

The harvest of the Dutch digital fields: the landscape of webarchiving in The Netherlands

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www.kb.nl

Goal:

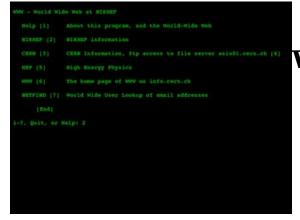
How does the landscape of the web and webarchiving in The Netherlands look like and what is the role of the Koninklijke Bibliotheek – National Library of The Netherlands in webarchiving?

What are the obstacles of webarchiving in The Netherlands and how does the national library deal with this, how can we improve our work?

What can we learn from the Dutch landscape as web archivists and researchers of the web?

The Dutch national web domain (1992-2017)

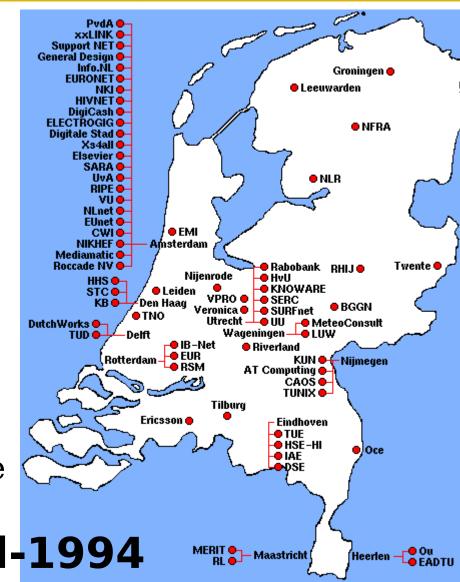
.nl country code Top Level Domain: 1986



Website of Nikhef, 1992, 3th website in the world

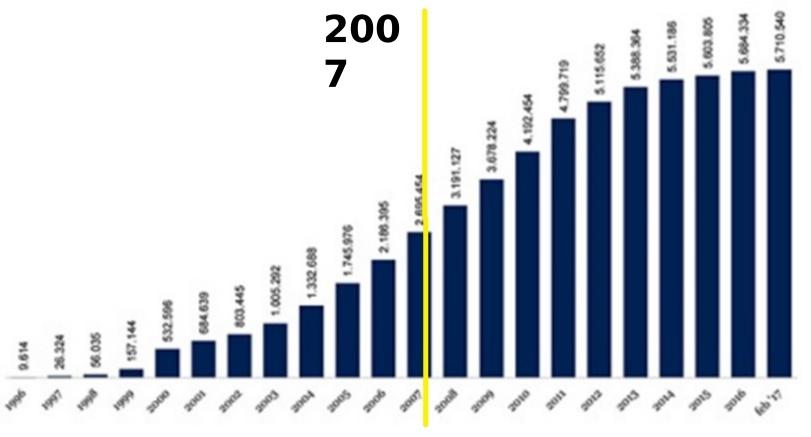
General characteristics:

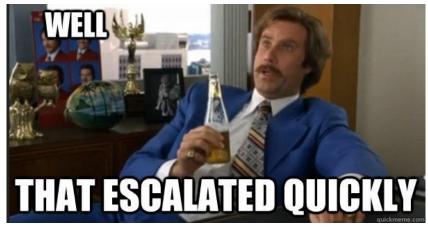
- 1. early and innovative, fast-growing
- 2. local or regional, neither centralised, nor one center
- 3. less attention to herita **puticulawe bth mid-1994** institutions...)





.NL-domain names: 5.777.777 million





Dutch national domain: +/- 8 million Sitesul Web Archive

SITESIL Web Archive **—** 13,000 sites = 0.16 %



Web archive of Belgium

The Belgian web is not currently systematically archived

HISTORY

In **June 1988** EARN and Eunet introduce the .be domain. Professor Pierre Verbaeten of the Leuven Catholic University is assigned the responsibility of it.

In **March 1993** the university gets IP connectivity. The name server for .be is installed on the computers of the Computer Science department of the university. The first .be domain names are registered manually in December 1993.

Interest in domain names grows; only names corresponding to the official organisation or company name, a commercial denomination or a trademark are being accepted. Each request has to be justified with official documents.

In 1994, 129 .be domain names are registered.

Source: https://www.dnsbelgium.be/en

TOTAL DOMAIN NAMES

1 5 7 0 8 7 4
.be

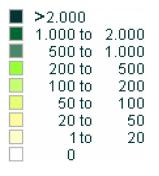
7 4 1 2 .brussels

6 6 5 5 .vlaanderen





Geographic Distribution

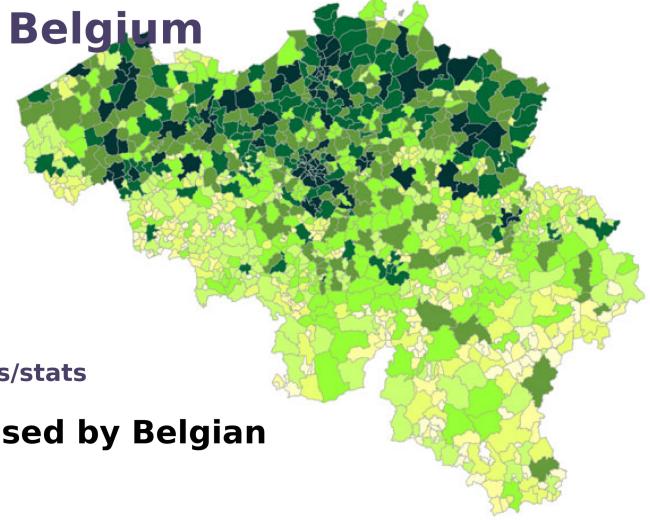


© DNS Belgium vzw/asbl

Source: https://www.dnsbelgium.be/whois/stats

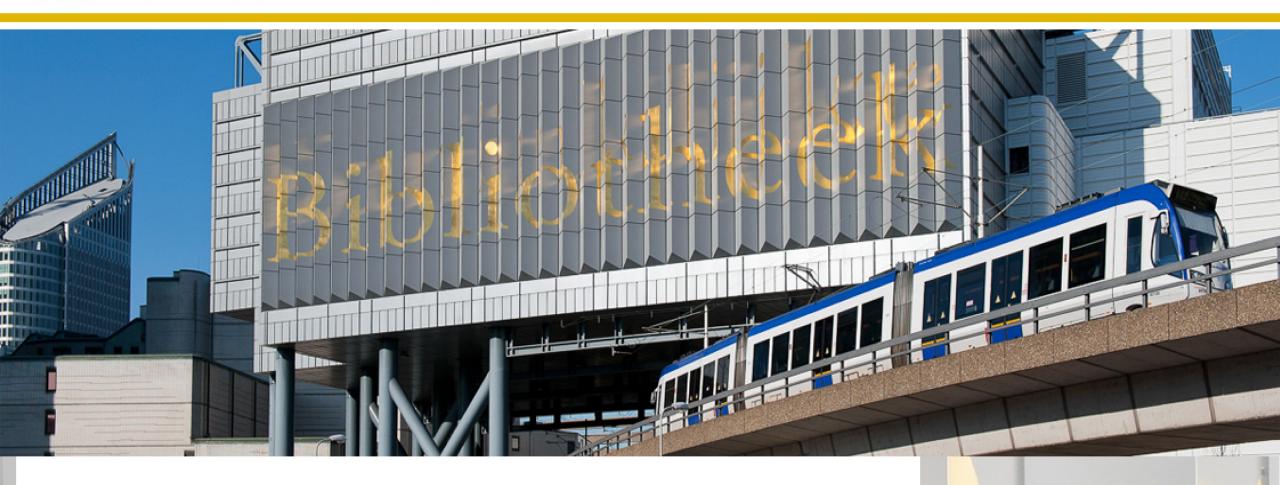
2.5 % of .nl domain names is used by Belgian citizens: overlap

Languages: Flemish, French, German

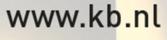


Comparison of web archives

Institution (Figures from early 2016)	Start web archiving	Domain crawl Yes/No	Sites crawled selectively	Size archive in TB	Size of co number	cTLD: domain of sites	Persons involved	FTE	Legal deposit
Koninklijke Bibliotheek (The Netherlands)	2007	no	10.000	22,5	.nl	5.623.823	2	1,3	No
British Library	2005	yes	15.102	27,8	.uk	10.000.000	8	8,0	Yes
Bibliothèque Nationale de France	2004	yes	273.416	567,0	.fr	2.500.000	90	2,5	Yes
Netarchive.dk	2005	yes	50.000	42.7	.dk	1.314.058	20	4,5	Yes
Bibliothèque nationale de Luxembourg	2016	yes	100	14	.lu	90.000	2	1,5	Yes
Belgium: PROMISE project	2017-8?	t.b.c.	t.b.c	t.b.c	.be	1.573.331	5	2.5	Yes



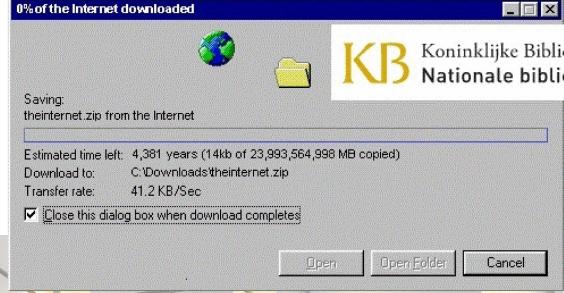
- Koninklijke Bibliotheek, National Library of The Netherlands
- Since 1798, former royal collection, The Hague
- Academic library, national library only since 1974
- Digital collection since '90-s, start web archive in 2007.



The aim of the KB-NL web collect

To select, preserve and make accessible a representative set of Dutch websites of the Dutch national domain





Web archiving @ KB in numbers

- 13.000 websites in total webcollection
- 30 Terabyte (one of our biggest digital
- Annual growth: +/- 1.000 sites
- 300 million (hyper)links
- Only selective harvests: no legal dep
- 1,5 full-time equivalent workload
- External hosting
- Restricted access: on site use, Wayback Machine
- One academic research project on data (Web Archive Retrieval Tools, 2011-2016)
- One internal research project on process of selection, harvest and usability (2016-2017)
- · No coöperation with National Archive: separate selecti୪୩% hଧା

PROMISE: Preserving Online Multiple Information: towards a Belgian StratEgy



24 month project financed by Belspo Start Date: 1 June 2017

Royal Library of Belgium (Project Coordinator)

State Archives Belgium

Research Group for Media and ICT and Ghent Centre for Digital Humanities

Research Centre on Information, Law & Society

Unité de Recherche et de Formation en Sciences de l'Information et de la Documentation (URF-SID)



Koninklijke Bibliotheek van België Bibliothèque royale de Belgique

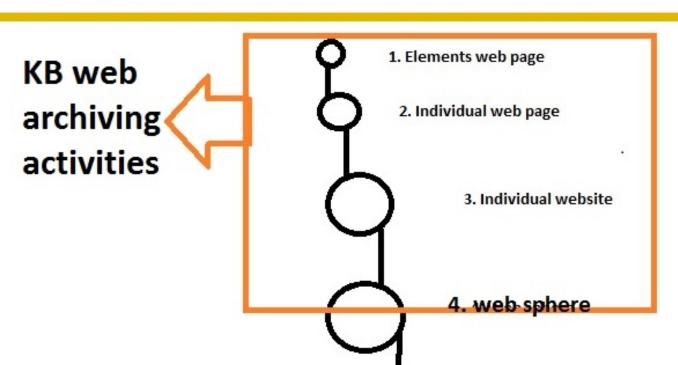








Harvesting: what do we preserve?



5. The Web as a whole

(WWW)

Web strata after Niels Brügger (2010)

Heritrix version 1.14.

- + Webcurator Tool
- + opt-out mailer (together hard to

upgrade)

www.kb.nl

Harvesting the Dutch landscape



No legal deposit, therefore no domain crawl of the Dutch national web

Instead: selective harvest

By collection specialists (everything

The Netherlands)

- On request of owners
- Endangered digital heritage
- Actual sites based on trends and p
- Special web collections
- National coöperation
- International coöperation



Special webcollections

Some collections:

- Netherlands in WW I
- Premier league football
- Dutch Santa Claus
- Plane crash MH17
- ■500 years Reformation
- (Former) monastries
- •Frisian websites (Frisian language, Frisian territory)

IIPC- collections
(legal issues!)

Other Dutch webcollect WEBARCHIEF



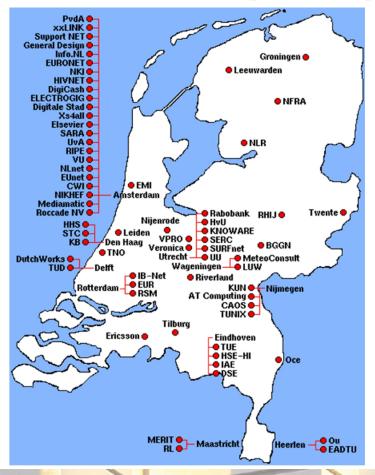


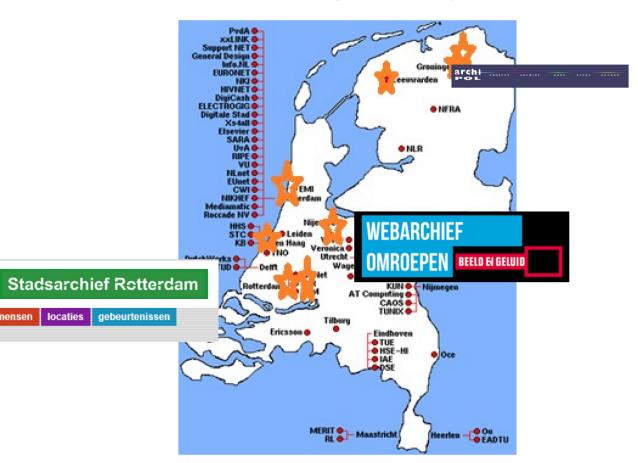




Thematic or regional collections, no national collection (only Frisian) In total 3,000 archived websites (KB: 13,000, 16,000 country wide) Few resources per collection Different crawl strategies, techniques

Dutch web (1994) - Dutch webarchives (2017)



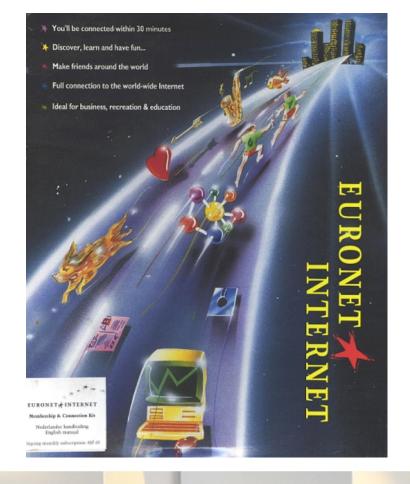


How to improve? Special webcollection Dutch webarchaeology:

find the pearls before 2007, esp. 90's



Casus: Euronet provider user sites



Total number of hits: 50198117

Total number of megabytes: 410168

Last three months: 1 |2 |3

Unique find: data and statistics from 1997, 1998 and 2005. (Almost like a domain crawl of euronet.nl)

User	Requests	Mbytes		
jharmsma	14542819	49540		
darkside	455164	36812		
dds	1483859	34705		
slf	2131068	22680		
m e	669746	20160		
sjoerdb	10559	11282		
siri2	763036	8812		
mvda	377015	8606		
absolute	382761	7644		
jbc	2160569	7242		
elaine	3927363	6120		
janenman	1123592	5833		
elmar	554041	5798		
w solarz	1026732	5554		
ybpalace	171625	4836		
rollo	1223016	4659		
ilm	489476	4411		
ceesa	613127	4408		
playsoft	301413	4203		
thieu	280702	4016		
elfrs mp	1109	3740		
satan	529831	3706		

index
File Not found
Europian Phil Ochs
EURONET SEX PART
http://www.euronet.
Beginners MP3 Site,
Marco's Armageddon
??
Dutchbear is moving ??
Dutchbear is moving
MagnetTheatre Jumps
freeware shareware
??
Amsterdam GAY! DAN&
Male Nude Celebs! H
Cees' Original Male
Home Page
Thieu's testing pag
??
Female Spanking Mal

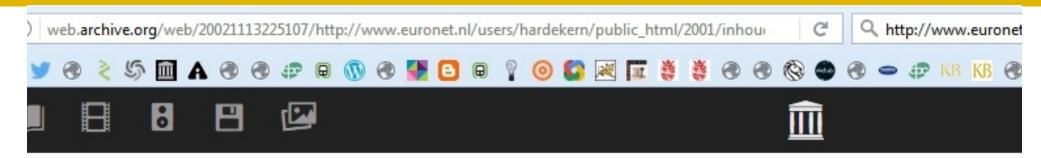
lex				
Not found				
pian Phil Ochs	pages			
NET SEX PART	User Hor	ne Page sta	its for 2005	5-02-02
://www.euronet.		_		
nners MP3 Site,	Total numb	er of hits: 920	0405	
		er of kilobyte		
o's Armageddon	Total Hollio	ci oi illioo, ic		
	Last five da	ys: 1 (Yester	day) 2 3 4 5	5
hbear is moving		-)	==17 = = = =	_
hbear is movino	User	Requests	Kbytes	
etTheatre Jumps	wilfried	246174	2213570	Wilfrie
	kgielen	10782	776859	??
ware shareware	pbstg mp	375	554941	33
	marij	35090	443390	De Nede
erdam GAY! DAN&	in002561	753	416314	Arjen's
37-1-0-2-1-1	nh	112624	397006	ADDDESS

- Amount of user sites in 1998, 2005, 2006;
- Description of content and data;

User statistics;

User	Requests	Kbytes	*Exact URL, user name.
wilfried	246174	2213570	Wilfried Brackhard Website IVL, USCI HUIIIC.
kgielen	10782	776859	??
pbstg mp	375	554941	??
marij	35090	443390	De Nederlandse Harry Potter site
in002561	753	416314	Arjen's Homepage
nh	112634	387006	ADDRESS WAREHOUSE - ROTTERDAM THE NETHERLANDS
erikje	507	342502	??
citron	7471	287535	LE JOURNAL CITROËN
keesree	23905	258672	TITANIC - A Voyage of Discovery (index)
marbak	25847	247685	MB Music about Faithless, Rollo, Kristine W and more
warnar	13156	243476	Biosciences
Antonie	van Leeuwen	hoek Anton	y van Leeuwenhoek Engravings Images

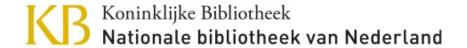
Animalcules Microbiology Statistics Statistiek Methodologie Amsterdam Torture video's, Extreme SM picture gallery, Bizar. Erotic, Sex, Bondage cindyx 6758 12236 211849 Evert's Homepage e wesker 22514 w solarz freeware shareware download software windows 98 games and Entertainment



Hard to crawl due to bad construction of sites



http://www.euronet.nl/users/hardekern/public_html/



Legal issues of web archaeology

Problems:

•No contact address: opt-out

"Digital dementia": owner do want to be associated with pa

No legal means to obtain mat

Neither owners, nor provider interested in preserving herit



Digital incunables of the Dutch web

Positive points: finding unique and missing parts of other collections

Broadcast sites, political parties, local sit







First research sites with born digital scientific publications (and hidden literated Web archaeology: layers.

Post-truth web collection

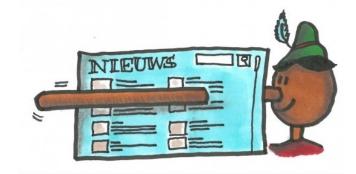
- Context of "truth" (internal / external link structure), fakenews
- Historic sources as building blocks for academic
- Archived website or at least data (web sphere!)
- Coöperation with academics: LEIDS UNIVERSITAIR WEEKBLAD

Provent Post History period



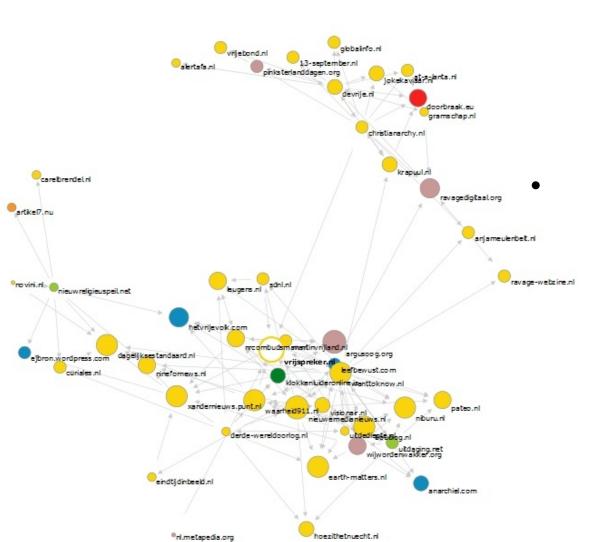


071-527... Internetarcheoloog



Kees Teszelszky doet onderzoek naar webarchivering bij de Koninklijke Bibliotheek. Samen met Leidse onderzoekers spreekt



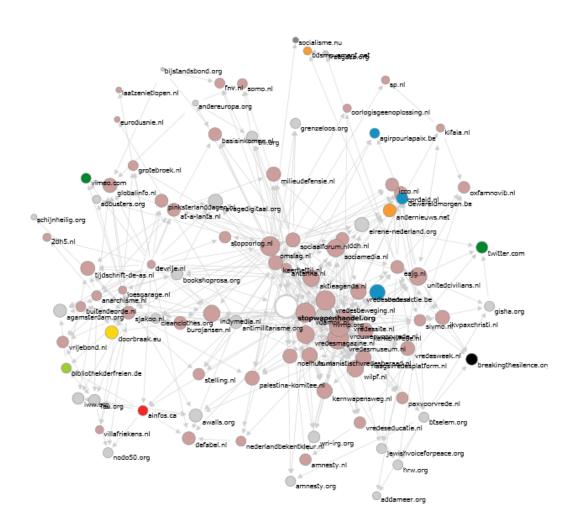


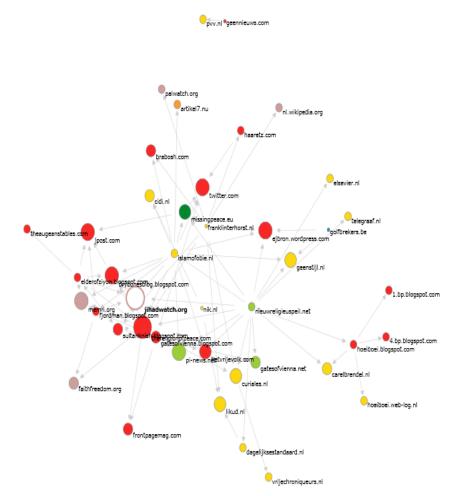


Link analysis as important as webarchiving

IssueCrawler of Digital Methods Initiative https://www.issuecrawler.net/

Koninklijke Bibliotheek Nationale bibliotheek van Nederland





maatschappijkritisch_4_rechts

Co-link Map Details:

Author: Kees Texteisty |
Fimali: kees texteisty (jkb.n |
Crawl start: 21 Sep 2017 - 06:46
Crawl end: 21 Sep 2017 - 09:17
Privilege starting points: off
Co-link Analysis Node: page
Rerations: 3
Crawl Depth: 3
Node count: 43

Nap generated from Issuecrawier.net by the Govcom.org Foundation, Amsterdam.

Legend:



Select links layers:

links on

Statistic

jihadwatch.org

Destination URL: http://www.jihadwatch.org/ Page date stamp: none Unks received from crawled population: 4133

Links from network (1 - 20)

- drybonesblog.blogspat.com
 elderafziyon.blogspat.com
- fjordman.blogspot.com
 detection of the company of the com
- 5. Islamofoble.ni
- 6. nieuwreiigieuspeil.net
- 7. thereligionorpeace.com

Links to network: 0

Conclusion

- Webarchiving differs in each country due to local culture and legal circumstances (similar to libraries and archives): it is important to take this phenomen in account when web archiving and doing research
- The Netherlands: locally organised, all web archives are in fact special collections, no central collection, therefore national coöperation is needed
- All relatively small collections, but with much local expertise and devotion.
- Selection policy have to be reviewed every 5 years: but also in retrospective: permanent web archaeology
- Special collections are good to unite local efforts nationally and to focus selective crawls for past, present and future webarchiving.

um odoratarumque nonnullarum Purgantium historiae libri IV riae pemptades sive libri XXX. et groot Cruydtboeck, hetwelk zouden uitgeven en in gansch . Plantin had zich langzamer. an al de houtblokken, die bij kers voor andere herbariums gd bij die van zijn eigen uit. lustratiemateriaal uit zonder het Museum Plantin Moretus an Pieter van der Borcht, in overwegend en niemand minroote kunst, die de Mechelsche ag legde. "Het is mij", schrijft en tijd in het bekijken van de nydtboeck van Dodoens verik, daarna in den tuin rond. en bloem en heester geschaard eidscher dos meende te zien der takken, de levendigheid ormatie der wuivende kronen, voor mij geopenbaard, en ik ren in den eeuwig afwisselenas. De prenten van Dodoens epping duidelijker en dieper as de trouwe illustratie van ter der levende natuur ge-

-in Highlocon

tgever door de banden eener den. Toen Dodoens in 1584 gedurende een paar jaren was, liet Plantin dit met emeenschappelijken vriend

, als blijk van vriendschap, verbeterden en vermeerderdschen tekst van zijn ge-

