chapter 5

CONCEPTUAL RECONSTRUCTION

Abstract concepts are but as flowers gathered, they are only moments dipped out from the stream of time, snap-shots taken, as by a kineotoscopic camera, at a life that in its original coming is continuous.
William James 1909, p. 235

Die Bedeutung der Sprache für die Entwicklung der Cultur liegt darin, daß in ihr der Mensch eine eigne Welt neben die andere stellte, einen Ort, welchen er für so fest hielt, um von ihm aus die übrige Welt aus den Angeln zu heben und sich zum Herren derselben zu machen. Insofern der Mensch an die Begriffe und Namen der Dinge als an aternae veritates durch lange Zeitstreden hindurch geglaubt hat, hat er sich jenen Stolz anggeeignet, mit dem er sich über das Thier erhob: er meinte wirklich in der Sprache die Erkenntnis der Welt zu haben.
Friedrich Nietzsche 1878, §1.11

5 / 1 / introduction

The second stage in the method of conceptual analysis proposed in section 2.7 is conceptual reconstruction (CR). CR is necessary to re-categorise the conceptual field for which analysis was needed. The goal of CR and, therefore, of this chapter, is to clean up concepts and – if needed – introduce new ones in order to be able to express the same meanings, refer to the same 'things', but without the ambiguity that characterised the concept(s) before analysis. More specifically, this chapter, aims at the construction of a new conceptual framework that (as) rigorously and unambiguously (as possible) categorises the field(s) and that can be used as a lingua franca of the theories of the CED as presented in chapter 7. As explained before (in § 2.7) CR does not necessarily aim at new definitions as this is often impossible or impractical (for example in the case of essentially contested concepts; see § 2.4), but at translation rules that make comparison between the theories using different variants of the concept possible. This goal 'is furthered best by designing primarily a mantle definition in which particular conceptions can be encompassed as special cases' (de Groot
The 'mantle definition' terms proposed in this chapter are "behaviour" and "meta-behaviour". The breadth of meaning of the concept of "culture" especially may make CR, in the specific case of the CED, a rather more requiring task than in many other cases of conceptual analysis. In fact, as many definitions of culture comprehend all or nearly all of social reality, a CR of the CED may entail a re-categorisation of social reality, in other words: CR of the CED is an exercise in social ontology.

5 / 1 / 1 / social and representational ontologies of the CED

As explained (briefly) in subsection 2.6.1, social ontology is the specification and/or description of the ultimate constituents of social reality. Social ontology specifies the basic categories or primitives that form the foundation of our perception of, and (scientific) thought about, the social. It is, however, not just social ontology that is relevant here, but descriptive ontology as well. It is not just the concepts of "culture" and "economy" we are interested in, but the relationships between the corresponding phenomena and their theoretical contexts as well. What is needed here are both an ontology of social categories and an ontology of relationships. The first is social ontology, the second is not aimed at a full classification of some part of reality, but at a 'specification of a conceptualisation' (Gruber 1993, p. 200), at a list of variants of types of relationships and is, therefore, a form of representational ontology (see § 2.6.1).

While the basic 'objects' of such a representational ontology are implied by its label, "an ontology of relationships", these are not that obvious in the case of social ontology. In principle, the same basic entities of existential ontology in general can be the basic 'stuff' of social ontology. Throughout the history of philosophy a number of basic entities or ontological primitives have been proposed. Leucippus and Democritus, for example, introduced the first atomic theory in the 5th century BC. Everything was ultimately composed of unchanging, indivisible and material atoms. In Greek antiquity in general, reality was considered to be composed of some kind of material things or objects. Ontologies of objects became – more or less – the standard. Whether these were material as in materialism or mere perceptions or figments of the mind as in idealism, ontology was usually a science or philosophy of the ultimately constitutive things.

As mentioned, there are some alternatives. Most of these gained (some) prominence in the 20th century only. Whitehead (1926; 1929) and Russell (1924) proposed an ontology based on events. In such an ontology, events are the basic constituents of reality, not objects. Wittgenstein (1922), on the other hand, claimed that reality consists of facts (or true propositions). Similarly, Searle (1995), in what is probably the most famous recent study in social ontology, took social facts as the basic constituents of social reality. The 'bundle theory' (e.g. Russell 1940; Goodman 1951/66), finally, argues that all things are sets of properties – hence, properties are the most fundamental constituents of reality – or, in the
version of van Cleve (1985), that individual 'things' emerge from bundles of properties, but are not identical with these bundles.

There are some important rules and pitfalls in ontology one has to be aware of. Subsection 2.6.1 already dealt briefly with methods of ontology. The most important rules mentioned were Ockham's razor (do not postulate more (kinds of) entities than necessary) and the advice to formalise in order to avoid ambiguity: 'wherever possible, logical constructions are to be substituted for inferred entities' (Russell 1914, p. 115; quoted in 2.6.1). Pitfalls in ontology have to do with the misleading nature of language. As Nietzsche points out in the quote at the beginning of this chapter, concepts are often considered to be aetnae veritates. They are not, however, eternal truths, but mere fashions (see § 2.4.2). Our ordinary, fashionable language to a large extent determines the categories of our thought, and hence, may limit ontological theorising: 'Die grenzen meiner Sprache bedeuten die Grenzen meiner Welt' (Wittgenstein 1922, 5.6; see also § 2.1.1). In ontological research it is necessary to cross the boundaries of our ordinary language and − if necessary − to introduce new categories and concepts. Formalisation may be useful in this process, unless it is used only to enforce another equally limited language (see also § 2.3.3).

Secondly, 'there are many abstract words which do not stand for single universals – e.g. triangularity and rationality. In these respects language misleads us both by its vocabulary and by its syntax. We must be on our guard in both respects if our logic is not to lead to a false metaphysic' (Russell 1924, p. 168; see also § 2.2.3). Especially in the conceptual framework of social science, concepts that do not simply refer to objects, events, or phenomena but to theories or ideas are abundant. Unfortunately, these abstract concepts, including "culture" and "economy", are often regarded ontological primitives (e.g. Castree 2004). Postulating these abstract concepts as basic entities is obviously absurd (e.g. James 1909; see quote at the beginning of this chapter), but often it is not entirely clear whether a specific concept or category refers to an actual (simple) event or object or to a complex theoretical construction (of multiple events and/or objects).

5 / 1 / 2 / this chapter

As the following sections are on the ontologies of the CED, they have to deal carefully with the problems and pitfalls sketched above. As mentioned, two different ontologies are relevant to the CED: social ontology and a representational ontology of relationships. Social ontology, the ontology of basic categories of social reality, of the concepts of and in the CED, is the subject of the following section. The main goal of section 5.2 is the conceptual reconstruction of "culture" and "economy". This, however, does not imply that the section aims at new, final definitions for these concepts, but at a common language in which the existing definitions, especially as they are applied in the CED, can be translated.
Section 5.3 deals with the ontology of relationships (between the poles of the CED); and section 5.4 presents a brief summary of the conceptual framework, the ontologies proposed in this chapter.

5/2/"culture", "economy" and social ontology

To reconstruct the concepts of "culture" and "economy", their definitions have to be rewritten in some common (and rigorous) language. This means that the elements that make up the definitions of these concepts have to be reduced to a (preferably small) set of ontological building blocks. These building blocks, moreover, have to be less ambiguous than the concepts that are built with them (e.g. Quine 1968; see § 2.2.3). In subsection 4.3.6 two sets of 'first-level aspects' of definitions and interpretations of "culture" were distinguished: $A^1_1$ and $A^1_2$. The latter contains "behaviour" and "meta-behaviour"; the first contains seven basic aspects of culture:

1. patterns (ways of doing things: customs, habits, practices, etc.);
2. rules (incl. values, norms, attitudes, roles, structures etc.);
3. institutions (formalised / codified rules, patterns and structures);
4. categories (language, concepts, meaning, etc.);
5. beliefs (knowledge, ideas, theories, convictions, etc.);
6. tools and skills
7. artefacts (objects, texts, the arts etc.).

This section focuses on the building blocks of social ontology, the relationship of these aspects of "culture" and similar aspects of "economy" (see § 4.4) to these building blocks and the reconstruction of the concepts of "culture" and "economy". Social ontology is the starting point of the section.

The most basic question in any ontology is that about its fundamental building blocks or primitives. A number of alternatives were mentioned in subsection 5.1.1. These alternatives can be evaluated in a social ontological context. First, assume that (some kind of) objects are the final constituents of social reality. The question that immediately springs to mind is: What kind of objects? Surely, artefacts do not make up social reality and the only alternative seems to be people. However, social reality is not about people themselves, but about what they do and why they do these things, about their actions and motivations. Hence, social reality is composed of behavioural events.

Alternatively, Searle (1995) claims that the fundamental building blocks in social ontology are facts of the form 'X counts as Y in context C'. (Much earlier, in the preface to the 1901 (second) edition to Les règles de la méthode sociologique (1895), Durkheim also claimed that social reality is constituted out of social facts.) Searle points at the meaning of events and objects in social contexts, at categories, rules and concepts, and takes these to be the
final constituents of social reality. The difference between the event-based ontology and Searle's social ontology – more or less – coincides with the behaviour-meta-behaviour dichotomy of subsection 4.3.3 (and \( A^1 \)). The event-based ontology is an ontology of behaviour while Searle's is an ontology of meta-behaviour.

The 'bundle theory' could be a special case of an event-based ontology. It would define all events as sets of properties. The plausibility of the bundle theory hinges on the question whether an object or events is or has a set of properties. This question links the event-based to Searle's ontology since a property is the application of a (meta-behavioural) category to an event. The question one could and should ask is whether the event is composed or merely categorised by the property. This is the question about the ontological status of meta-behaviour which will be dealt with in subsection 5.2.3.

The basic ontological assumption of this section is that the building blocks of social reality are both actual behavioural events and meta-behavioural categories, rules, etc. Subsection 5.2.1 analyses the 'first-level aspects' of "culture" \( A^1 \) listed above in these terms. Subsection 5.2.2 and 5.2.3 deal with the nature of meta-behaviour and the ontological relationship between behaviour and meta-behaviour respectively. Subsection 5.2.4 presents a reconstruction of a selection of interpretations of "culture" and "economy".

5/2/1 behaviour, meta-behaviour and aspects of "culture"

Individual human behaviour is determined, as graphically represented in figure 5.1, by the interaction of reason, will and habit. It is, however, not individual human behaviour as such that is of interest here, but the cultural influence thereupon. Culture influences behaviour through the formation of will, habit and the input (of information) for rational decision-making (reason). (Note that there may be external constraints unknown to the decision maker at the time of the decision that hamper the execution of a choice for action.)

**Figure 5.1:** A model of (individual) behaviour

- reason
- will
- habit
- mental event / choice for action
- actual behavioural event / action

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159
An individual's will, his preferences and desires, is partly determined by a common human hunger for sex (Freud), power (Nietzsche) and/or money (Marx) (there may be more of these basic drives and there may be differences between men and women, but that is of little relevance here) and partly by culturally different ideals and taboos. Spiro (1954) pointed out that the distinction between innate and social (cultural) drives cannot properly be maintained and is fruitless. In other words, will may be a product of natural or innate drives and culture, but these components of (the creation of) will cannot be distinguished. The formation of individual habits is influenced by individual experience, social rules and reason. Habits may be reasonable at the time of formation, but mostly they are copies of some rule, norm or social standard. Even when they become habits, not all rationality is lost as it may be rational, or more efficient at least, to copy known successful behaviour in similar occasions rather than rationally consider the options each time. Although reason may influence habit and will, the latter are generally far stronger in determining our actions than reason, and through them, culture co-determines our behaviour. Reason more often is used to justify our actions afterwards, than to determine what action should be taken beforehand. (Similarly, individual values and attitudes are often adapted after and to actual behaviour.) Moreover, reason itself is not independent of culture. The idea of rationality and what is considered to be rational behaviour differs among socio-cultural groups (e.g. Zukin & DiMaggio 1990; Peet 1997). This may be a matter of conceptual confusion rather than actual cultural influence on reason, but even if reason is defined as the faculty of logical thought and knowledge (see § 3.2.1), the process of rational deliberation is influenced by culture (e.g. Elster 1989; Rabin 1998). This influence, although indirect, is of fundamental importance.

Rational choices for action are based on a consideration of the advantages and disadvantages of alternative actions. Culture influences this process of choice in (at least) two ways. Firstly, by pre-selecting the options for consideration. There are always options for action that are not considered, not even thought of, simply because we (and the socio-cultural group we are part of) just do not know these options exist. Secondly, the deliberation itself is based on the input of information through (different kinds of) perception. Perception, in turn, is transformed by our concepts, categories and ideas. We perceive the world and categorise and remember our experiences in the terms provided by our language (see also § 2.1.1).

Figure 5.2 (below) graphically summarises the above, but needs some further explication (a less elaborate version of the figure was proposed by, for example, Coleman 1990). Culture as concepts, categories, ideas, patterns, rules and institutions co-determines our choices for action and hence, our behaviour. The sum of all actions, of all behavioural events, is social reality. Social reality, in turn gives shape to (and includes) culture. Patterns are repeated actions in similar situations, the habits and customs of the group. Rules and institutions are formed if patterns are transformed into norms, if they are codified or if they are forbidden. Concepts and categories are the labels we apply to (and by which we classify) our actions, the results thereof and the things that influence them. Ideas and beliefs specify what actions
have been successful in the past or not, what kind of actions are preferable in what kind of situations and what kind of actions are taboo. Rules, patterns, ideas, concepts, and the like cannot be separated (from each other) easily. Rules and institutions are conceptual constructions, whereas ideas and beliefs generally include rules or institutions. Indeed, culture (or meta-behaviour) is a 'complex whole' (e.g. Tylor 1871; see also § 4.2).

**Figure 5.2: a model of social behaviour**

Culture co-determines behaviour (e.g. Cushner & Brislin 1986/96; see also §§ 4.3.3 and 5.3). Hence, culture is meta-behaviour. The prefix "meta-" is mostly used to denote something that transcends what is followed by the prefix. "Meta-physics" is what lies beyond (or before) physics; it is some supposed deeper, more fundamental reality that cannot be investigated by the normal tools of empirical science. Similarly, "meta-behaviour" is what lies beyond actual behaviour. As meta-physics is some kind of 'deeper reality' that determines our world, meta-behaviour co-determines actual behaviour. And like meta-physics, meta-behaviour cannot be seen or investigated directly but only through the world or behaviour it produces.

The concept of "meta-behaviour" was introduced in subsection 4.3.3 as a comprehensive term for all aspects of culture that transcend actual behaviour. Meta-behaviour includes the 'things' that (relatively) directly guide our behaviour such as rules, habits and laws, but it also includes the 'things' that influence our behaviour indirectly by determining our perception of reality: language, concepts, theories and beliefs. Meta-behaviour is the ever-changing set of rules, concepts, etc. that our forefathers developed in an evolutionary process of adaptation to an ever-changing world and that we keep developing and adapting to our needs. Meta-behaviour, therefore, is both contingent and path-dependent.
Whether a definition of culture as meta-behaviour, as suggested above, is sufficient (as a definition) depends on two questions: (1) are there meta-behavioural 'things' that are not cultural; and (2) are there cultural 'things' that are not meta-behavioural? The first question can be answered by looking at figures 5.1 and 5.2. These show that behaviour is determined by reason, will and habit. Reason is explicitly not an aspect of "culture"; reason and culture are nearly contradictory (see § 3.2). Culture is the enemy of reason (e.g. Gellner 1992). The next question then, obviously, is: Is reason (a type of) meta-behaviour? The answer to that question would be positive if meta-behaviour is interpreted as everything that determines behaviour, but that is not what is intended here nor in earlier sections (§ 4.3.3 mainly).

Similarly, individual habits and will may be formed by culture, but that does not make them cultural. The clue is in the adjective "individual": culture is not an individual, but a social phenomenon. The definition of meta-behaviour as 'that which guides behaviour' (§ 4.3.3) must be amended: meta-behaviour is everything social (-ly shared, learned, transferred, formed, etc.) that influences or determines behaviour. This solves the problem as reason, will and (individual) habit are individual phenomena, but (some of) the influences thereupon are not. (Note that learned behaviour is generally socially learned – it is learned by people from people – which implies that learned pathways for behaviour are social (or non-individual) influences on behaviour and, therefore, by the definition presented above, are meta-behaviour.)

The second question on sufficiency of the definition of culture as meta-behaviour was whether there are 'things' cultural that are not meta-behavioural. This question can be answered by considering the most important elements or aspects of (in) definitions of "culture", the list of first-level aspects $\Lambda_1$ presented in subsection 4.3.6 and repeated above. (Obviously, $\Lambda_2$ is not relevant here.) Patterns, rules and institutions have been dealt with above and in subsection 4.3.3. Patterns are the ways people do things: customs, habits, practices etc. Patterns are not just repeated action, but provide pathways for action. At some point patterns may become rules. Rules are normative patterns. Rules are combinations of patterns and associated norms or values (e.g. Kunkel 1965). Roles are (a kind of) conceptually identified patterns or rules and skills are rules in which the value is more practical than normative. Institutions, finally, are codified or formalised rules or patterns. (see also Schlicht 1993; 1998, § 4.3.3 and figure 4.1)

Categories and concepts are the labels we apply to things, events, patterns, and so forth. By means of these labels we classify and experience reality. Categories and concepts co-determine perception and the way it is used in and for thought. Thought is further influenced by beliefs, ideas and convictions (and hence, by knowledge as 'justified true belief'). While patterns, concepts and beliefs are clearly examples of meta-behaviour, tools and artefacts seem to be more problematic. Tools and artefacts are often, but not necessarily (as in the case of texts), material objects. However, what makes them a tool or artefact is not their materiality but their meaning or intended use. What makes an object a tool or an artefact is a rule for its use (although that is not necessarily still in effect). Hence, tools and artefacts are meta-behavioural. (Note that many artefacts are tools as they are or were often...
intended for a specific use with a specific goal. These uses and goals may, however, not be considered rational or useful by (relative) outsiders.)

The above shows that culture can be defined as meta-behaviour, as everything social that influences or determines behaviour, indeed. However, the concept of "meta-behaviour" itself is not entirely ontologically unproblematic as meta-behaviour is both pre and post behaviour: it is both a reflection and a determinant of actual behaviour. This problem will be dealt with in subsection 5.2.3 after a brief excursion on social primitives and formal symbols in the following subsection.

5.2.2 primitives, symbols and meta-behavioural entities

The basic constituents or primitives of social reality are behavioural events and/or meta-behavioural entities (e.g. rules, concepts). Social reality, then, consists of the set of behavioural events \( \mathbb{B} \) and the set of meta-behavioural entities \( \mathbb{M} \). (See box 5.1 for an explanation of the symbols introduced in this chapter.) Figure 5.2 also includes mental events \( d \), which could be aggregated in a set \( \mathcal{D} \). Mental events, however, are psychological rather than social entities and the aggregate \( \mathcal{D} \) is non-existent or meaningless at least. Social reality consists of actions and rules and ideas (etc.), not of individuals' decisions.

\( \mathbb{B} \) can be indexed: \( \mathbb{B}_x \). These indexes represent subsets, conceptual categorisations or classifications of \( \mathbb{B} \) and are, therefore, meta-behavioural. For example, the between economy as behaviour related to production, consumption and distribution \( \mathbb{B}_{PCD} \) and behaviour in general only makes sense because of our conceptual distinction between productive, consumptive and/or distributive behaviour and other kinds of behaviour. As all (possible) subsets of \( \mathbb{B} \) are bound either conceptually or trivially, they are contingent. Moreover, events (members of \( \mathbb{B} \)) themselves are distinguished from the larger process they are part of only because they can be classified. Like subsets of events, events are conceptually and, therefore, meta-behaviourally bound. Hence, actual events are dependent on meta-behavioural entities (see also § 5.2.3).

Similarly (to the distinction of conceptually different indexed subsets of \( \mathbb{B} \)), subsection 5.2.1 showed that different types of meta-behavioural entities \( m \), different subsets of \( \mathbb{M} \), can be distinguished. Figure 5.3 presents a formal taxonomy of these types of \( m \) or subsets of \( \mathbb{M} \). The descriptions of the classes in figure 5.3 introduce new symbols (before the ↔ symbol) and the conditions for the application of these new symbols, their definitions (after the ↔ symbol), such that \( D \leftrightarrow rpr(m,x) \) is shorthand for: \( \forall m[m=D \leftrightarrow \exists x[rpr(m,x)]]) \), which should be read as: 'for all \( m \), is a \( D \) if and only if there is an \( x \) such that \( m \) represents \( x' \) or, shorter, as: ' \( D \) is defined as an \( m \) that represents an \( x' \), in which \( x \) is an unspecified type of entity and can, hence, be replaced by 'something'.

163
The top-level distinction of the taxonomy distinguishes representations or descriptions $D$ ($rprs(m,x)$: 'm represents x') from patterns $p$ ($rlif(m,\varphi,b)$: 'm is a pattern of the form: 'in case of (or if) $\varphi$, then $b$'). The first type of meta-behavioural entities can be subdivided further in concepts $C$, which are representations ($rprs$) of entities (phenomena, objects or events) $\varphi$; and theories, ideas and beliefs $T$, which are representations of relationships $R$ between (two or more) entities $\varphi$.

Patterns are relationships ($rlif$) between an actual entity (event, object or phenomenon) $\varphi$ and a behavioural event $b$ of the general form: 'in case of (or if) $\varphi$, then $b$'. As all entities $\varphi$ are either behavioural events $b$ or non-behavioural physical objects or events, $rlif(m,\varphi,b)$ is a special type of $rlif(m,\varphi,\varphi)$, which is itself a special type of relationship $R$ (formally: $\forall m[(rlif(m,\varphi,b)\rightarrow rlif(m,\varphi,\varphi))\land (rlif(m,\varphi,\varphi)\rightarrow m=R)]$). Hence, a meta-behavioural entity of type $T$ (e.g. theory, idea, belief) may be a representation of another meta-behavioural entity of type $p$ (pattern). (Note that the distinction between behavioural events and physical objects or events is similar, but not completely identical, to the distinction between institutional and brute facts (Anscombe 1957; Searle 1969; 1995) and that the meaning of several terms, including "patterns", is more restricted here than in earlier sections.)

Within the set of patterns $P$, a number of subtypes can be distinguished depending on the applicability of two further predicates: $vald$ and $chwl$. The first distinction is that between rules $u$ and customs $h$. Rules are valued ($vald$) patterns (see § 5.2.1); customs are not. The second distinction is that between institutions $i$ and non-institutionalised rules $n$. The defining characteristic of institutions is that these can be changed by an act of will ($chwl$) (see also § 4.3.3).
box 5.1: behavioural and meta-behavioural entities: formal symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\varphi)</td>
<td>an actual entity (event, object or phenomenon) ((\varphi \in \Phi)); there are two kinds of (\varphi): behavioural events (b), and physical objects and events</td>
</tr>
<tr>
<td>(\Phi)</td>
<td>the set of actual entities</td>
</tr>
<tr>
<td>(b)</td>
<td>an (actual) behavioural event ((b \in \mathcal{B}))</td>
</tr>
<tr>
<td>(\mathcal{B})</td>
<td>the set of (actual) behavioural events (remember that (\mathcal{B} \subset \Phi))</td>
</tr>
<tr>
<td>(\mathcal{B}_x)</td>
<td>a set of (actual) behavioural events bounded by (x) such that (\mathcal{B}_x \subset \mathcal{B})</td>
</tr>
<tr>
<td>(d)</td>
<td>a mental event</td>
</tr>
<tr>
<td>(m)</td>
<td>a meta-behavioural entity ((m \in \mathcal{M}))</td>
</tr>
<tr>
<td>(\mathcal{M})</td>
<td>the set of meta-behavioural entities</td>
</tr>
<tr>
<td>(\mathcal{M}_x)</td>
<td>a set of meta-behavioural entities bounded by (x) such that (\mathcal{M}_x \subset \mathcal{M})</td>
</tr>
<tr>
<td>(D)</td>
<td>a representation or description (type of (m))</td>
</tr>
<tr>
<td>(\mathcal{C})</td>
<td>a concept or category (type of (D))</td>
</tr>
<tr>
<td>(\mathcal{C})</td>
<td>the set of concepts or categories ((\mathcal{C} \subset \mathcal{M}))</td>
</tr>
<tr>
<td>(T)</td>
<td>a theory, idea or belief (type of (D))</td>
</tr>
<tr>
<td>(\mathcal{T})</td>
<td>the set of theories, ideas and beliefs ((\mathcal{T} \subset \mathcal{M}))</td>
</tr>
<tr>
<td>(p)</td>
<td>a (behavioural) pattern (type of (m))</td>
</tr>
<tr>
<td>(\mathcal{P})</td>
<td>the set of (behavioural) patterns ((\mathcal{P} \subset \mathcal{M}))</td>
</tr>
<tr>
<td>(u)</td>
<td>a rule (type of (p))</td>
</tr>
<tr>
<td>(\mathcal{U})</td>
<td>the set of rules ((\mathcal{U} \subset \mathcal{P}))</td>
</tr>
<tr>
<td>(h)</td>
<td>a custom (type of (p))</td>
</tr>
<tr>
<td>(\mathcal{H})</td>
<td>the set of customs ((\mathcal{H} \subset \mathcal{P}))</td>
</tr>
<tr>
<td>(i)</td>
<td>an institution (type of (u))</td>
</tr>
<tr>
<td>(\mathcal{I})</td>
<td>the set of institutions ((\mathcal{I} \subset \mathcal{P}))</td>
</tr>
<tr>
<td>(n)</td>
<td>a non-institutionalised rule (type of (u))</td>
</tr>
<tr>
<td>(\mathcal{N})</td>
<td>the set of non-institutionalised rules ((\mathcal{N} \subset \mathcal{P}))</td>
</tr>
</tbody>
</table>

The taxonomy presented in figure 5.3 seems rather straightforward. Reality, however, is not. Subsection 4.3.3 briefly explained that the boundaries between types of patterns (e.g. customs, rules, institutions) are fuzzy rather than the crisp boundaries suggested by the formulas in figure 5.3. The difference between rules and customs, in practice, is not that the first are valued patterns while the latter are not, but that the first are valued more strongly and more explicitly than the latter. There is a continuous range in which \(\text{valid}(p)\) and \(\text{valid}(p)\) are the extremes. The same is true for the distinction between institutions and non-institutionalised rules. The difference is not absolute but one of degree of institutionalisation, in this case: the degree to which it is possible and/or feasible to change a rule by an act of will. Therefore, in short, \(\mathcal{U}\) and \(\mathcal{H}\), respectively \(\mathcal{I}\) and \(\mathcal{N}\) (see box 5.1), are overlapping subsets of \(\mathcal{M}\) with fuzzy membership. Moreover, the distinction between concepts, theories and patterns too is not as hard as suggested in figure 5.3. As explained in subsection 2.1.2 and 2.4.2, concepts are theories themselves (or theory laden at least).
Moreover, Wittgenstein (1953) argued that a concept (or its meaning) is a rule for its use (see § 2.2.1). Hence, a concept is a rule as well. Rules in turn, if interpreted utilitarianistically (‘it is useful to do b in case of ϕ’), are theories. And finally, theories are ordered sets of concepts.

It might be useful to illustrate the above with an example: the event of John buying a loaf of bread at the bakery. As an individual actual event this is a b, but it can also be deconstructed into a series of bs: John entering the bakery; John ordering a loaf of bread; John receiving a loaf of bread; John paying; etc. These behavioural events in turn can be divided and subdivided ad infinitum. The event, of course, cannot be described without meta-behaviour. Indeed the classification and description of the events themselves is meta-behavioural (conceptual, to be more precise). "Ordering", "buying", "loaf of bread", and so on are all meta-behavioural entities of the type C. Moreover, the classification and (sub-)division of events is, in practice, dependent on the availability of concepts to label and describe the classes.

As it is busy in the bakery, John awaits his turn, conforming to an unwritten rule (n) or custom (h). The banknote John uses to pay for his bread is an artefact; it is an actual (physical) object (ϕ) that is used in conformity to an institution (i). John's decision (d) to pay, rather than steal the bread, may have been formed in a rational process in which John evaluated the advantages and benefits of buying versus stealing. The latter is punishable by the institution (i) of law, which is a risk John chooses not to take. On the other hand, buying it may be just a habit that is formed in John's education as the effect of some kind of rule (u). Of course, John does all of this because he believes that his actions have certain (desirable) effects. He believes that ordering a loaf of bread will result in him receiving it; similarly, he believes that the baker will accept his money in return for the bread. These beliefs are examples of the theories, ideas and beliefs (T) that influence our actions.

Like any classification, the ontological taxonomy presented here is an arbitrary classification of a reality that is continuous. Concepts and categories 'are only moments dipped out from the stream of time' (James 1909, p. 235; more fully quoted above). Although class boundaries are defined as unarbitrarily as possible, they are arbitrary nevertheless. This implies that definition in terms of this framework, although far less ambiguous than the definitions presented in section 4.2, is not completely unambiguous. To make matters even worse: even the distinction between behavioural and meta-behavioural entities is problematic. Meta-behaviour M both (co-)determines and classifies behaviour B. The two sets seem to be inseparably bound together. The phrase that meta-behaviour classifies behaviour, however, suggests that behaviour is more fundamental or primitive than meta-behaviour. The next subsection deals with the ontological status of meta-behaviour.
The ontological status of meta-behaviour concerns the existence of meta-behaviour $M$ independently of behaviour $B$. Do rules, institutions, categories, concepts, and so forth exist independently of the actual (behavioural) events that are categorised by them or are they just that: categories or classifications? In other words: does culture exist independently of (culturally influenced) behaviour? This is the Medieval problem of universals with a slight twist.

One of the most important philosophical problems of the Middle Ages was the question whether universals are 'things' or just words. Universals are concepts referring to kinds rather than individuals (particulars). "Tree", for example, is a universal; "the tree in my backyard" is not. "Man" is a universal; "Socrates" is not. ("The tree in my backyard" and "Socrates" are particulars.) (On universals see e.g. Moreland 2001.) The first answers to the question on the existence on universals were realist. Plato and Aristotle defended different kinds of realism. According to Plato, universals are real and exist completely independently of the things they refer to. Particulars are nothing but inadequate imitations of universals (ideas). Aristotle, on the other hand, argued that universals exist in concrete things. Universals make things what they are. Medieval realists, including Thomas Aquinas and Duns Scotus, mostly (but not exclusively) followed Aristotle. The opposite to realism is nominalism, according to which universals are just words. Universals only exist in the mind as names for actual things. Nominalism flowered in the 12th and 14th centuries in the works of Abelard (although he is sometimes referred to as a conceptualist, which is held to be some kind of middle position between nominalism and realism) and William of Ockham. The problems of universals returned in 20th century analytical philosophy. Wittgenstein (1953), for example, concluded that the application of a single term (universal) does not necessarily mean that all instantiations of that term have a common essence (see § 2.2.2 and §2.2.3) and, therefore, refuted Aristotle's position.

The problem here is a bit wider than that of universals, however. It is not just the relationship between concepts and their instantiations that is questioned, but also the relationships of customs, rules and institutions to the behavioural patterns they pre- and/or de-scribe. The nominalist position would be that meta-behaviour is nothing but a classification of actual behavioural events and $M$ can be reduced to $B$. Realism, on the other hand, denies this reduction and claims that there are elements of meta-behaviour that are present in actual behavioural events. The problem is that both claims seem to be true.

The main argument against realism is Ockham's razor (see §2.6.1). Arguments against nominalism are generally of a less formal nature. A major problem of nominalism in this specific case is that it seems to be incompatible with many theories of the CED (which would either refute nominalism or these theories). How could a rule $m$ co-determine a behavioural event $b$ if $m$ is nothing but a label for $b$? The label should at least exist as a pathway or template in the mind of the actor that chooses to do $b$. 

5 / 2 / 3 / on the ontological status of meta-behaviour
Moreover, the reduction of $M$ to $B$ is not the only reduction possible. Actual events can be reduced to meta-behavioural entities as well, as the distinction of an event from the 'stream of time' (James 1909) is dependent on the existence of an appropriate concept (see also § 2.1.1). We perceive reality in terms of our concepts, and the event of paying for a loaf of bread at the bakery, for example, is an event only because we conceptually (hence, meta-behaviourally) distinguish the event of paying from the continuous process that is our world. In other words, $a \ b$ is $a \ b$ only if there is an $m$ describing it.

Like most (if not all) philosophical problems, the problem of universals may be a conceptual one: it may be more about what it means to 'exist' than about universals. Clearly, if universals or meta-behavioural entities exist, they exist in a way that is fundamentally different from their instantiations. That, however, does not necessarily deny their existence. $B$ and $M$ both exist, but not in the same way, not in the same sphere of social reality, not in the same of Popper's (1972) three worlds. Hence, there are (at least) two spheres of reality: (1) the sphere of actual entities $\Phi$ (remember that $B \subset \Phi$); and (2) the sphere of meta-behavioural entities $M$. The first is the sphere of brute facts, the second that of institutional facts (Searle 1969; 1995). The first contains rocks, bricks and the actual event of bricklaying; the second contains the concepts of "rock" and "brick" and the rules, theories and ideas associated with bricklaying.

5 / 2 / 4 / "culture" and "economy" as ontological categories

The goal of this section, of course, is to rewrite the concepts of "culture" and "economy" in less ambiguous terms. Section 4.2 showed that there are many definitions of both "culture" and "economy" (but of "culture" especially). These definitions can be translated in terms of behaviour and meta-behaviour. Tylor's (1871) definition of culture as 'that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society' (p. 1) can be translated easily. The first half of his definition specifies a number of examples of meta-behaviour, while the second points at the social aspect of culture, which is also implicit in the concept of "meta-behaviour" (see § 5.2.2). Hence, Tylor's "culture" (C10) is meta-behaviour $M$ (although it could be argued that, as Tylor did not explicitly include language, his definition of culture should be translated as $P \cup \exists$).

Although most concepts of culture can be translated as meta-behaviour, there seem to be some exceptions. A number of scholars (mainly from an anthropological background) define culture in terms of behaviour rather than meta-behaviour. In subsection 4.2.1, it was shown, however, that what is intended in these definitions are types or patterns or behaviour rather than (actual) behaviour itself. Hence, these concepts too identify culture with meta-behaviour.
The majority of the definitions specified in section 4.2 interpret culture as a subset of \( \mathbb{M} \). Most of these coincide with the subsets distinguished in subsection 5.2.2. However, some definitions are more specific. The classical definition (C1) of culture as the application of skilled human activity to transform non-human, non-cultural nature (as in agriculture etc.), for example, refers to a very specific subset of meta-behaviour: the skills and behavioural patterns related to the transformation of nature: \( \mathbb{P}_{\text{trans.nat.}} \).

Among the definitions (presented in § 4.2) that can be translated simply in terms of the subsets presented in subsection 5.2.2 nearly every combination of these subsets seems a candidate for a definition of culture. For example, C35 defines "culture" as institutions \( \mathbb{I} \). On the other hand, C43 defines "culture" as everything except institutions: \( \mathbb{M} - \mathbb{I} \). Some further examples illustrate the variety of definitions: "culture" as a way of life as in C4, C47, C53 and C57, for example, is \( \mathbb{P} \); C27 is \( \mathbb{H} \); C15 is \( \mathbb{T} \); C78 is \( (\mathbb{P} - \mathbb{I}) \cup \mathbb{C} \); C41 is \( \mathbb{T} \cup \mathbb{H} \cup \mathbb{N} \); C59 is \( \mathbb{M} \); C61 is \( \mathbb{N} \); C63, C65 and C80 are \( \mathbb{C} \); and C82, finally, is \( \mathbb{C} \cup \mathbb{H} \cup \mathbb{N} \).

(See § 4.2 on the codes used to identify definitions of "culture").

Despite this bewildering variety of interpretations, as mentioned in subsection 4.3.2, there seems to be one characteristic that, more than all others, divides the definitions of culture into two groups. This is the subset of institutions \( \mathbb{I} \). A number of theorists explicitly interpret "institutions" as different from "culture". Their concept of "culture" is \( \mathbb{M} - \mathbb{I} \) or a subset thereof. The competing interpretation sees institutions as part of culture and hence, defines "culture" as \( \mathbb{M} \) (or a subset (including \( \mathbb{I} \) thereof). The first of these interpretations seems to be slightly more common among institutionalists (mainly economists and sociologists), the second slightly more common among anthropologists.

The only concept of "culture" on the list (in section 4.2) that cannot be translated as meta-behaviour or a subset thereof is \textit{cultura animi} (C2 and C20). \textit{Cultura animi} is culture of the individual rather than society. It is the education and 'individual refinement' (Sapir 1924, p. 403; C20) of individual people. It has relatively little to do with culture as a social category and is of very limited relevance to the (history and/or theories of the) CED and will, therefore, be further ignored.

Translation of the concept of "economy" in terms of behaviour and meta-behaviour is slightly more complicated than translating "culture". The most common (modern) definition of "economy" is aggregate productive, consumptive and distributive (PCD) behaviour: \( \mathbb{B}_{\text{PCD}} \). "Economy" as implied in the phrase "economic growth" is more or less synonymous to "wealth". It is the aggregate monetary value of productive, consumptive and distributive behaviour: \( \mathbb{V}(\mathbb{B}_{\text{PCD}}) \). \( \mathbb{V} \) is a function such that \( \mathbb{V}(\mathbb{B}_{\text{PCD}}) = \text{def. } \Sigma \text{ value}(b_{\text{PCD}}) \).

These are, however, hardly the only interpretations of the concept. A translation of the late-19th century concept of "economy" would be \( \mathbb{I}_{\text{PCD}} \) as it was then interpreted as the institutional organisation of production consumption and distribution. Still earlier, in the late 18th century, "economy" was the institutional organisation related to national wealth: \( \mathbb{I}_{\text{nat.wealth}} \). (see also § 3.4.3 and § 4.4) (Note that if "economy" is defined as \( \mathbb{I}_{\text{PCD}} \), it is a subset of "culture" defined as either \( \mathbb{I} \), \( \mathbb{U} \), \( \mathbb{P} \) or \( \mathbb{M} \).) The concepts of "economy" most
No final definitions of "culture" and "economy" are provided in this section. Such final definitions are not the goal of this study (and would, moreover, probably not be very useful). What was aimed at, and what has been done above, is the construction of a common language for the translation of the concepts of the CED that is as rigorous and as unambiguous as possible. Different versions of both "culture" and "economy" and economy are used in different theories. Most theories on the influence of culture on economic growth can be rewritten as theories of the influence of $M_X$ on $B_Y$; that is, as the influence of meta-behaviour of type X on actual behaviour of type Y. The formal structure of the (possible) relationship(s) between $M_X$ and $B_Y$, here written as "influence on", is the subject of the next section.

5 / 3 / the ontology of C-E relationships

The analysis of the CED thus far focused almost exclusively on the polar concepts of "culture" and "economy". As explained in section 2.7, the CED is not just a pair of concepts, it is a complex theoretical (and possibly empirical) relationship as well. Remember that the analysandum was defined as:

$$D_{CED} = \langle\langle"culture","economy","relation\rangle,R_{bin.op.},R_{theory}\rangle$$

in which "culture" and "economy" are related both by binary opposition ($R_{bin.op.}$) and, mediated by $C_{relation}$ in / by theory ($R_{theory}$). The last part, $R_{theory}$, is the subject of chapter 7. In this section $C_{relation}$ will be analysed. Verbs often used for $C_{relation}$ include "determines", "causes" and "influences". Causality, however, is not without its problems (see also § 7.1.1). The idea of causation is one of the most difficult and most debated topics in philosophy (e.g. Humphreys 2000). Ever since Hume (1748) showed that causation is not an empirical category, philosophers of science argued whether there should be a place for the concept in empirical science. It may, however, be very difficult do without it.

Generally, varieties of $C_{relation}$ are causal relationships of differing strength and direction. In its strongest form, A determines B, while in its weakest form there is no more than 'some influence' of A on B. Nearly all theories of the CED are positioned between these extremes. Table 5.1 distinguishes a number of possible strengths of relationships (in rows) based on probability of event B if A or not A. The formula $p(B|A)$ means 'the chance of B happening if A happened'. The alternatives in the table do, however, have no implications on the direction of causality; they only show a probabilistic relationship between A and B.
As the strength of a theoretical relationship is generally not easily measurable or quantifiable, it is not very useful to distinguish too many classes of strength. Moreover, most theories are not very specific on the strength of the supposed relationship. It seems, therefore, enough to distinguish theories of strong and weak causation. The boundary between these classes, however, is highly subjective. Combining these two classes of strength with two directions of causality results in eight possible causal relationships:

**Table 5.2: Possible combinations of strengths and directions**

<table>
<thead>
<tr>
<th>w</th>
<th>w</th>
<th>s</th>
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<tbody>
<tr>
<td>w</td>
<td>w</td>
<td>s</td>
</tr>
</tbody>
</table>

The symbols in table 5.2 can be read as in these examples:

- A ⇒ w B A weakly causes (influences) B;
- A s ≤ B A is strongly caused (co-determined) by B;
- A s w ≤ B A is strongly caused (co-determined) by B while, the other way around, A weakly causes (influences) B;
- A ⇒ B there is a causal relationship between A and B (from A to B) of unknown strength.

The structure of C_{relation} in the CED is, however, not simply one of event A caused event B since the concepts of "culture" and "economy" do not refer to (singular) events. It is not culture and economy themselves that are (directly) causally related, but changes in aspects or values thereof. (Culture is not an event; as the most general definition of "event" is a change in something (e.g. Lombard 1991), cultural change is.) An extra symbol is needed to symbolise this. This extra symbol represents change or difference, but as change (or difference) may have an explicit direction, two versions of the symbol are needed. These are ∆ representing undirected change or difference; and ( representing directed change or difference. Hence ∆A ⇒ ∆B means that a change in A causes a change or difference in B; and ∆A ⇒ ∆B means that more A results in more B. (Note that ∀A,B [∆A ⇒ ∆B → ∆A ⇒ ∆B].) Meta-behaviour and behaviour in general are, by definition (see § 5.2.1), related such that:
as this relationship is implied by the concept of "meta-behaviour". However, there also is a causal relationship in the opposite direction: meta-behaviour not only (co-)determines behaviour, but is also produced by it (see §§ 5.2.1 and 5.2.3). Hence:

\[ T5.1 \quad \Delta M \leftrightarrow \Delta B \]

The formal structure of theories of the CED is generally more complex than this. Weber's claim, for example, that Protestant asceticism influences entrepreneurship (1905; see § 3.5.2 and § 7.3) can be formalised as:

\[ T5.2^* \quad \Delta N_{\text{protestantism}} \Rightarrow \Delta B_{\text{entrepreneurship}} \]

which can be read as: more Protestant values (non-institutionalised rules) weakly causes more entrepreneurship (or entrepreneurial behaviour). Similarly, Marx's thesis that 'Die Gesamtheit dieser Produktionsverhältnisse bildet die ökonomische struktur der Gesellschaft, die reale Basis, worauf sich ein juristischer und politischer Überbau erhebt' (Marx 1859, pp. 8-9; see § 3.4.1) can be formalised as:

\[ T5.3^* \quad \Delta P_{\text{production}} \Rightarrow \Delta T_{\text{legal/political}} \]

which can be read as: changes in the patterns (most importantly: institutions) of production determine changes in legal and political institutions. Note that Marx's and Engels's theories of the CED were broader and more complicated than T5.3* suggests (hence, the asterisk). (In sections 7.2 and 7.3, respectively, the Marxian and Weberian theories of the CED will be analysed more extensively, which will result in more comprehensive formal translations.)

**5/4/ summary**

The building blocks or primitives of social reality are behavioural events and meta-behavioural rules, concepts, and so forth. \( \mathcal{B} \) is the set of (all) behavioural events; \( \mathcal{M} \) is the set of (all) meta-behavioural entities. The concept of "meta-behaviour" itself is defined as everything non-individual that influences or determines behaviour. Within both sets \( \mathcal{B} \) and \( \mathcal{M} \) subsets can be distinguished (see box 5.1 and § 5.2.2). These subsets are bound either trivially or conceptually. As concepts are meta-behavioural entities, a conceptually bound subset is a meta-behaviourally bound subset. "Culture" and "economy" can be defined as
(combinations of) subsets of $\mathbb{M}$ and $\mathbb{B}$. Box 5.2 presents the most important interpretations in these terms:

**Box 5.2: most important interpretations of "culture" and "economy"**

<table>
<thead>
<tr>
<th>Interpretation</th>
<th>Equation</th>
</tr>
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<tbody>
<tr>
<td>&quot;culture&quot;</td>
<td>$\mathbb{M}$</td>
</tr>
<tr>
<td>&quot;culture&quot; $\subset$</td>
<td>$\mathbb{M}$</td>
</tr>
<tr>
<td>&quot;culture&quot;</td>
<td>$\mathbb{M} - \mathbb{J}$</td>
</tr>
<tr>
<td>&quot;economy&quot;</td>
<td>$\mathbb{B}_{\text{PCD}}$</td>
</tr>
<tr>
<td>&quot;economy&quot;</td>
<td>$\mathbb{V}(\mathbb{B}<em>{\text{PCD}}) = \sum \text{value}(b</em>{\text{PCD}})$</td>
</tr>
<tr>
<td>&quot;economy&quot;</td>
<td>$\mathbb{I}_{\text{PCD}}$ :</td>
</tr>
</tbody>
</table>

In the CED, culture and economy (or aspects thereof) are related to each other in weaker or stronger causal relationships symbolised by $\Rightarrow^w$ for a weak causal relationship ("influences") and $\Rightarrow^s$ for a strong causal relationship ("(co-)determines"). Different strengths and directions of these relationships can be combined. A $^s \Rightarrow^w$ B, for example, means that A is strongly caused (co-determined) by B while, the other way around, A weakly causes (influences) B. The relationship, however, is not directly between culture and economy but between changes in aspects thereof. The symbols $\Delta$ and $\triangleleft$ represent undirected change or difference and directed change or difference respectively. Hence. $\Delta A \Rightarrow \Delta B$ means that a change or difference in A will cause a change or difference in B, $\Delta A \Rightarrow \Delta B$ means that more A will result in more B. (Note that $\forall A, B[\Delta A \Rightarrow \Delta B \Rightarrow \Delta A \Rightarrow \Delta B]$.) Combining all types of symbols in an example: $\Delta \mathbb{M} \Rightarrow^s \Delta \mathbb{B}$ is a formal representation of the thesis that differences in meta-behaviour (co-)determine differences in behaviour.

The next chapter deals with the operationalisation and measurement of a number of the interpretations of "culture" and "economy" presented in box 5.2.