This contribution at-an-angle por-

travs some of the continuous work

Text and images on the following pages flow from our longstanding curiosity in and a few years of experience with data practices at VTi. As freelance developer and designer team, we were commissioned to re-develop toneelstof.be, a project documenting four decades of Flemish theatre. Currently we are working on Who's who, online interactive visualisations of VTi-data that will be launched in parallel to this publication. As members of

the Association for Arts and Media: Constant, we exchanged ideas about projects such as Travelogue¹, Archipel² and Verbindingen/Jonctions: By Data We Mean³. These conversations were based on a common interest in the way data practices effect contemporary artistic practice.

Our incremental understanding of who does what in relation to this particular database made us appreciate the consistency, intelligence and intensity by which VTi puts their mission to 'document and register' into practice. It is why we insisted on a 'data-diary' as our contribution to *Perspective: artist.*

To intensify our experience with this particular data, we zoomed in on a few processes that involve both computers and people. We organised several intimate encounters with the database and traveled tables and fields in search of traces of history, exploring its texture and patterns.

First we looked at aspects of working with data. What daily routines surround it? VTi-staff responsible for collecting, entering and processing this data rarely make a point of what they do. How is their logic, humour and way-of-doing recorded into the database? How to balance between stable objective cri-

teria and changing circumstances? How does its technological context influence this work?

Then we asked ourselves: how is the data structure connected to the practice of performing arts organisations? How do you record 'functions' in a cross-disciplinary and transversal field and make them fit a spreadsheet, a metadata field, a categorical column? How do you prevent this data structure from defining boundaries that others might want to erase? Finally we looked at profiles and biographies that emerge from the VTi-database: if there are prototypes to be distilled, how do we identify them, or do we risk with such a data-deterministic perspective to render practices and positions powerless? In the last episode of this data-diary we speculate about ways that a biography can be a distributed space for ambiguity, and how to keep data gaps visible.

None of the work that we discuss here is actually hidden, but its dullness and technicality make it prone to blend into the background and it's only with some effort it can be rendered tangible. We think it is essential to pay attention to data practices in order to understand the value and validity of data, especially when we focus on what it

can tell us about the roles of individuals in the field.

We would like you to read this contribution as a collection of annotated snapshots, a glimpse of how the VTi-database (like many databases) is the product of long term institutional work but also of micro decisions informed by intuition, technical artifacts and common sense.

Text and images:
Michael Murtaugh, Femke
Snelting (Constant)

Written and produced with the help of the following (former) VTi-staff:

Wessel Carlier (ICT)
Floris Cavyn (Documentation & Art
Criticism)

Martine De Jonge (Library)

Marijke De Moor (Communication) Gunther De Wit (Communication, until 2012)

 ${\color{red} \textbf{Joris Janssens}} \ (\textbf{Director})$

Bart Magnus (Research Travelogue & Collection Development)

Dries Moreels (Collection Development, until 2010)

All sources can be found at: www.activearchives.org/whoswho

www.arts-mobility.info www.archipelproject.be

www.constantvzw.org/vj12

VTi feels itself responsible for the intensive documentation of performing arts' practices. The field and the context are studied, artistic and policy procedures are registered, classified and made accessible via an extensive performing arts' database, the library and the website. www.vti.be/en/over-vti/mission

The backbone of <u>data.vti.be</u> is formed by **productions**. Productions are understood as performative events,

Joris Janssens, 'Fabeldier komt op de kaart. "Spelen" en "maken" in het Vlaamse theater sinds 1993' ('Mapping the Mythical Creature. "Acting" and "creating" in Flemish theatre since 1993'), in Courant 92, February-March 2010

'BROKEN TAPE'

'Text is damaged'

'the text is in bad shape'

'book is damaged'

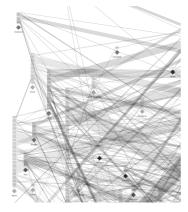
'traceless'

'lost'

'not returned'

'copy lost. ordered again'

temporal activities produced in the wider field of performing arts. Typically, a theater play or dance performance will have a certain number of people credited. By consistently recording each premiere, where, when it happened and which people and organisations were related to it, a dense and highly populated web of relations starts to appear:



'Metro Area: Mapping the transnational co-production network behind the Flemish performing arts [2005 – 2009]'. Poster included in 'Ins and outs: A field analysis of the performing arts in Flanders' (VTi, 2011)

It is important to keep in mind that only productions that 'have something to do with the Flemish subsidy system' are being recorded. Be-

cause VTi collects information about transnational co-productions and international touring dates, it is possible to produce images that reach outside the borders of Flanders. But productions that are exclusively financed by other national or international funding agencies, and also productions that did not receive any subsidy, are invisible to this database.

Users



We start off our exploration by browsing a 'dump' of the full database contents that we run locally with the help of pgAdmin, a graphical management, development and administration tool for databases written in PostgreSQL. Like in most databases that we have had a closer look at, we find empty tables, redundancies and mystery data; historical traces of imports, migrations and updates. But in a table called postits we discover small gems that bridge the digital and physical realities of the VTi-library:

'TAPE STUK'6

01

'Tekst is beschadigd'
'de tekst is in slechte staat'
'boek is beschadigd'⁷

and

'spoorloos'

'verloren'

'niet teruggebracht'

'exemplaar verloren. opnieuw in bestelling'⁸

We continue with user_accounts, a table that holds information about everyone that might have authored this data. Here we meet Jan Testmans, one very prolific user that has made thousands of consecutive edits in a very short period of time.

	(PK) serial	login character varying	name character varying(100)	character :	created_at	updated_i	identity_u characters	creater_id integer	updater_ki integer	permalink character	edenin booleas
1	3485	testmans	Jan Testmans		2869-12-	2010-04	testmens			ns	TRUE
2	1405	priemik	Niki Prien		2009-12-	2010-04	priemnik			1k	TRUE
3	3487	verbojan	Jan Verboven		2009-12-	2010-04	verbajar			ns	TRUE
4	1401	willeyse	Ywes Willens		2009-12-	2010-D4	willeyve			5.0	TRUE
5	3409	gharierw	Erwin Gharib		2009-12	2010-04	ghariery			DV.	TRUE
	3410	moreedri	Dries Moreels	dries@v!	2009-12-	2010-05	http://c		3410	openid-v	TRUE
7	3411	bruynber	Bernadette De Bruyn		2009-12	2010:04	bruyaber			er	TRUE
	3412	schepmie	Mieke De Schepper		2009-12-	2010-04	schopmie			ie	TRUE
,	3413	carlines	Wessel Carlier	wesselde	2009-12	2012-08	http://c		3413	openid-v	TRUE
10	3414	brandchr	Christel De Brandt				http://c		3414	openid-v	
11	3415	boodiyas	Yasmina Boudia		2009-12	2010-04	boudiyas			85	TRUE
12	3416	adminov	AdminOV		2009-12-	2010-04	adminon			м	TRUE
13	3418	kintean	An Kinne		2009-12-	2010-04	kirnean			n	TRUE
54	3419	asbeslyd	Lydia Asbestaris				asbeslyc			yd	TRUE
15	3420	baeteels	Els Boeten		2009-12-	2010-04	baeteels			1.5	TRUE
56	3421	baldia	Diane Bal	dianegy	2869-12-	2010-04	http://c		3421	coenid-v	TRUE

5

6 7

When we ask Wessel about Testmans, he starts to laugh. 'Where did you find him? He was invented by one of the developers that migrated the database from Microsoft Access in 1998. He always used that name when he needed an account to test.'

on company websites, publicity pushed via social media and checked against his own experience with the ebb and flow of activities in the field. By the end of the month, Floris translates the document into HTML and publishes the information on <a href="https://www.websites.com/windless-checked-companies-checked-compan

Workflow

So, how did 56.844 people, 20.700 productions, 12.427 organisations that are linked through 253.986 relationships end up in this database? Floris tours us through each step in the process:

In September, Floris compiles a document october_2011.doc containing all premieres for the following month. The list includes their date, location and relevant website. On average he collects 30 premieres per month from printed season brochures and newsletters provided by theatre and dance companies themselves. This list is completed with additional information



2012 season brochures, ready to be registered

In October, Floris produces a second file called 20110916.doc. This file contains the updated list of productions that premiered in September plus links to specific web-pages where credits for that particular production can be found. He creates a record for each production into the database and Martine starts to complete their credits one by one. Based on the information communicated by performing arts organisations' own websites, people are linked to productions, according to their function. If neces-

sary these functions are 'normalised' with the help of a function-reference sheet prepared by Bart. The off-season summer period is used for a yearly 'data-check'. Members of the communication departments of relevant organisations receive an e-mail that invites them to log in to the database and report mistakes or propose corrections.

Although this 'data-check' has not yet triggered a massive response, we find some comments in the table error_reports:

'In 2003-2004 (première 17 mei 2003) en 2004-2005 speelden wij de voorstelling Met de kikker alles kits? of: een kabouter op een klein rood brommerke'

'als genre is "theater" wel voldoende'

'Arne Lievens is geen acteur! Hij deed het lichtontwerp'9

Perspective

As is evident from a well established workflow, the feedback loop between practice and data is extremely tight; it mirrors the way information is usually organised and communicated by performing arts organisations themselves (posters, brochures, flyers and web-pages are arranged

around the unit of a season, followed by the unit of a production that each have a list of credits). The pertinent choice for an event-based perspective continues the data model that was established in the *Theaterjaarboeken Vlaanderen* (*Theatre Yearbooks Flanders*), a project that data.vti.be in some way has replaced. In these yearly publications, productions and their credits are meticulously recorded as of season 1965-1966:

Kaaitheater

Akenkaai 2 - 1210 Brussel tel. 02/218 58 58 - fax 02/218 49 65

De Opdracht

(Der Auftrag)

Oorspronkelijke taal: Duits AUTEUR-Heiner Müller. REGIE: Jan Ritsema. VERTALING: Macrei Otten. DRAMATURGIE: Marianne van Kerkhoven. PRODUKTIE-LEIDING: Paul Antipoff, Carlo Sourguignon. ACTEURS: Bea Rouffart. Dirk Roofthooft. Dries Wieme. PRODUKTIE: Kaaitheater - Felix Meritis,

Amsterdam.
WEDEROPVOERING, AANTAL VOORSTEL
LINGEN: 44.

Listing of productions and their credits in Theaterjaarboek Vlaanderen 1992-1993

Compagnie De Koe

Montignystraat 3-5 - 2018 Antwerpen tel. 03/238 64 97 - fax 03/238 09 91

Informatie niet ontvanger

De Touroperator

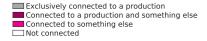
Oorspronkelijke taal: Nederlands TEKST: Cie. De Koe. REGIE: Bas Teeken. ACTEURS: Diane Belmans. Dirk Tuypens. Steven Watermeulen. PREMIERE: 23 september 1992, Monty, Antwerpen.

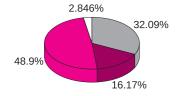
A person will appear in the VTi-database once she is credited in a specific

^{&#}x27;In 2003-2004 (première 17 may 2003) and 2004-2005 we played the performance Met de kikker alles kits? of: een kabouter op een klein rood brommerke (Everything alright with the frog? or: a gnome on a small red motorcycle)' 'for genre, "theatre" suffices'

^{&#}x27;Arne Lievens is not an actor! He did the lighting design'

relation to a particular production. What happens to work that does not result in a 'product'? Maybe if we projected this same approach onto another field, architecture for example: could we imagine how such a 'natural' approach might come at a price? Not many influential 'paper architects' would be present in such a database? How many people are present that are not directly linked to a production?





Paper architects? People and their relationship to other data objects

Surprisingly, almost half of the people represented in this database, have

no direct relation to any production. In almost every case they are included because they authored a book, an article or photograph that is available from the VTi-library. When we try to explain or concerns. Bart reminds us dryly that most people in the pink category 'are probably dull theatre scientists', meaning: not paper architects. We wonder if we could use this population to show how people that are not directly linked to a physical event, might have an influence on the image of the field of the performing arts, as it is constructed through data.

Database timeline



Notes from a phone conversation with Wessel

Entries in the current database do not occur earlier than 1998, but a first version was built in 1993. It combined office management, a library catalogue and data collection.

It was custom built and constantly extended, updated and patched up. Five years later the technical context had already radically changed, and with it also the understanding of what this database could be used for. The project started to take centre stage as a tool for research and analysis, and functions were separated into different applications. From 2003 onwards, VTi publishes their data about people, institutions and productions online via a Drupal front end. The library catalogue could be browsed via a separate page with the help of AquaBrowser, 'the market-leading library search solution, 10. In 2008, preparations were made for a large update of the data environments. At this point, it was decided to merge the production database with the library catalogue again so that catalogue information was now re-integrated with people, functions and organisations.

All data was migrated to Post-greSQL, an open source object-relational database system. VTi started to experiment with Research Description Frameworks (RDF) and Semantic Web standards (Linked Open Data) and all public content released under a Creative Commons Attribution-Noncommercial-Share Alike 2.0 Belgium License.

Overlap

Linked Open Data is based on the idea that if everyone would make 'raw data' available in a standard format that expresses how one thing relates to another, we could then connect all these dispersed data-collections and produce more intelligent, contextual search engines for example. Combined with permissive licensing, both human and machinic users can analyse, process and script data without having to ask permission, as long as results are made available under the same condition.



Linked Data: Is your data five star?

We understand the investment of VTi in Linked Data plus Open Content as a meaningful strategic choice. The quality of the material that data.vti.be has collected, derives from its specificity and depth. But if the boundaries of this collection cannot be structurally interrogated, their strength quickly turns into a limitation.

^{&#}x27;AquaBrowser in the VTi-Library will bring the collection to life with instantaneous search results, word associations and an array of choices and paths using the 'Search, Discover, Refine' design features that take the user on an information journey like never imagined before.' Press release Medialab Solutions www.librarytechnology.org (2005)

11

Bias could become potentially legible if users could more easily compare differences and omissions between overlapping data collections.¹¹



Tim Berners Lee tweets THIS IS FOR EVERY-ONE at the London Olympics opening, 2012

Femke Snelting: Do you feel that information is being flattened out by the use of Linked Data? Dries Moreels: There is of course a risk, that you need to normalise a number of things. Well, it does not have to be like that. The beauty of Linked Open Data is that it does not need to level. So you can just say: this is my vocabulary, and this is my data. And I do not comform to any other vocabulary than the one I declare here. You can keep it as critical as you want. You can still link the data, but it of course makes it harder for users to do something with it. They must make an effort to understand your vocabulary. (Interview for Jonctions/Verbindingen 12: By Data We Mean, 2009)

- 'Real name Christiane Slagmulder'
- 'Also known as Johannes Pauwels'
- 'Is now woman'
- 'Was man before'
- 'not the same as Sofie De Smet!'
- 'not the same as Sophie De Smet!'
- '= Wim De Coster'
- 'offical name is Liesbet'

We too find the promise of a flexible and multi-dimensional data-model hard to resist and dive deep into the world of semantic technologies, eager to find tools and techniques that we can apply in projects that we are developing with and for VTi. Meanwhile, Travelogue: Mapping Performing Arts Mobility concludes with concrete recommendations for linking data of European performing arts institutions, and closer to home preparations are made to finally cross-connect artist biographies at bamart.be, event information published on cultuurnet.be and performing arts data at data.vti.be. But it is not easy to make our daily data realities live up to the passionate optimism of Semantic Web advocate, Sir Tim Berners Lee.

go away
User-agent: *
Disallow: /

data.vti.be/robots.txt (October 2012)

Technologies for processing, publishing and visualising Linked Data are still relatively immature and semantic server technologies costly and slow. For performance reasons, Wessel has temporarily disallowed indexing by automatic crawlers. This means that currently none of the high quality information available at

VTi shows up in search results.



At this point in time VTi does not publish their data in the RDF-format. Most likely interested parties will, just like us, need to work their way through a hefty database dump in order to enjoy this data.



vtidata.120821.sql 452.7 MB

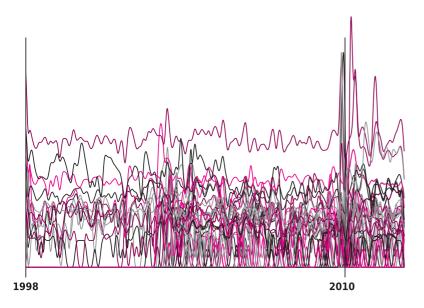
We turn back to our PostgreSQL export and continue browsing the post-its-table that documents a lively process of continuous data-gardening:

2009-05-25 17:08:38.903 'Echte naam Christiane Slagmulder' 2009-05-25 17:08:38.903 'Ook bekend als Johannes Pauwels' 2009-05-25 17:08:38.903 'Is nu vrouw' 2009-05-25 17:08:38.903 'Was vroeger man' 2009-05-25 17:08:38.903 'niet dezelfde als Sofie De Smet!' 2009-05-25 17:08:38.903 'niet dezelfde als Sophie De Smet!' 2009-05-25 17:08:38.903 '= Wim De Coster' 2009-05-25 17:08:38.903 'officële naam is Liesbet'12

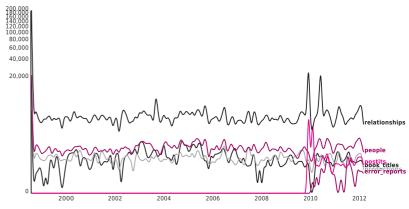
Pulse

Each database entry has a timestamp that records exactly when a user has clicked 'save'. We start to fantasise about how we could map the 'pulse' of this database; how we could show a dialogue between human and machine activity over time.

Would it be interesting to parallel the timeline of the database to changes in the field that the data relates to?



All database entries according to date of entry



Same graph, focused on a selection of tables (relationships, people, postits, booktitles, productions and $error_reports$)

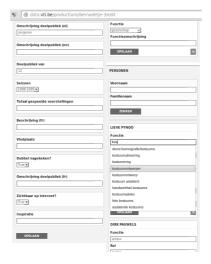
19

Functions and roles

The notion of 'function' in <u>data.vti.be</u> has fascinated us from the start. It makes sense in relation to the actual subject of the database (recording credits of people and organisations in relation to theater and dance productions) but also maps quite naturally to the concept of Linked Open Data that VTi has decided to model their data after. Central to this is that you organise data in triples, small clusters to express how one data-object relates to another:

Anne Teresa De Keersmaeker → choreography → Elena's Aria
Anne Teresa De Keersmaeker → dance → Elena's Aria
Cynthia Loemij → dance → Elena's Aria
Elena's Aria → co-production → Rosas

Therefore, each piece of data at <u>data.vti.be</u> is contextualised by links to other data, and these links themselves are 'qualified' through their function or role.



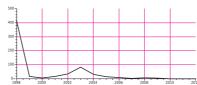
A production is linked to a person (in this case: Lieve Pynoo for costume design of the production Bernadetje) by picking a function from a list of suggestions.

It not only makes for an incredibly rich web of connections, but also allows us to potentially look at the shifts and changes that occur in how people qualify their relationship to their work and its outcome: productions.

Functions in time

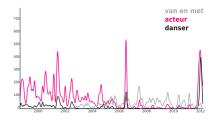
Since the collection of roles is mostly 'harvested' from websites and season brochures produced by performing arts organisations themselves, we expect changes and inconsistencies. Ideas about who to credit and how have changed over time. ¹³

But when we ask Floris about their procedure for creating new functions, we are surprised to find out that he has not created a new function since he started working at VTi three years ago. When we look at the creation dates of functions, we see that the last entry has indeed been made 2009-05-25 17:08:38.903 and that the creation of new functions has stabilised over time:



Amount of new functions created per year. In 1998 412 existing functions were imported from Microsoft Access into the current PostgreSQL database

Instead of looking at when new functions were added, we need to look at the popularity of functions over time. At what point were which functions attached to people and productions? We pick three of the most popular ones and compare their usage:



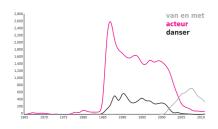
Functions entered by VTi: **actor**, **dancer** and **by and with** according to date of entry (time-stamp)

The graph above starts at 1998 (when first entries were recorded) and ends in September 2012, when we received the data dump. Halfway 2007 and again by the beginning of 2012, the functions **actor** and **dancer** were entered many times.

We produce a second graph, showing the same functions but now plotted according to the date of the production they were related to. Even when we have not taken into account whether the amount of productions changed for certain seasons, this graph seems to reflect the discus-

^{&#}x27;In addition, we need to take into account that so-called function descriptions are not stable. They are also historically determined. They are part of a creative process, subject to fads, and sometimes respond slowly to a changing practice.' Joris Janssens, 'Fabeldier komt op de kaart. "Spelen" en "maken" in het Vlaamse theater sinds 1993' ('Mapping the Mythical Creature. "Acting" and "creating" in Flemish theatre since 1993'), in: Courant 92, February-March 2010.

sion on making and acting that we referred to earlier. But we are most of all intrigued by the fact that there are little similarities between our first and second exercise. While the workflow for data collection at VTi seems tightly linked to the actual rhythm of premieres, these two graphs speak about very different temporalities:



Functions recorded in the field: actor, dancer and by and with according to date of production

Artistic vs. non-artistic

Since 1993, the list of available functions has expanded to 641 entries. Some overlapped and others were considered confusing. Many had never been used because they were inherited from a past incarnation as contact database: Minister

Minister of Culture, Responsible for personnel, Mayor.

van Cultuur, Personeelsverantwoordelijke, Burgemeester¹⁴.

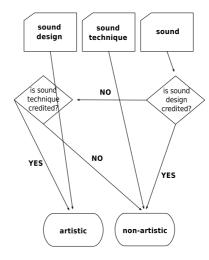
In 2010, around the time that the rising popularity of inclusive function descriptions such as **by and with** is being analysed in Courant 92: Over 'Spelen' en 'Maken', Bart starts to update the list.



20 most used roles and their changes. Redundant categories marked in pink (2010)

The update includes a 'normalisation' of descriptions. Dancer now is listed as dance; choreographer becomes choreography. The translation of a profession (musician, dramaturge, designer) into a function (music, dramaturgy, design) implies a subtle but significant linguistic shift: Anna Teresa De Keersmaeker is not a dancer, but her relationship to a particular production is dance.

Another decision is to include only those functions that are considered 'artistic'. It means that as of 2010 neither sound technique nor catering is logged in the database. In the process, the list of functions is reduced from 641 to 162.

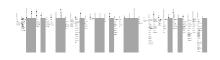


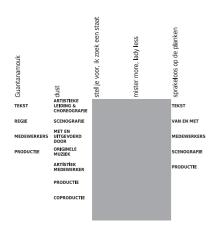
How to deal with an ambiguous credit such as sound? A decision tree for deciding whether an unspecified role should be considered 'artistic' or not (based on conversation with Floris).

We continue to be puzzled by this division. To decide between 'artistic' and 'non-artistic' work seems uncharacteristically presumptuous but from discussions with VTi-staff we understand that in the performing arts, the fault-line must follow a rather well established division of labour. Bart explains: 'Somebody that is on stage, or conceptually influences the artistic result is included. If it is just about technical execution, it's not'.

In order of appearance

We wonder how the order that credits appear on websites and in brochures reflects this division between 'artistic' and 'non-artistic'. If we assume that a function placed higher up in the hierarchy of credits, is considered as of more importance to the actual production than one that was placed lower, we might get a sense of where the field of performing arts would draw the line.





Overview and detail of credit listings for all 39 productions that premiered in Flanders in October 2011. Productions with no web accessible archive are marked in grey.

company performance text direction music soundscape film image lighting design costumes To get a sense of the way credit listings might differ and converge, we start replaying the workflow that Floris described to us earlier. Using the links he prepared for Martine in 20110916.doc, we make an attempt to harvest credit listings as they were originally formatted. Their vocabulary varies even more wildly than imagined (we find 159 different functions), but only then we realise how little information about the past is saved by theater and dance companies themselves.

On each website we find detailed information about current and upcoming productions, including descriptions, credits and images. But once the season is over, much of it goes missing.







There's no time like the present: web-pages with information about $Achter\ de\ Wolken$ ('t ARSENAAL) and $Turning\ Turning\ (CAMPO)$, one year later

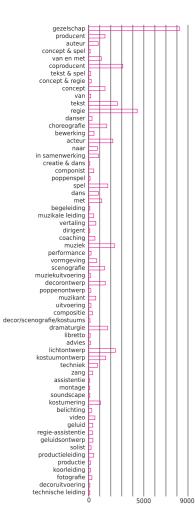
We return to the VTi-database. There is no record kept of the order that functions were originally communicated but since Martine enters credits usually one by one, using the actual listings as published by the companies, we might be able to get some idea of the hierarchy of credits through processing timestamps. Joris is skeptical about our method; we can only hope that Martine's workflow is consistent enough to produce data that we can use, even when our purpose is speculative.

We start processing the function table according to timestamps.

On 2007-06-11 between 16:36:23 and 17:05:58,11 credits were entered for the production Wisseltijd:

440663 Wisseltijd
2007-06-11 16:36:23 1 gezelschap
2007-06-11 16:36:34 2 spel
2007-06-11 16:36:52 3 tekst
2007-06-11 16:36:58 4 regie
2007-06-11 16:37:11 5 muziek
2007-06-11 16:37:18 6 soundscape
2007-06-11 16:37:25 7 film
2007-06-11 17:05:32 8 beeld
2007-06-11 17:05:40 9 belichting
2007-06-11 17:05:44 10 vormgeving
2007-06-11 17:05:58 11 kostumering¹⁵

For each production, we produce a similar list and rank functions in order of appearance. This is what we end up with:



Gezelschap (company), is both popular and usually entered first. This makes sense, since that information can not be copied from the credit list itself but implied through the source of the credit-listing. After producer follows author, concept and performance and by and with. Support functions such as design and dramaturgy have all ended up on the bottom half of the list.

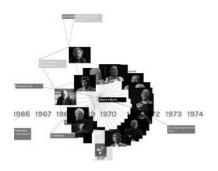
The results are messy and we are not really sure how to use them but somehow we are relieved to see the complex pattern of humans at work come through. It points at the complexity by which practices in and out VTi relate to each other, and how data histories are written, one entry at a time.



Functions that were most often entered first, are on top; bar length represents amount of entries

Biographies

For <u>toneelstof.be</u>, we used data from <u>data.vti.be</u> to dynamically map relations between people, productions and organisations.



In Toneelstof we only scratched the surface of the data that we were introduced to, and we are happy to work on a follow-up entitled Who's who. This time the focus shifts from the historical perspective of productions to data about people. We have been commissioned to develop interactive 'views', aimed at the indi-

We have to finish our data-diary by the end of October. At this point we have just begun sketching visualisations for the online version of Who's who that will be launched in December 2012.

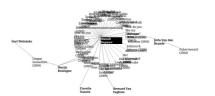
viduals portrayed in this database. It would provide an as of yet unavailable image of both the field of performing arts, and the roles individuals play within it. Exploring these online images could 'support the self-definition of actors in the field'. An interesting challenge!¹⁶

Co-occurrence

At <u>data.vti.be</u> there is currently no view that permits web users to see connections between people. The data is there but you need to manually follow links from web-page to web-page.

Manah Depauw

DETAILS			PRODUCTIES						
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► Johnson & Johnson ICO			➤ Programmaboekie:	Manah	DOCU				



Same data, different image: two views on Manah Depauw each according to data in the VTi-database.

We start with visualising relations between people that have been credited for the same production. The resulting anemone-like figures are drawn with the help of force-directed graph layouts provided by d3.js, a JavaScript library that supports transforming data into dynamic diagrams.

Each production forms a 'hub', an event that links people to each other. But what constitutes a 'network' in this database? Obviously, a long and varied career produces many co-occurrences in a database. Does the fact that people appear on stage together constitute a relationship? If many people are credited for a particular production, should each relationship 'weigh' less? If a person is multiply credited with several roles for the same production, what influence does that convey on the network?

Profiles

We are not just interested in data relations between people, but also in how their individual careers might become legible through data that is collected by VTi over time. We try out another type of visualisation, 'tree-maps', to display all the productions related to a particular person, grouped by their 'function', or the credited position or role they had in the production.

We focus on people that have at least one function linked to at least one production. More likely, they'll have multiple functions assigned to multiple productions. This is what Kishan Singh, Sien Eggers and Anne Teresa De Keersmaeker look like as a tree-map:



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Anne Teresa De Keersmaeker

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Tree-mapping careers: Kishan Singh entered the database in 2008 and was entered in 5 different functions for 15 productions since then. Sien Eggers appeared in 1980. She is linked to 95 productions in 6 different functions. Anne Teresa De Keersmacker first entered in 1981 and was recorded in 17 different qualities related to more than 350 productions.

At first sight, these patterns reflect the varying intensity of three very different artistic careers. But they also reflect their particular relation to the database.

First of all, in many productions, De Keersmaeker is credited for both choreography and dance and those productions appear twice. In addition, following the structure of the VTi-database, productions are linked to a particular season and may thus appear more than once when spanning multiple seasons. As a result, especially De Keersmaeker's tree-map gets distorted. For productions until 2006, Sien Eggers is often listed as acteur (actor). In later productions, she is credited for spel (performance), probably related to an update of functions which took place in 2010. Eggers has also participated in many television and film productions that are not recorded in the VTi-database.

Newcomer Kishan Singh is amongst others listed for technical design and technique in relation to respectively three and four productions. From the decision flowchart reference we know that these two functions probably mean the same thing. And lastly, the original production credits for Locked-in by De Queeste list Singh for lighting design, technique and production. The database recorded his credit for lighting design but not those for technique and production.

Types



At a second meeting about Who's who at VTi, Joris proposes to look for three types of 'makers' that he thinks could be legible from VTi-data, and ultimately from the visualisations we come up with:

Type 1: Anne Teresa De Keersmaeker - dense connections to a single organisation

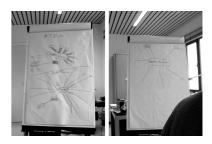
Anne Teresa de Keersmaeker has her own company, Rosas. She works with a stable group of dancers for a longer period of time.

Type 2: Alain Platel - looser connections to multiple organisations
Alain Platel founded les ballets C de la
B in 1984. Over the years the company has developed into an 'artistic platform' for multiple choreographers that each bring along their own performers and co-productions.

Type 3: *Manah Depauw - many tem*porary connections to multiple organisations

Manah Depauw is a 'typical freelancer'. She has her own company, but also works for other companies. Her data-biography should show many temporary connections to various organisations and people.

He draws us three graphs:



His proposal is exciting, and helps us test the sometimes dizzying abstractness of RDF-graphs against real people. But we are very aware that these seemingly simple images represent a complex set of relationships between people, organisations, functions and time. We only have a few elements to play with:

How many different organisations does a person have strong relations to? How many different people does a person co-occur with often? How many different functions does someone have over time?

We start by analysing written biographies published by De Keersmacker, Platel and Depauw on their own websites, to see if we can discover any of these typologies. We mark up every mention of function, production, organisation and person:

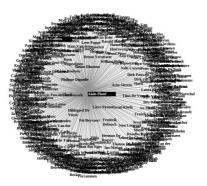


Even with formatted texts like these, differences are hard to interpret. Does a 'type 3' always have many mentions of many things?

We return to our sea-anemone sketches to see if we can already recognise our three types there. We haven't yet figured out how best to deal with the place of organisations, more specifically: dance and theater companies. They are actually conflations of people and productions, but in the database they have the same status as an individual. So, we are still looking at people-to-people relations, linked through productions.

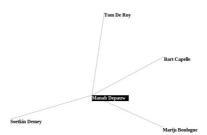
We start by hiding 'production hubs'. Lines now directly connect people whenever they have co-occurred in the same production. We also adjust the distance between people according to their co-occurrence count:





Manah Depauw vs. Alain Platel: Depauw has many connections on the same level; only a few are pulled closer. Platel has a much denser and more distributed range of co-occurrences.

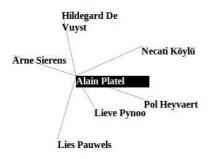
Especially for long-running careers such as those of De Keersmaeker and Platel, the amount of connections found is overwhelming, and our web browser starts to choke on the many lines it is asked to draw. We zoom in by limiting the graph to show only people that have 10 or more co-occurrences:







Filtered further down to 20 co-occurrences, we realise that Platel shares the most intense data-relation with costume designer Lieve Pynoo (41 co-occurrences):



But none of the people that Alain Platel has the closest data-relation to, are listed on the 'who's who' page at the website of his company, les ballets C de la B.

les ballets C de la B

ARTISTIC TEAM

Alain Platel (director)

Christine De Smedt (choreographer / dancer)

Koen Augustijnen (choreographer - director) Lisi Estaras (choreographer / dancer)

Sara Vanderieck (artistic assistance Alain Platel)

ADMINISTRATION

Erna Van Akoleyen (administrator and personnel management)

Herwig Onghena(financial manager)

Lieve Bosmans(accountant)
Lieven Thyrion(general manager)

PRODUCTION

coordinator of productions

COMMUNICATION

Hilde Debuck (external communication & publications)

Nele Dhaese (press and public communication)

TECHNIQUE

Carlo Bourguignon (in charge of technique - projects)

Jan Mergaert (technical director)

Kurt Lefevre (in charge of technique - projects)

Luc Laroy (transport set)

Serge Vandenhove (technical administrator)

Wim Van de Cappelle (in charge of technique - projects)

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