
4.3. Dokumentationspflichten im Zeitalter von FinTech

Gelingt es nicht oder nur schwerlich, Vertragspartner und wirtschaftlich Berechtigte zu identifizieren, kann die Dokumentationspflicht, wie sie heute in Art. 7 GwG verlangt wird, nicht im traditionellen Sinne aufgehen werden. Das stellt die FINMA und die wirtschaftlich Berechtigten abzubilden. Das muss die Wahrung der Anonymität im Vordergrund stehen. Gegebenenfalls führt das zukünftig zu einer Gefahr der Geschäftsmodelle in transparente und nicht transparente. Das stellt die FINMA und die wirtschaftlich Berechtigten abzubilden. Das muss die Wahrung der Anonymität im Vordergrund stehen. Gegebenenfalls führt das zukünftig zu einer Gefahr der Geschäftsmodelle in transparente und nicht transparente.

5. Weiterführende Gedanken zum Schluss


Die Frage stehe im Raum, ob diese neuen Geschäftsmodelle auch deshalb entwickelt wurden, um dank Technologie und Dezentralisierung diese Anonymität wieder zu erhalten und sie dann auch für die schweren Kriminalitäten des Darknet oder für Terrorismusfinanzierung zu nutzen. Es wird deshalb für den Staat eine Groswage, wenn er gleichzeitig mit Vehemenz alle Formen von Geldwascherei, Terrorismusfinanzierung und Steuerlauftreten bekämpft und auf der anderen Seite unter dem Titel Innovationsförderung blockchaintezte Geschäftsmodelle fördert. Es bleibt die grosse Herausforderung, dass sich Geschäftsmodelle entwickeln können, die technologisch fortschrittlich sind, aber das geltende Recht respektieren.

DESIGNING A DATABASE TO ASSIST LEGAL THINKING: A NEW APPROACH TO INDEXING USING FACETS

Günter Reiner / Michelle Cumyn / Michèle Hudon / Sabine Mas
German General Tax Act concerns about its ethical implications. Documents, such as cases and scholarly works, with a view to suggesting possible arguments and solutions, as well as identifying untenable ones as such.

The potential for preparing or supporting legal decision-making through the use of computers is obvious. In fact, the automated application of the law has already crossed the threshold into reality, despite legitimate concerns about its ethical implications. For instance, the German General Tax Act (Abgabenordnung) permits revenue authorities to use fully automated procedures to conduct, correct, withdraw, revoke, cancel or amend tax assessments based on the information at their disposal and the data supplied by the taxpayer; this process is actually not a fully automated subsumption because the taxpayer himself characterizes his data by selecting the appropriate headings in the standardized electronic form. In Canada, the federal government assesses immigration files using a predictive algorithm (Luo 2018). These examples illustrate the range of automation initiatives, from a formal, rule-based approach for typical (routine) cases with clearly structured data to one that facilitates the exercise of discretion through pattern recognition.

There already exists extensive, hardly manageable theoretical and practical preliminary work in these areas. Research initiatives reached a peak in the 1970s (e.g., Kilaru 1974) and then subsided somewhat, but in recent years, have picked up again. At first, attempts were made to formalize the application of legal rules, and to reproduce it through computer programming, using a rule-based approach. More recently, a preferred approach has been to replicate or assist the non-deductive weighing of possible outcomes through pattern recognition. Such research, which in some cases has been carried out with considerable effort (e.g., the empirical research by Gerathewohl 1987), has not yet fulfilled its promise, and its current applications are limited in scope.

Computer support is undoubtedly most advanced in the area of legal databases, where the challenge is to identify and procure relevant legal documents that match a query. This is not to be underestimated, but there is still much room for improvement. As we will show, the research interface in a legal database is, or can become, much more than just a technical aid. It is our belief that indexing legal documents using facets would make valuable information available to the user, enhancing the performance of the database; that it would also pave the way for automated indexing; and finally, that it may provide a useful conceptual structure for the development of AI initiatives in the legal domain. After providing some thoughts on the ways in which databases might better support legal thinking, we present our indexing model and prototype and consider avenues for automated indexing.

2. Requirements for a database that supports legal thinking

2.1. The task of legal research

Legal databases in their current form increasingly contribute directly to legal thinking. Legal research's databases and legal thinking are closely intertwined. It is no coincidence if the term research has a dual meaning:

1) Searching for information in a library or database
2) Scientific research, i.e., exploration and reflection

Thinking requires knowledge before it can generate knowledge (Krathwohl 2002, at 212, 214, referring to de Kiewitz's Knowledge dimensions of the revised Bloom's Taxonomy of educational objectives). This also applies to the search for information, which is necessarily preceded by an act of thought. In this respect, searching for information is almost a paradox. If one is looking for information contained in a document, one must have a certain idea of the information one is looking for in order to search for documents that contain it (cf. Khullar 1991, at 362). Searching is a means of thinking, and conversely thinking is a means of searching. If it is possible to recognize the conceptual map of a certain domain and to incorporate it into the structure of the database, search results may be optimized. A faceted classification can help to accomplish this task: it creates a uniform grid for asking questions of an unknown document and the information it contains (e.g., which persons, actions, which things were involved?).

In the legal field, the two meanings of legal research, search for information and exploration/reflection, have a common that they aim to accomplish a legal task (in a broad sense). Such a legal task may simply consist of searching for a specific document or set of documents that match predefined criteria. For example, one wishes to find a case that the Court of Appeal handed down on April 1, 2010 or one is interested in cases awarding compensation for pain and suffering due to a concussion. In these examples, the decisive search criteria are already included in the task description; therefore no legal thinking is involved.

Other searches truly require and generate legal knowledge, because they aim at answering a legal question, i.e., a question whose answer requires the application of the law, by means of information contained in legal documents. Most frequently, the user is looking for the legal characterization of certain facts, in order to ascertain the legal consequences attached to them. In other situations, the search is for possible facts that would generate a desired legal consequence, for example how a disclaimer should be phrased in order to be effective. Faced with a legal issue, the person looking for an answer tries to characterize the issue and/or the (real or anticipated) facts according to the issue in order to determine what elements are missing towards a solution. The more experienced the user, the more their search will be targeted to the relevant legal categories and concepts representing the authoritative rules.

Such legal research requires an initial impulse that presupposes structural and conceptual knowledge, i.e., the building of a mental model of the topical area (Kosold 2002). The information seeker needs to break down facts into search terms (unless the database is capable of interpreting a question using natural language, which until now works only for very simple questions). If legal concepts are used as search terms, the need for structural analysis goes without saying, but even if users confine themselves to searching with terms describing certain facts, they should at least know or have a feeling for what part of reality is likely to be relevant. (Another possibility, the establishment of which is very time-consuming for the database provider, would be an interface offering a linked decision tree based on a number of typical questions.)

Structural knowledge gained by the user can itself be the result of a search. Quite often, the results of one's initial query help to refine it with the use of different search terms. This can be done either directly by looking at the results list, or indirectly by reading a few documents selected from the results list. Failures are informative inductive (multi-directionality in information behaviours, Gonzalo 2006), yet they cost time and effort. The challenge is to guide users as quickly and as directly as possible to the required information and to the relevant documents by helping them select the right combination of search terms. That should be the aim of computer scientists, information scientists and lawyers working to improve the performance of legal databases.

2.2. The assistance provided by legal databases

The legal database should assist the user who needs to apply the law in order to solve a legal question or problem. This assistance is mainly provided indirectly through the documents contained in the database and...
Designing a database to assist legal thinking: a new approach to indexing using facets

3. A new approach to indexing using facets

3.1. Presentation of the approach

Inspired by the theory of faceted classification, we have developed an indexing model that follows a content grid of six predefined categories (or facets in a broad sense) (CUMYN et al. 2018). This structure represents the grammar of legal information contained in documents of the database. Our hypothesis is that this model will facilitate the search for cases with similar facts (as regards the relevant law) and support legal thinking by revealing connections between facts, legal categories and sanctions that co-occur within decisions of the database.

In order to test our approach, we have built a Web application prototype with Python programming language and the Django framework. The application, that serves both as an indexing tool and database, contains 2,500 cases from Quebec (written in French for the most part) in the areas of administrative law, labour law and the law of obligations. Using a controlled and structured vocabulary (thesaurus, c.f. ISO 25964-1:2011 (E), at 262) developed (in French) incrementally under the supervision of an expert librarian, we have manually indexed each case. The thesaurus contains scope notes and basic semantic relations: broader term, narrower term, preferred term, non-preferred term (for synonyms) and related term. At the time of indexing, keywords (drawn from the thesaurus) are assigned to the appropriate facets in the case content description. The indexing tool provides a basic search interface so that indexers can visualize the indexing of prior cases.
Broughton 2001, at 74). Ranganathan's original facets were there expanded to 13 categories representing
a «production process», and being particularly suitable for the analysis and organization of terms in technol-
yogy: Thing/entity, Kind, Part, Property, Material, Process, Operation, Patient, Product, By-product, Agent,
Space and Time (Broughton 2001, at 79; Cumyn et al. 2018, at 884).

The universalism ambition of facted classification suggests that it should be extended to the legal domain, but
so far only a few attempts were made. After participating in the CRG, Broughton sought to implement the Bliss
Classification in the legal documentation (Broughton 2010, at 37–40). Her goal was to design a new list of
subject headings such as one finds in library catalogs, using the CRG's facets. Assuming that «of the context
of any given subject field, usually only a smaller number of the categories are relevant» (Broughton 2010, at 37),
she defined the following eight significant facets in law: Jurisdictions (Space), Substantive law (Thing: Personality),
Legal practice and procedure (Process and Operation; Energy), Attributes and principles of law, Jurisprudence
(Property: Master), and a residual category named Common Subdivision that includes Agents and Time. As
we have indicated in brackets, each one of these facets can be traced to the CRG's and Ranganathan's schemes. We
are not aware that this system has been implemented in practice.

In a similar vein, Sweet & Maxwell, a British legal publisher, has created a «Legal Taxonomy» for structur-
ing its indexes’ thesaurus in accordance with the facets of principle faceted indexation (Scott & Smith 2010, at 217).
The terms to be classified were drawn from an index designed for legal periodicals. The scheme is intended to be
used for all the publisher’s printed and online publications relating to English law, including Westlaw UK. The
new classification has been successfully implemented. The taxonomy, which is updated regularly, is available
online (http://2.sweetandmaxwell.co.uk/online/taxonomy/). It is unusual in that top-level terms designate
an hierarchy of legal subject areas ranging from «accountancy» to «water laws», which it is said should not
too far from some of the «national» divisions of subject matters (Scott & Smith 2010, at 219). Facets are
introduced within each subject area, with a view to making its internal structure more consistent and predictable
for indexers and users alike. Twenty «standard facets» are identified for that purpose: Attributes, Court, Civil
procedure rules, Documents, Entities, Events and actions, Judgments and orders, Liabilities, Mark, Notices
and orders, Payments, Persons, Place, Policies, Powers rights and duties, Principles, Statement, Time,
Tribunals, Vitiating Factors (Scott & Smith 2010, at 219).

The manner in which facet analysis was applied to the legal domain by Broughton and by Sweet & Maxwell
does not fulfill the promise of faceted schemes; nor do they meet our requirements, for several reasons: The
hierarchical classification of subject headings proposed by Broughton is rigid, whereas faceted schemes
are supposed to be flexible (Kvannek 1999, at 39–41). Sweet & Maxwell provide flexibility by allowing
the same terms to be repeated within each subject area, and sometimes under more than one facet, but the
resulting taxonomy is over-developed and redundant, whereas a classification scheme should be economical.
Moreover, Sweet & Maxwell’s use of subject areas as top terms encourages users to limit their search to a given
subject area, whereas facets ought to promote different perspectives or points of entry (Broughton 2010, at 24).
Many legal questions cut across subject areas, and a legal database, especially one that embraces facet
analysis, should engage jurists to think outside the silo of a given practice area or specialization.

In addition, Broughton and Sweet & Maxwell worked with existing lists of subject headings and index terms,
and applied facet analysis to the underlying concepts without addressing their nature or function. Concepts
used by lawyers are often ambiguous in that they relate simultaneously or alternatively to a set of facts or
one concept or legal categories, defined as a set of rules, on the other (Cumyn & Gosselin 2016, at 335–336).
For example, there may have been a theft: this is a description of the facts. Different legal consequences may
follow: one might apply the criminal law relating to theft, or one might turn to labour law, property law, the
civil law of insurance, etc., depending on the legal question one has to answer in relation to the facts. We discovered
that applying facet analysis to the names of legal categories is both difficult and confusing. However, we
also found that applying facet analysis to the facts of each case is not only feasible, it appears to highlight

Designing a database to assist legal thinking: a new approach to indexing using facets

relevant information about the case. A related point is that traditional legal indexes and classifications favour
the use of abstract legal concepts over those that merely describe the facts. Thus we came to develop our
own indexing scheme based on facet analysis of the cases themselves and consequently, we created our own
classified vocabulary, instead of relying on existing thesauri. To clarify the use of concepts, which, like theft,
may represent either the facts of a case or applicable rules of law, we created separate categories (or facets
in a broad sense) for dealing with the factual elements of a case and the legal consequences that follow. This
also reflects the structure of legal thinking outlined above: answering a legal question frequently requires the
characterisation of certain facts, i.e., identifying the legal categories that may apply to such facts; or in reverse,
knowing the facts that would trigger the application of a given legal category.

Finally, facets are commonly used as a browsing tool, and this is arguably their most attractive feature, if one is
designing the search interface of a database. Faceted search interfaces allow the user to filter results by selecting
from the set of indexed terms (labels, cf. Hearst 2006, at 26) associated with each facet. To be effective,
facets must be intuitive and limited in number.

We found Ranganathan’s PVEST formula to be the simplest and the most intuitive. We noted its similarity
with Gaius’ famous tripartite division, well-known to all Western legal systems. Gaius declared that «all our
law is about persons, things or actions» (Institutiones, I, 8, http://www.thelatinlibrary.com/gaius1.html#; see also
Bijs 1997, at 5). For Ranganathan, persons and things belong to the facet Personality, but in law, the
distinction is so fundamental that it is necessary to provide separate facets. After experimenting with various
schemes, we arrived at the following six facets:

- **Person**: a natural or legal person, body or entity that has decision-making authority (e.g. lawyer, farm
  worker, Ministry of Justice, committee).
- **Action**: an act, activity or decision that is governed by law or that has legal consequences (e.g. accident,
  sale, dismissal).
- **Thing**: a tangible or intangible, concrete or abstract entity that is subject to a legal framework or protected
  by law; typically, the object of litigation or the instrument of an action (e.g. car, deed, licence).
- **Context**: an additional element that is essential for the treatment of a legal problem with respect to time
  and place or regarding the character of a thing or action, including a cause or consequence (e.g. delay,
  age, deficiency).

The above are facets in the narrow sense, since they are derived from Ranganathan’s scheme. Like his
fundamental facets, they are intended to grasp humans’ perception of reality. The facets capture the factual
basis of a case in its legally relevant dimensions, since the law regulates the conduct of persons with respect
to things. The systematic and structured indexing of facts and acts that form the basis for legal judgments and
decisions require that «words or actions» be «legalized» (Broughton 2010, at 883).

For **legal rules** (e.g. assignment of claim, right to counsel).

The last two facets (in a broad sense) are devoted to legal consequences:

- **Legal category**: a concept referring to a set of rules or precedents, typically found in a statute or part of
  a statute, a leading case or a line of case law (e.g. assignment of claim, right to counsel).
- **Sanction**: remedy, compensation, punishment or other form of relief resulting from the application of
  legal rules (e.g. punitive damages, interlocutory injunction).

The latter are facets only in a broad sense, because they belong entirely to the legal domain and do not reflect
any of the facets envisioned by Ranganathan or the CRG. They are major categories of legal concepts.
which one finds in conventional databases, or the subject areas of Sweet & Maxwell. However, they are less homogenous and less ambiguous, since they do not refer to the facts of a case, but describe only the legal consequences attached to the facts, which are represented by the above-mentioned facets in the narrow sense. Our decision to distinguish legal categories and sanctions is based on the special importance of the later. Legal questions are often questions about applicable – solicited or feared – sanctions. Then it may be advised to start by searching for legal rules that impose those sanctions.

3.2. The grammar analogy: a syntax of legal information

Our facets mediate between the experts in knowledge organization and lawyers’ own understanding of their discipline (Cumyn et al. 2018, at 835). They bring together Gauss’ famous tripartite division and Ranganathan’s PMEST formula (see the comparative table, id.). The scheme is so simple, that it might even seem trivial, yet it is hoped that this will make it intuitive and easy to grasp for users. It is interesting for facet analysis finds a parallel in linguistics, especially in grammar (cf. Maniez 1999, at 252-253), broad defined as the whole system of rules or procedures that make up a given language. This will be explored using Ranganathan’s scheme.

The PMEST facets correspond to four dimensions or functions on which numerous languages are built. They are represented by the word types nouns, verbs, adjectives, and adverbs:

- Personality ≈ noun
- Energy ≈ verb
- Matter ≈ adjective
- Time ≈ adverb
- Space ≈ adverb.

Surely this comparison should not be taken literally. Index terms assigned to all five facets are nouns, in accordance with accepted standards regarding the construction of thesauri (see ISO 25964-1-2011, at 631). The distinction between the four word types seems to be based on a similar perception of reality as the one underlying the distinction between facets Person, Matter, Time, and Space. There are entities or things (Person, Matter) that are the subject of an assertion. They are usually expressed by nouns. There are actions, processes, change (Energy) that are not exclusively, but best expressed by verbs. There are properties and qualities that attach to the entities or things and describe their state (Space). They are not exclusively, but best expressed by adjectives. The facets of Time and Space finally express circumstances that contextualize the assertion. They are not exclusively, but best expressed by the word type adverb.

Let us illustrate this with an example. The assertion: "Last week, Gill damaged her computer when she slipped on an icy sidewalk." can be broken down as follows (cf. Cumyn et al. 2018, at 894): (1) Personality: Gill, computer (2) Matter: icy (3) Energy: slip, damage (4) Space: sidewalk (5) Time: last week

ad 1. «Gill» and «computer» are nouns, and (in contrast to «sidewalk» and «week») they could be nothing but nouns due to their function, because their character as entities (in the broad sense of «personality») is crucial here. ad 2. «Icy» is an adjective, ad 3.: To «slip» and to «damage» are verbs, and indeed the process or action («energy») of slipping and the associated damaging are crucial to the assertion. One could also write: «Gill’s slipping damaged her computer». Then «slipping» would be a noun, however, this wording is somewhat artificial, because here a process is to be expressed. In addition, one could also say: «The computer is damaged.» Then «damaged» would be an adjective, but it would not be the same assertion, because the emphasize would no longer be on causation (action), but on the state of the computer. ad 4. and 5.: The assignment is self-explanatory. The words «sidewalk» and «last week» are nouns, but they are part of an adverbial phrase, whose function it is to describe the circumstances, not the core assertion.

Assuming the assertion «Last week, Gill damaged her computer when she slipped on an icy sidewalk» were to describe the factual basis for a claim in damages by Gill against the municipality, it would be indexed using the following concepts, according to our model (we refer in square brackets to terms drawn from our controlled vocabulary):

- Person: not applicable (there is nothing legally relevant to say about Gill)
- Action: fall [chute], breakage [bris]
- Thing: computer [ordinateur]
- Context: slippery surface [surface glissante], sidewalk [trottoir]
- Legal category: civil liability (public authority) [responsabilité civile (autorité publique)]
- Function: compensation damages [dommages intérêts compensatoires]

It is no coincidence if the six questions that journalists are trained to ask when covering a story (who, what, when, where, why, how) are reminiscent of the PMEST formula. In her best-selling course book on legal research, A. Sloan (2018, at 27) notes that users, when presented with a set of facts, tend to use the six journalist questions to generate a list of search terms (cf. the popular formula in German legal education «Wer will was von wen woran wann war?»). It is also possible to categorize the relevant information by identifying the parties, places and things involved, the potential claims and defences, and the relief sought by the complaining party (Sloan 2018, at 27-28). Our model responds to the structure of legal research by ensuring that corresponding keywords are used to index legal documents, and that the search interface reflects a similar structure.

Comparing Ranganathan’s scheme with the four functionally comparable facets of our model that describe the facts, it can be seen that we have refrained from giving the dimensions of time and space a prominent role and have instead created a single facet named «Context» for all circumstances that complete the action in accordance with the linguistic adverb function (if legally relevant). In contrast, we have divided the Personality facet of the PMEST formula into the two facets Person and Thing, because the distinction between persons (subjects) and things (objects) plays a decisive role in law. This view is confirmed by our observation that terms assigned to Person and Thing could not be anything other than nouns, unlike the terms of other facets which could easily be converted into verbs or adjectives or adverbs. Linguistically speaking, we integrated the level of cases (caso) into the structure in addition to the word types: Person corresponds to the subject in the grammatical sense, Thing to the object. But here again, the comparison should not be taken too literally. In the sentence «A beats up X for no reason», X is grammatically seen an (accusative) object, nevertheless we would index the victim X not under Thing, but under Person. From a legal point of view, people are always subjects, not objects. However, we had considered distinguishing between perpetrators and victims and dividing the Person facet accordingly, but finally rejected this idea for practical reasons.

4. Potential for automatic indexing

A further step will be to consider whether our model may serve as a tool for the (semi-)automatic text-based and ontology-based keyword extraction and semantic indexing of cases. Both supervised and unsupervised data mining techniques can be considered.

There have already been numerous attempts to develop systems for the automatic indexing of legal texts (see e.g. Korycinski / Newell 1990; Francesconi et al. (eds.) 2010, Part 3; Girard 2013; see also patent US 7,805,524 B2 of November 23, 2010). So far, this has not been achieved in a generally convincing way. Many established editors continue to use human indexing (albeit computer-assisted), despite its cost, because
fully automated indexing does not meet their standards. Where the search process is humanly curtailed, it delivers better results (Novelov Mari 2013, at 43, comparing Westlaw and Lexis).

However, we believe that our faceted indexing scheme offers an advantage over unstructured indexing in the process of automation. Faceted arrangement of knowledge elements can promote the modelling of semantic relationships between the terms and the concepts they process. Faceted arrangement of knowledge elements can promote the modelling of semantic relationships between the terms and the concepts they process. The existence of a semantic indexing scheme, organised by well-defined facets together with a controlled vocabulary, and the degree of normalization it ensures reduces ambiguities, reveals similarities among documents and could make indexing more predictable for the machine learning required for automatic indexing.

It is probably not sufficient to support the machine learning required for automatic indexing. However, our faceted indexing scheme offers an advantage over unstructured indexing in the process of automation. Faceted arrangement of knowledge elements can promote the modelling of semantic relationships between the terms and the concepts they process.

Our faceted indexing scheme offers an advantage over unstructured indexing in the process of automation. Faceted arrangement of knowledge elements can promote the modelling of semantic relationships between the terms and the concepts they process. It is probably not sufficient to support the machine learning required for automatic indexing. However, our faceted indexing scheme offers an advantage over unstructured indexing in the process of automation. Faceted arrangement of knowledge elements can promote the modelling of semantic relationships between the terms and the concepts they process.
SUPPORTING THE LEGAL REASONING PROCESS BY CLASSIFICATION OF JUDGMENTS APPLYING ACTIVE MACHINE LEARNING

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Keywords: Legal Text Analysis, Legal Sentence Classification, Natural Language Processing, Legal Reasoning, Active Machine Learning

Abstract: The digitalization of information is transforming the way we live and creating many new business models. Digitalization is also taking place in the legal domain. Legal documents, such as contracts and general terms and conditions, are produced thousands of times a day due to numerous online contract generators, e-commerce platforms, banks and insurance companies. As a result, computer-aided legal reasoning has become an attractive research area. The purpose of this research is to investigate the applicability of active machine learning and binary text classification in order to detect sentences, providing a statement about the ineffectiveness of a clause.

1. Introduction

The way we live has been changing due to the digitization of information, as well as it has been creating many new business models. Autonomous cars, internet of things, social media and artificial intelligence are just examples for a few trending technologies that make heavily use of digitally available data. In 2016, 16.1 petabyte (PB) of data were generated worldwide. According to estimates, 80% of the newly generated data is unstructured (Raghavan et al. 2004). By the year 2025, the amount of data generated is expected to rise up to 163 ZB (Reinsch et al. 2017).

Due to this increase of available unstructured data, and the enhanced capabilities of algorithms and computing power, the demand for automated data processing, e.g. text classification, pattern finding and knowledge extraction, is increasing and has become an important area for research (Khan et al. 2019). One measure of progress in machine learning (ML) is the significant amount of existing real-world applications, like speech recognition, computer vision, robot control and accelerating empirical sciences (Mitchell 2006). Past research has shown the successful application of various ML classification algorithms on text-based data.
Sämtliche in diesem Buch verwendeten personenbezogenen Bezeichnungen sind geschlechtsneutral zu verstehen. Zwecks bessrer Lesbarkeit wurde zum Teil auf eine unmittelbare geschlechtsneutrale Schreibweise verzichtet.


O Codex
I Commentatio
II Colloquium
III Dissertatio
IV Doctrina
V Liber amicorum
VI Magister
VII Monographia
VIII Thesis
IX Scriptum
X Anthologia

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Wir hoffen, dass dieser Tagungsband in gedruckter und in elektronischer Form mit ähnlichem Interesse aufgenommen wird wie die Tagungsände der Vorjahre!

Wien, Bern und Rovaniemi, im Februar 2019
Erich Schweighofer, Franz Kummer und Ahti Saarenpää

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