

KatKit 2022 — TU Darmstadt 2022-02-21

# Die Klassifikation des nicht Klassifizierte

Eine Untersuchung der Residualkategorien in ICD-10

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# Überblick

1. DH und ICD-10?
2. ICD-10 in 4 Minuten
3. Residualkategorien in ICD-10
4. Ein konkretes Problem / Lösung?

# 1. DH und ICD-10?

2. ICD-10 in 4 Minuten

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**Wat? DH und  
Krankheiten?**



## Cologne Sanskrit Lexicon

Query:

### Dictionaries

monier  pwg  aptestud

### Input language

- Sanskrit (SLP1) or any other language
- Sanskrit (autodetect input script)
- SLP1  Harvard-Kyoto  ISO 15919  Devanagari
- other languages
- English  German

### Where and how to search

- both lemmas and definitions
- only lemmas  only definitions
- exact  partial  similar

## Exact matches (in lemmas)

► 9 results

Matches in monier

**निर्वाण***nirvāṇa* (SLP1: *nirvARa*)

**निर-वाण***nira-vāṇa* (SLP1: *nira-vARa*)

*mfn.* blown or put out, extinguished (as a lamp or fire), set (as the sun), calmed, quieted, tamed ( cf. **अ-निर्व**), dead, deceased ( lit. having the fire of life extinguished ), lost, disappeared MBh. ; Kaiv. &c (*monier at page 557.3*)

*mfn.* immersed, plunged L. (*monier at page 557.3*)

*mfn.* immovable L. (*monier at page 557.3*)

## Charter: Serbische Herrscherurkunden (1306-1388) 13460820 - Dusan

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Signature: 13460820 - Dusan

[< Previous Charter](#) 10 of 17 [next charter >](#)

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### Graphics



Zoom image:

[Open image in Flash viewer >](#)

[Open Image Tools](#)

▼ Abstract

▼ Text witnesses

▼ Art historical description

▲ Full text

[Home](#) > [Averroes](#) >

## Averroes' Works



chunk 812



Textus/Commentum [86]



91v



[Ibn Rushd](#)

### Averrois Cordubensis Commentarium magnum super Aristotelis librum VIII Physicorum (c.78, c.79, c.86)

Translated by [Michael Scotus](#)

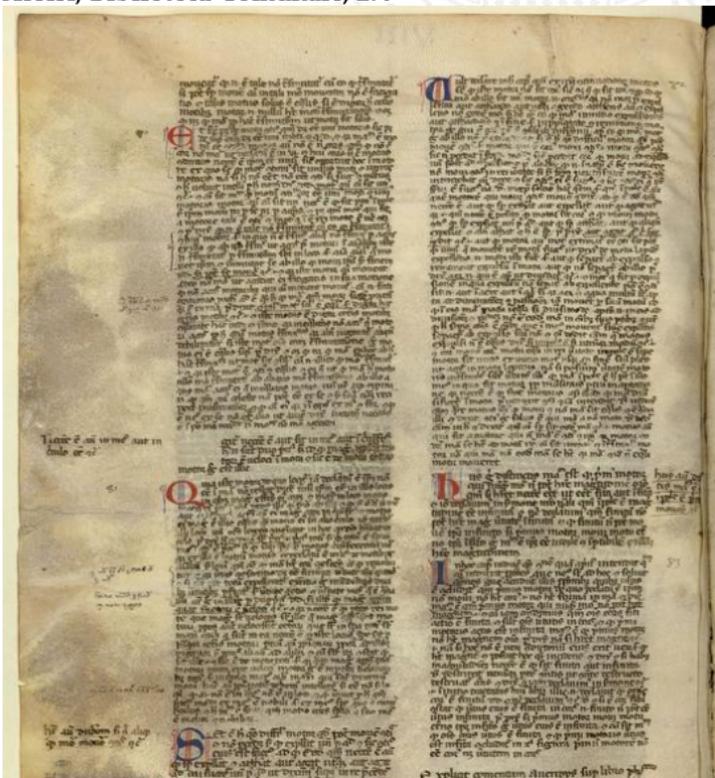
ed. [Guy Guldentops](#), [2002], chunk 812

[ p. 15] **Textus/Commentum [86]**

**Hiis ergo distinctis manifestum est quod primus motor, qui numquam movetur, non potest habere magnitudinem omnino, quoniam si haberet, necesse esset ut esset finita aut infinita. Et iam declaravimus in sermone nostro naturali quoniam impossibile est magnitudinem esse infinitam. Et nunc declaravimus quoniam finitum non potest habere virtutem infinitam, et quod finitum non potest movere tempore infinito. Sed primus motor movet motu eterno tempore infinito. Ergo manifestum est ipsum esse indivisibilem et impartitum et nullam habere magnitudinem.**

In hoc capitulo inducit conclusionem quam a primo intendit, quoniam cum induxit propositiones que necessarie sunt ad hoc et solvit questiones que accidunt in illis propositio | nibus quibus usus est, concludit quoniam primus motor, de quo declaratum est ipsum non moveri, non habet corpus, idest non habet formam in materia. Et dicit **Manifestum est quoniam pimus motor, qui numquam movetur, non potest habere magnitudinem**, idest et cum iam ostendimus quod omnis corporis finiti actio est finita et similiter omnis virtutis in corpore, et quod primi motoris actio est infinita, manifestum est quod dicitur primus motor non habet magnitudinem omnino. Post dicit

### Assisi, Biblioteca Comunale, 279



**#goals**

Ähnliche Probleme in Ihren Projekten?

Bitte geben Sie mir Bescheid

1. DH und ICD-10?

## **2. ICD-10 in 4 Minuten**

3. Residualkategorien in ICD-10

4. Ein konkretes Problem / Lösung?

# ICD-10

## International Statistical Classification of Diseases and Related Health Problems

10th Revision

Volume 1  
Tabular list

Fifth Edition  
2016

1977 Seiten!

# ICD-10-(GM) als Standard im Gesundheits- wesen

S92.1 Fraktur des Talus (€€€)

S92.20 Ein oder mehrere  
sonstige Fußwurzelknochen,  
nicht näher bezeichnet (€)

# ICD-10 ~ = Taxonomie

A01 Typhoid and paratyphoid fevers

A01.0 Typhoid fever

A01.00 Typhoid fever, unspecified

A01.01 Typhoid meningitis

A01.02 Typhoid fever with heart involvement

A01.03 Typhoid pneumonia

A01.1 Paratyphoid fever A

A01.2 Paratyphoid fever B

A02 Other salmonella infections

A02.0 Salmonella enteritis

...

A03 Shigellosis

A03.0 Shigellosis due to *Shigella dysenteriae*

# ICD-10 ≈ Taxonomie

Ch 1

A00 Cholera

A01 Typhoid and paratyphoid fevers

A01.0 Typhoid fever

A02 Other salmonella infections

A03 Shigellosis

...

A09 Infectious gastroenteritis and colitis, unspecified

A15 Respiratory tuberculosis

...

A19 Miliary tuberculosis

...

B97 Viral agents as the cause of diseases classified elsewhere

B99 Other and unspecified infectious diseases

C00 Malignant neoplasm of lip

C01 Malignant neoplasm of base of tongue

...

D49 Neoplasms of unspecified behavior

...

Ch 2

Ch 3

# ICD-10 ~ = Taxonomie

A01 Typhoid and paratyphoid fevers

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A02 Other salmonella infections

A02.0 Salmonella enteritis

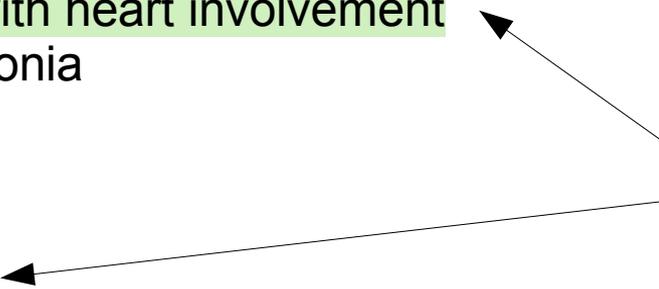
A02.1 Salmonella sepsis

...

A03 Shigellosis

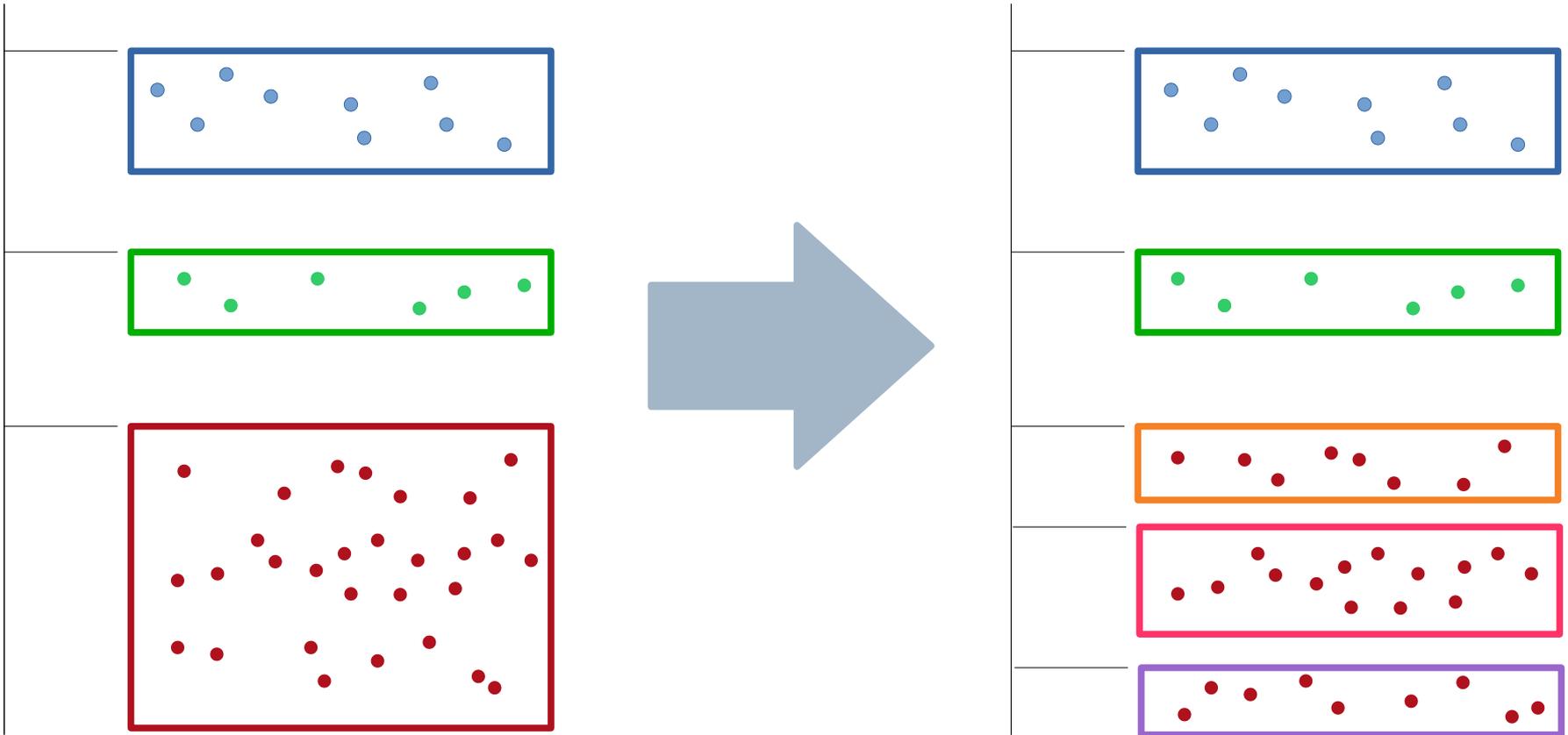
A03.0 Shigellosis due to Shigella dysenteriae

**Nur Blätter sind  
abrechenbar**



# **Entwicklung der Taxonomie in ICD-10**

# Statistischer Ansatz



# ICD-10

## ➤ Taxonomie

B55 Leishmaniasis

B55.1 Cutaneous leishmaniasis

# SNOMED

## ➤ Ontologie

Cutaneous leishmaniasis (disorder)  $\equiv A \cap B$

A  $\equiv$  Mucocutaneous infection caused by  
Leishmania (disorder)

B  $\equiv$  Protozoal infestation of skin (disorder)

ICD-10

International  
Statistical  
Classification  
of Diseases and  
Related Health  
Problems

---

10th Revision

---

Volume 1  
Tabular list

Fifth Edition  
2016



World Health

- M20.2 Hallux limitus/rigidus
- M20.3 Hallux varus und valgus et rigidus
- M20.4 Hammerzehe
- M20.5 Krallenzeh/Reiterzoh
- FüBe**
- M21.07 Knickfuß
- M21.4 Plattfuß
- M21.60 Hohlfuß
- M21.61 Knick-Plattfuß
- M21.62 Spitzfuß
- M21.63 Spreizfuß
- M21.68 Sonstige Def. Knöchel/Fuß
- Sonstiges**
- L85.1 Keratosis palmoplantaris, erworben
- L85.9 Hyperkeratosen
- M72.2 Morbus Ledderhose
- B35.1 Nagelmykose
- L60.0 Eingewachsener Nagel
- B37.2 Kandidose der Nägel
- L03.02 Phlegmone an Zehen/Paronychie
- R02.07 Nekrose, Knöchelregion/Fuß/Zehen
- Z46.7 Versorgung mit orthopäd. Schuh(en)

**Dekubitus**

**Dekubitus Stadium 1**

- L89.00 Kopf
- L89.01 Obere Extremität
- L89.02

- L89.23 Beckenkamm
- L89.24 Kreuzbein
- L89.25 Sitzbein
- L89.26 Trochanter
- L89.27 Ferse
- L89.28 Sonst. Lok. der unt. Extremität
- L89.29 Sonstige und n.n.bez. Lok.
- Dekubitus Stadium 4**
- L89.30 Kopf
- L89.31 Obere Extremität
- L89.32 Dornfortsätze
- L89.33 Beckenkamm
- L89.34 Kreuzbein
- L89.35 Sitzbein
- L89.36 Trochanter
- L89.37 Ferse
- L89.38 Sonst. Lok. der unt. Extremität
- L89.39 Sonstige und n.n.bez. Lok.
- Dekubitus, Stadium nicht näher**
- L89.90 Kopf
- L89.91 Obere Extremität
- L89.92 Dornfortsätze
- L89.93 Beckenkamm
- L89.94 Kreuzbein
- L89.95 Sitzbein
- L89.96 Trochanter
- L89.97 Ferse
- L89.98 Sonst. Lok. der unt. Extremität

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- M21.07 Knickfuß
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- M21.60 Hohlfuß
- M21.61 Knick-Plattfuß
- M21.62 Spitzfuß
- M21.63 Spreizfuß
- M21.66 Sonstige Deformitäten/Fuß
- Sonstiges**
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- M72.2 Morbus Ledderhose
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1. DH und ICD-10?

2. ICD-10 in 4 Minuten

# **3. Residualkategorien in ICD-10**

4. Ein konkretes Problem / Lösung

# ResidualkategorieN

ICD-10 enthält mehrere Residualkategorien (Restkategorien).

Unterschiedliche Arten von Residualkategorien.

# “Other specified”

A04.4 Other intestinal Escherichia coli infections

A04.8 Other specified bacterial intestinal infections

A30.8 Other forms of leprosy

# **“other, unspecified”**

A25 Rat-bite fevers

A25.0 Spirilloiosis

A25.1 Streptobacilloiosis

A25.9 Rat-bite fever, unspecified

# “except”

A28.8 Other specified zoonotic bacterial diseases, not elsewhere classified

S92.8 Other fracture of foot, except ankle

Z73.3 Stress, not elsewhere classified

# “other of the same kind”

## A02 Other salmonella infections

A02.0 Salmonella enteritis

A02.1 Salmonella sepsis

A02.2 Localized salmonella infections

A02.21 Salmonella meningitis

A02.22 Salmonella pneumonia

# “due to other detail”

A08.19 Acute gastroenteropathy due to other small round viruses

J15.1 Pneumonia due to Pseudomonas

J15.2 Pneumonia due to staphylococcus

J15.3 Pneumonia due to streptococcus, group B

J15.5 Pneumonia due to Escherichia coli

J15.8 Pneumonia due to other specified bacteria

# “due to other detail” (Zw.kategorie)

## A18 Tuberculosis of other organs

A18.0 Tuberculosis of bones and joints

A18.01 Tuberculosis of spine

A18.02 Tuberculous arthritis of other joints

A18.1 Tuberculosis of genitourinary system

# “general”

A50.45 Juvenile general paresis

B38.7 Disseminated coccidioidomycosis

C80 Generalized cancer

# **Formalisierung der Eigenschaften der Restkategorien**

# Eigenschaften der Restkategorien



1. Entity known / unknown
2. Name known / unknown
3. Classification certain / uncertain
4. 1 dimension / multiple dimensions
5. Single entity / collective entity
6. Entries are simple entities / other categories
7. Defined by entity itself / in contrast to other entities
8. Worth having a category for / not worth

# A25.9 Rat-bite fever, unspecified

1. Entity known / unknown
2. ~~Name known / unknown~~
3. Classification certain / uncertain
4. 1 dimension / multiple dimensions
5. Single entity / collective entity
6. Entries are simple entities / other categories
7. Defined by entity itself / in contrast to other entities
8. ~~Worth having a category for / not worth~~

# A50.45 Juvenile general paresis

1. Entity **known** / unknown
2. Name **known** / unknown
3. Classification **certain** / uncertain
4. **1 dimension** / multiple dimensions
5. Single entity / **collective entity**
6. Entries are **simple entities** / other categories
7. **Defined by entity itself** / in contrast to other entities
8. ~~Worth having a category for / not worth~~

# A18 Tuberculosis of other organs

1. ~~Entity known / unknown~~
2. ~~Name known / unknown~~
3. Classification **certain** / uncertain
4. 1 dimension / **multiple dimensions**
5. **Single entity** / collective entity
6. Entries are simple entities / **other categories**
7. **Defined by entity itself** / in contrast to other entities
8. ~~Worth having a category for / not worth~~

# A02 Other salmonella infections

1. Entity **known** / unknown
2. Name known / **unknown**
3. Classification **certain** / uncertain
4. ~~1 dimension / multiple dimensions~~
5. **Single entity** / collective entity
6. Entries are simple entities / **other categories**
7. **Defined by entity itself** / in contrast to other entities
8. Worth having a category for / **not worth**

## **A28.8 Other specified zoonotic bacterial diseases, not elsewhere classified**

1. Entity **known** / unknown
2. Name **known** / unknown
3. Classification **certain** / uncertain
4. **1 dimension** / multiple dimensions
5. **Single entity** / collective entity
6. ~~Entries are simple entities / other categories~~
7. Defined by entity itself / **in contrast to other entities**
8. Worth having a category for / **not worth**

# Eigenschaften der Restkategorien

1. Entity known / unknown
2. Name known / unknown
3. Classification certain / uncertain
4. 1 dimension / multiple dimensions
5. Single entity / collective entity
6. Entries are simple entities / other categories
7. Defined by entity itself / in contrast to other entities
8. Worth having a category for / not worth

$$2^8 = 256$$

# Beispiele?

Andere Arten von Residualkategorien,  
die von ICD-10 nicht abgedeckt sind?

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**4. Ein konkretes**

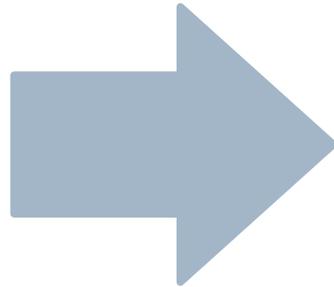
**Problem / Lösung?**

**Residualkategorien sind  
notwendig...**

Residualkategorien sind  
notwendig...

**aber während der Eintragung  
verliert man Information**

Wille  
Information  
nicht  
wegzuwerfen



**~10 000**  
Residual-  
Kategorien  
in ICD-10

# Zwei mögliche Lösungen

**Strukturierte  
Restkategorien**

**Klassifizierung des  
Nichtklassifizierte**

Before classifying as "Other", do you have any additional information?

Unknown phenomenon

Unitary /  Collective item

Suggested category:

Could have subcategories

OK

KatKit 2022 — TU Darmstadt 2022-02-21

# Die Klassifikation des nicht Klassifiziertes

Eine Untersuchung der Residualkategorien in ICD-10

Gioele Barabucci

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