* [RBV] of firm strategy may offer us a helpful lens through which to understand strategy in this more competitive environment. The principle conclusion of the RBV was that to be successful a firm had to find a unique resource or competence to which their competitors did not have access (Penrose, 1959; Barney, 2001). This unique potential was then the source of a competitive advantage.

Seen from this point of view, the general problem solving and design competences that form the core of architectural training and of traditional architectural practice are anything but scarce. Signature styles, or at least the ambition to display a signature style, are also relatively common. And to portray a specific 'signature' as a scarce resource seems a bit sycophantic.

## **2.2 What counts as a unique resource?**

If RBV strategy relies on unique resources, what count as a resource for a small architectural firm? And are any of them unique? As architecture does not require a heavy investment in plant or costly materials, the resources in question are the firm's competences to deliver specific services to their clients. However, it is difficult to imagine a truly unique architectural competence, aside, that is from the architect's signature style, which is not relevant to the majority of clients. We therefore argue that strategy for small firms will be a matter of a scarce combination of scarce competences, rather than of truly unique competences. Architectural firms, small or large, must strive to identify one or more scarce competences to which they have access and build their firms around them.

Competition in architecture takes place on a project-by-project basis – in the selection processes of clients. While clients for large projects will often have relatively robust, transparent selection processes based on pre-established criteria, clients for smaller projects, and therefore smaller firms will have more improvised selection processes. For these clients the two most important selection factors will be price and ‘click’ – the feeling that they can work with this particular architect. Click is a mix of personality, values and interaction style. This will typically be assessed on the basis of a presentation based on the firm’s portfolio and how it proposes to carry out the design of the project. We therefore propose that the relevant competences are:

- Values
- Competencies required to realize values
- Portfolio as evidence of realized values.

The method we propose here will elicit the value system of the principals of firms interviewed. It is at the level of values that a firm can best determine its potential to differentiate itself from its competitors. Once the value system is determined, the firm can then perform an assessment of its competencies and determine which ones to foreground or to invest in developing further. Finally, the firm can determine how to present its portfolio to best exemplify its chosen values.

### **3. Personal Construct Psychology (PCP)**

The overarching theoretical foundation of this paper and approach is that of Personal Construct Psychology (PCP) also known as Personal Construct Theory (PCT) first published by George Kelly in 1955. The theory has a strong psychological foundation but has also been applied in more pragmatic domains. The overall contribution of the paper is to validate RGT as a briefing method for unearthing of tacit knowledge by firm principals. Results overtime are to inform the authors on emerging business strategies applied by architectural firms, clients and designers. For this, the authors are into determining how well RPT - in conjunction with cluster analysis – is able to reveal:

- (1) Architects’ visions on attributes of practice differentiation and business development strategies.

Psychology aims to predict behaviour. Similar to other psychological theories PCP is funded on a set of assumptions about man and his relation to the world (Kelly 1955). In this way, through the PCP lens the authors draw on respondents experience to plan for their future. PCP only help to expose those plans or predictions and thus the researchers would have a possibility to provide guidance - and the respondent to see and compare their own practice over time.

This study embraces a pragmatic approach towards its validity in which at this point it only seeks to *make-sense* from the respondent view point, thus internally valid. That is, if the grids make sense to those involved in the study the model is internally valid. This is supported by the epistemological framework of Personal Construct Psychology (PCP) (Kelly, 1955). Kelly suggests, that the sorting scenarios proposed to the client are representative of those with which he must deal in structuring his life role. No such thing as general representativeness can be achieved in the same way that there is no general validity of a test. The problems of representativeness in constructs and element where measured in relation to each hypotheses or client under test (Kelly 1955).

PCP offers a framework for understanding human behaviour and decision-making. PCP works on the premise that people spend a lifetime testing personal predictions or hypotheses. In other words, every

person is viewed as a scientist who seeks to apply definitions, concepts and constructs (constructs as attributes attached to concepts) to each of his or her actions. By adopting such a view, PCP provides a framework where subjects think and reflect on their decision-making, attitudes, knowledge and as well as actions taken by individuals and collective groups. One of the research techniques to elicit such knowledge and information is the repertory grid technique RGT (Gaines, 1999).

### **3.1 The Repertory Grid Technique [RGT]**

The repertory grid technique falls under the principles of Personal Construct Psychology. The technique has been applied on a wide range of fields spanning from psychology to management. To begin an RGT session on a particular topic the client (or interviewee) and the researcher (in this case software designer) begins with discussions around given scenarios known as '*elements*'. Such elements could also be situations, people, objects or any chosen scenario under investigation and in the case of this paper they may refer to different software applications that planners are asked to consider. As part of such discussions, the technique requires the client to compare elements thus generating a list of *bi-polar* attributes or *constructs*.

RGT requires respondents to compare and contrast a number of elements, objects or scenarios. For instance, the focus of a grid session could be on the assessment of the interface of a number of planning software applications. This will require comparing and contrasting across all ten elements such as software tools - organised in pairs or triads - thus generating *distinctions* also known as *bi-polar constructs*. When the approach is by triads, this comparison takes place by randomly bringing up three scenarios at a time. Then each respondent needs to identify an aspect that is similar to two scenarios and which makes a difference to a third thus generating grids with elements and bi-polar constructs. Grids are generated implying conscious reflections. Grid validation takes place by individual respondents who follow up discussions, thus respondents have the choice to change the grid. A more detailed account of how constructs are elicited will be presented in the next section of this paper.

### **3.2 Applying RGT to differentiation of architectural firms**

In the context of business strategies for design firms, the application of RGT would involve subjects considering subsets of *competing design firms* as *elements* with the purpose of generating a number of constructs and rating them. The first step is to select a number of architectural firms from the environment of the interviewee. Each participant was asked identify 9 architectural firms which exemplified a set of roles and which served in some way as an example to them. Originally, the authors chose a series of roles which were defined in terms of the characteristics of the firms to be named, however during the interviews it emerged that the interviewees were more able to think of relevant firms when triggered to think of firms in terms of their meaning to the interviewee. In all cases the final two firms were the interviewees own practice as it was then, and as the interviewee would ideally see it develop.

*Table 1: Original and Emergent Reference Firm Roles*

	<i>Original</i>	<i>Emergent</i>

1	<i>Traditional architecture practice</i>	1	<i>Former Employer</i>
2	<i>Alternative architecture practice</i>	2	<i>Mentor</i>
3	<i>Avant-gard practice</i>	3	<i>Ideal Model (Firms which the subject would like to imitate)</i>
4	<i>Small start-up</i>	4	<i>Negative Model (Firms which the subject would definitely not like to imitate)</i>
5	<i>Small established</i>	5	<i>Competitor</i>
6	<i>Design driven practice</i>	6	<i>Ally</i>
7	<i>Process driven practice</i>	7	
8	<i>My own practice</i>	8	<i>Subject's own practice</i>
9	<i>My ideal practice</i>	9	<i>Subject's ideal practice</i>

The way the interviews were structured was by organizing triads, consisting of three of the element architectural firms, and asking the respondent to identify a commonality amongst two practices which makes a difference to the third. For instance, if the triad consisted of elements 1, 4, & 6 (traditional, small start-up, design driven firms). The respondents might then group 1 and 6 together and differentiates them to 4 yielding the construct *Experience*, and the contrast *Lack of negotiation skills*. This means that for the respondents a traditional practice and even a design driven practice are better fit to negotiate with clients. This implies that a small start-up is less prepared with such an important business skill.

The process is repeated with as many practice combinations as felt exhaustive to cover the topic and subtopics of the paper. This could be developed over on-off session or over a number of sessions.

## 4. Interviews

The study consists of a series of 5 interviews (4 in the Netherlands, and 1 in Switzerland) of principals of small architectural firms using the PCT/RGT technique. The Interviews were conducted according to the protocol described below. Each interview resulted in a completed Repertory Grid comprising of between 7 and 10 constructs consisting of values and their contrasting ‘opposite’. These in turn provide a characterisation of each firm individually, and of the strategic context collectively which will be presented in a follow up paper to this one.

### 4.1 Firms Interviewed

This section reports on emerging constructs on five interviews as a scoping qualitative study.

#### 4.1.1 Firm PN1 A&R10

In going so far as to include the word ‘renovation’ in the name of the firm the owner-architect signals to potential clients that their problem is not a second choice selection for the firm – not a poor substitute for a new building. By focusing the practice on renovation, the firm has been able to assemble

experience in the problems specific to the renovation and repurposing (transformation) of older buildings. The firm supplies advice during the initiative phase, including assistance in obtaining renovation subsidies for listed buildings. The owner-architect started the firm on a part time bases, and have been working fulltime for 3 years by the time of the interview. The firm had 3 contract workers in addition to the principal.

#### **4.1.2 Firm PN2 (Urbmath)**

The sole owner-architect started Firm N1 immediately upon graduation from architectural school. Indeed the firm's approach is directly taken from the architect's graduation project – a center for Rotterdam Contemporary Youth Culture. What sets Firm N1 apart from other young architectural firms is the architect's personal interest and facility in what he calls Youth Culture. In essence the architect is hip. He is a figure in the Rotterdam hip-hop scene, and is accepted as a credible speaker for youth culture by the municipality and by private clients. The firm was 3 years old at the time of the interview, and had grown to 5 contract workers.

#### **4.1.3 Firm PN3 (ORGA Architect)**

PN3 is specialized in sustainability, specifically “Bio-based Building”, and is active in research into bio-based architectural materials as well as design of sustainable buildings. In addition the firm has a strategic partnership with a small contracting firm, also specialised in bio-based building. The firm has received media attention, and the principal has received an award for entrepreneurship and achievement. The firm was 6 years old, and had 4 fulltime employees in addition to the principal.

#### **4.1.4 Firm PN4 (SJO Architecten)**

The 2 principals of SJO Architecten took over the firm on the retirement of their previous employers. The succession had been carefully structured by the previous employers, who hoped to leave a legacy and an imprint on the firm. The firm had changed its name less than a year before the interview. The firm had been healthy up to the crisis in 2008, and had continued with reduced staff since then.

#### **4.1.5 Firm PS1 (OOS Architektur)**

Firm motto/slogan: **Design is our passion**

PS1 is an architectural firm based in Zurich which was founded in Zurich in 2000 by the four architect-principals. In recent years it has grown into a larger commercial firm with corporate clients operating in Zurich and neighbouring areas. Besides office facilities, other projects also include housing projects and converting old factories into social-housing systems in the townships of Aathal, Flums and Schönau near Zurich. The factory conversions has become one of their trademarks their own office being in an old factory in Zurich's industrial suburb Haltestelle.

“We create space in all scales, and design it comprehensively. Our team is made up of specialists in architecture, interior design, urban planning, spatial development, scenography and branding. They transform the requirements, subjects and values of users and clients into a customized spatial environment. In addition to our wide experience, we continually observe new trends and developments

and ensure that the knowledge gained flows into the projects. A trans-disciplinary approach and holistic methods characterize the development process and the results of our work.”

The practice was 13 years old at time of interview and had approximately 20 employees and two principals, both interviewed.

## 4.2 Interview Results

The method generated both a wide spectrum of constructs, and therefore of values, reflecting the variety of firms interviewed. Yet it was also possible to group the constructs in clear clusters around three themes: Design & Ideology, Process, and Business. The Design cluster was the least surprising. Architects traditionally attempt to distinguish themselves through their portfolio and signature or style. However, we saw some constructs, such as the Flexible-Specific construct that contrasted sharply with the traditional architectural interest in specificity and idiosyncrasy. The Process cluster contained constructs that were both internally focussed and externally focussed.

*Table 2: Clustering of constructs, clusters, subclusters and example constructs*

Cluster	Subcluster	Construct	Contrast
<i>Design &amp; Ideology</i>	<i>Design</i>	<i>Elegant Design</i>	<i>Mediocre Design</i>
		<i>Flexible, Impersonal</i>	<i>Specific, Personal</i>
	<i>Ideology</i>	<i>Official Culture</i>	<i>Subculture</i>
		<i>Design Driven</i>	<i>Social Impact Driven</i>
<i>Process</i>	<i>Process</i>	<i>Joy/Fun</i>	<i>Professional/Corporate</i>
		<i>Openness to share knowledge</i>	<i>Won't share knowledge</i>
<i>Business</i>	<i>Internationalisation</i>	<i>Swiss Market</i>	<i>International market</i>
	<i>Specialisation</i>	<i>(Social) Housing</i>	<i>Divers portfolio</i>
		<i>Sustainability</i>	<i>General Services</i>
	<i>Services</i>	<i>Architect</i>	<i>Architect Developer</i>
	<i>Size</i>	<i>Big projects</i>	<i>Only small projects</i>
	<i>Marketing</i>	<i>Waits for work to come in</i>	<i>Creates work</i>
	<i>Business</i>	<i>Business as usual</i>	<i>Business innovation</i>
		<i>Want to make money</i>	<i>Careless of money</i>

The process cluster is a combination of current and desirable attributes to the practice - inwards to the firm. These align with the practice culture and also technical skills such as ability to share knowledge and problem solving.

The business cluster is outwards to the firm - with constructs such as business growth, national or international expansion, business size, client base and marketing strategies just to mention some.

The overall appraisal is been a positive one in the sense that grid process and results gives instant feedback articulated by the interviewer. In this way, participant and researcher can discuss results and modify them if necessarily. Amongst the graphics for date analyses are: structured repertory grids, cluster analysis, dendograms, principal component analysis and socio maps which are beyond the scope of this paper but previously studied in depth by one of the authors over a PhD investigation (Aranda-Mena, 2003). Grid analytical work will follow up to this paper.

### 4.3 Feedback on the tool

The authors have asked two of the respondents to provide some comments or feedback on actual Repertory Grid Technique. Here below some of the feedback. In general the interviewees responded positively, e.g. “Extremely Interesting” -- PN4.

#### 4.3.1 Feedback from PN4

“Extremely interesting.”

Thinking about help to the specifics of the firm.

“This is very nice because then you start to think of how you want to position yourself.”

Forced choice is what makes you start thinking.

Each different set requires that you make a switch, either positive or negative.

#### 4.3.2 Feedback from OOS

The Repertory Grid Technique was perceived as good and effective method but it was pointed out that in order to drilldown into more understanding of differentiation across the element organisations more information from the competitors would be required other than the more superficial perception. Follow up *zoom-in* sessions would be required.

Perhaps a follow up session purely focused on internal resources including human resources, skills and assets. It will be then easier to also compare with competitors. This was referred as a *360° degree pan-view*.

Other topics such as organizational maturity were discussed. Especially in relation to architecture which tends to be a “highly-controlled” culture where principal architects tend to keep the knowledge to themselves and run their studios on a top-down approach. Swiss example of Peter Zumthor, Mario Botta came to the discussion as highly personalized practices which must likely will die when their funding members are gone.

A world-view that still prevails in architecture culture is that of the architect at the top of the pyramid above investors and above society. In the view of the interviewees ***design*** is a core business attribute which has to be a must but from there a number of skills and competencies have to be developed.

The triad technique works well however, the perception is that the discussion is too superficial as the tendency is to generate and *outside-view* instead of “drilling-into”.

A recommendation (for the follow up interview) is to have/provide more information (or allow time to research) the particular elements (architecture practices) in order to have a more informed/factual discussion.

The two respondents much liked the triad interviewing technique and are looking forward to follow up discussions and engagement with our research paper/topic of much value to them!

## 5. Discussion

Past present and future.

Many of the constructs generated are similar to the questions the Coxe group used in their typological approach. On the one hand this suggests that few new values were disclosed. On the other hand it does make it possible to cycle between discussions of typological consistency and points of differentiation within the type.

However, the results do suggest that where the Coxe typologies suggest that few Strong Idea firms would have an interest in profitability, this may no longer be true. Indeed, the firms interviewed, although generally successful, did not fit easily into the Coxe typologies, particularly the distinction between practice-centred-business and business-centred-practice.

Developing tactics, bottom up.

During the interviews a more interviewee centred approach, e.g. the emergent elements, was found to elicit more productive conversation around the constructs. This sets the goals of research and consulting against each other, as mapping the range of strategic values would require using a consistent set of elements and constructs in order to build up a body of data that could be analysed with the statistical tools from the RGT.

The brevity of interviews, and the dependency on perceptions of the element firms, means that the interviews are limited to an exploration of values. The element firms serve as devices with which to prod the interviewees to reveal their values. The results, therefore, are not a complete analysis of capabilities of the interviewee's and element firms, but rather an analysis of the values by which the interviewee would like to differentiate their firm from the element firms. Further work would be required to determine the degree to which the interviewee's firm possessed the desired capabilities or needed to invest in developing them.

All of the firms interviewed expressed a clear desire to distinguish themselves from what they saw as the way the previous generation did business. Whether it was in terms of authenticity, design innovation and research, corporatism or business innovation. Interestingly, while there was a clear interest expressed by all the firms interviewed in profitability, most also wanted to contrast themselves from what they perceived as the conservative ‘corporate’ firms which are normally associated with profitability.

Customer orientation. [Actually, the strategy of differentiation of firms implies a similar differentiation of clients. The scarce competences will not be of interest to every client; otherwise they would not be scarce.]

## 6. Conclusions

On the validity of the current data collected the authors maintain that the paper is of qualitative nature and no further validation other than that of the respondents is required. In other words, internal and not external validity is expected at this point. However, it is envisioned that over a series of interviews eliciting constructs and elements will sum up of statistical analysis with external validity (Wright, 2006). At this point the authors are expecting to provide generic templates to assist industry with various entry points into PCT based mentorship sessions.

Results at this stage indicate wide range of emerging constructs, which have been categorised into a more specific number of clusters. A hierarchy of clusters are discussed such as (1) Design Oriented, (2) Ideology, (3) Process and (4) Business are amongst the most crucial discussion themes.

To conclude, this paper is argumentative in nature and as the abstract and introduction states, it aims to position the Repertory Grid Technique as a method to assist architectural firms with their growth. The RGT has proven to be a flexible, engaging methods that begins from the view-point of the respondents and not from a more traditional prescriptive approach such as the earlier investigated and tested techniques such as the RBV.

One aspect of RGT which could be better addressed in future sessions include **timing** control as it is easy to branch into a number of internal and external issues to the practice with some of the interviews taking 90 minutes or in the Zurich case over several sessions. It would be interesting to limit the agenda to more specific topics for discussion with the view to revisit the interviewee and expand from particular points. The other side to timing is that of discussing experiences or aspects to the practice in past, present or even future. The timing in this sense provides a way to compare a point of reference within the same practice as it grows, shrinks or experiences transitions points from stability to crisis and bouncing back (or not) to stability. This aspect of timing can be better managed during the interviews in order to encourage “reflections” and provide a retrospective history to particular clients or firms.

The final argument is that of the utilised terminology via the RGT for eliciting the constructs and thus developing the grids. RGT would provide a number of predefined elements, however the authors found that different respondents react differently to the same set of elements and in some cases better words would suit those same elements – ie. same meaning under different words and in other cases even cultural or language adaptation. This is an interesting development as the interviews took place across three different countries and although in English, the connotations of the elements and in some cases the actual literal translation into Dutch or German would provide a different meaning, in such cases, the element name would be refined to suit the client or respondent and not the interviewer. In this case the authors expect to see overtime a number of similar elements or constructs under different names or labels and possibly moving across different languages too.

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