

The collage illustrates the digital workflow of the Costume Core project. It shows the integration of archival records (SharePoint), structured data entry (Cataloging Worksheet), physical artifacts (Wedding Dress of Isabel Miller Board), and a public-facing digital collection (Vassar College Costume Collection).

VRA Foundation Project Grant

# Costume Core Toolkit

Mid-project Report - February 2020

*compiled by Arden Kirkland*

# Project Overview

This project provides a toolkit to streamline the process of setting up standards-based, interoperable metadata for collections related to the study of historic clothing. One goal of this is to combat the bias toward artifacts with significant provenance such as a known maker or date by adding structural and demographic details to show a wider range of the culture, economy, and politics which they represent. An application profile called Costume Core builds on existing standards including Dublin Core, VRA Core, Cataloguing Cultural Objects, the Art and Architecture Thesaurus, and the Europeana Fashion Thesaurus to support such metadata for historic clothing.

The Costume Core Toolkit provides files and templates to help collection managers set up or remediate digital collections following the guidelines from Costume Core. This includes an extension of the VRA ontology (in OWL/RDF) along with cataloging templates in Google Sheets format which can be downloaded as CSV or Excel for generic, platform-agnostic use, and formats for Omeka S and JSTOR Forum.

Costume Core uses “micro-thesauri,” subsets of terms pulled from disparate parts of the Art and Architecture Thesaurus, Europeana Fashion Thesaurus, fashion vocabulary from the International Council of Museums, and other terms created as entities in Wikidata by members of the Fashion WikiProject. These terms are grouped into shorter controlled lists to streamline the process of choosing terms, especially for catalogers with less subject matter expertise. The Toolkit shares these terms, along with URIs to be used as Linked Data, not only as generic CSV/Excel files, but also in the specific formats needed to import them into JSTOR Forum and Omeka S. The content in the toolkit will be available to the public under a Creative Commons BY - SA license.

# Project Status

The most significant support that the funding from this grant has allowed is the time to address Costume Core as an ontology, with the challenges of modeling the relationships between the different concepts that are the basis for the detailed structural description of an artifact such as a piece of clothing.

Work has progressed steadily over the last six months on Costume Core as an ontology, including microthesauri of re-grouped terms that have been downloaded via SPARQL from standard vocabularies including the Art and Architecture Thesaurus, the Europeana Fashion Thesaurus, the fashion vocabulary from the International Council of

Museums, and other terms created as entities in Wikidata by members of the Fashion WikiProject (screenshots and links below).

Existing data from the historic clothing collections from Vassar and Smith Colleges has been downloaded and remediated using a combination of Open Refine and Google Sheets, both to normalize the use of costume core terms in some fields, and to change the formatting of some fields based on Costume Core's interpretation of Cataloging Cultural Objects. A template was created in Google Sheets with formulas to aid in mapping existing data to the Costume Core structure. Additionally, ten examples from each collection have been further enriched with the more granular detail using the Costume Core elements. These examples will be made available both in Google sheets (downloadable as Excel or CSV) and in a sample FileMaker database, to be able to see the potential of searching across collections from different institutions.

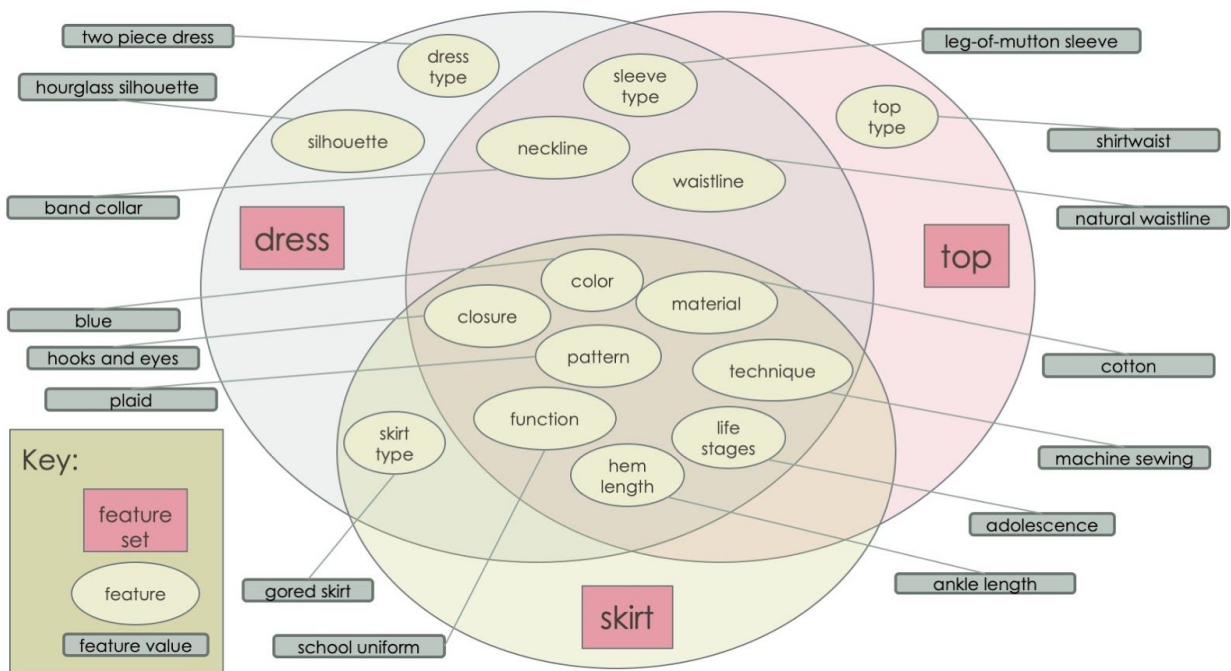
This work has made it possible to test Costume Core with a handful of clothing study collections. Feedback so far has shown that the greatest challenge of this project is to balance the needs of both experienced costume historians and novice level students and volunteers. Testing with faculty members, and use of datasets created by faculty and consultants, has resulted in the choice and amount of terms tipping too heavily toward the side of experienced users. Faculty testers have jumped back and forth between suggesting advanced terms, but then recognizing from their work with introductory-level students that they would not search in the same way. The work in the remaining months of the project will focus on returning the balance to benefit novice users, through a reduction in the choice of terms within any one list and intermediate groupings of terms that are based more on common structural details than on period based vocabulary. More testing will be conducted with college undergraduate students this spring to make sure the Costume Core terms entered by catalogers, along with use of visual supports, can help novice searchers to search across cultures, periods, and different institutional collections.

Some unexpected opportunities arose during the fall, delaying the proposed timeline slightly, but enriching the scope of resources that will be available to the public at the end. Notably, it became apparent that the maintenance of the Costume Core terms, and their relationships to other existing vocabularies and available images, required more than just simple spreadsheets. A relational database using FileMaker was created to store data in related tables for each of the consulted standard vocabularies. With this addition it seemed only natural to also create a FileMaker template for costume collection data entry, which will be freely available to end users who have a FileMaker license, as another option allowing better support for using drop-down lists with fields where multiple terms can be entered, something that is difficult in a standard

spreadsheet. Work in both Omeka S and JSTOR Forum began with initial steps last fall, and will continue between now and March, based on the work already done in other formats.

Additional testing opportunities beyond Vassar and Smith were also identified, partnering with Loyola Marymount University (LMU) and the University of Georgia (UGA) through a new initiative of the Costume Society of America to pilot a Digital Angels program. Testing the Google sheet templates with LMU required the addition of liturgical terms to the Costume Core micro-thesauri, to support their collection of vestments. Work with the collection at UGA has added some terms from non-Western dress, much needed to move the project beyond the primarily Western focus so far.

## Significant Milestones (Screenshots and Links)



The Feature Set model that is the foundation of the relationships in Costume Core: features sets are created for different types of objects, with only the features that are appropriate for that object. Terms (feature values) are stored in a single table, using the column for features like a broader term, to filter into shorter lists.

1	A	B	C	D	E	F	G	H	I	J
1	Identifier	Cataloguer With Date	Work Type	Color Main	Color Secondary	Pattern	Medium	Technique	Neckline	Collar
2	VC2004023	Arden Kirkland 2004-05-07   Margaret Thompson & Madeleine Boesche 2/13/10; Julia Fields Fall 2011	dress	white	black   gray	stripes	cotton   silk   m etal   elastic   fe lt	machine sewing   hand sewing   princ ess seam	strapless   sw eetheart	
3	IP2012001	Jenna Doherty & Hilde Wulf, 2014-01-27	dress	tan	brown   blue		brocade   silk   satin   ribbon	machine sewing   hand sewing   princ ess		band collar
4										
5										
6										

Template for data entry using Google Sheets, with drop-down lists and hover-over instructions (see links below).

B	C	D	E	F	G	H	I
color	closure	closure placem	neckline	collar	sleeve type	sleeve length	waistline
beige	buckle	center back clo	ballerina neckli	ascot	batwing sleeve	cap sleeve	angled waistlin
black	buttons	center front clo	boat neck	band collar	bishop sleeve	elbow-length sl	asymmetrical
blue	clasp	double-breaste	cowl neck	bertha	dolman sleeve	extra long slee	bare midriff
brown	eyelets	neck closure	crew neck	bow collar	engageante	long sleeve	basque
burgundy	frogs	off-center back	décolletage	Chelsea collar	foresleeve	short sleeve	bolero
coral	grommets	off-center front	funnel neck	convertible coll	forward sleeve	three quarter sl	curved
cream	hooks and eyes	side closure	halterneck	jabot	hanging sleeve		dropped
fuchsia	lacing		henley neckline	Mandarin collar	Juliet sleeve		high
gold	snaps		keyhole necklin	Napoleon collar	kimono sleeve		hip-level
gray	ties		off-the-shoulder	Peter Pan collar	lantern sleeve		natural waistlin
green	toggles		round neck	polo neck	leg-of-mutton s		no waistline
lavender	velcro		square neck	Puritan collar	one sleeve		pointed
maroon	zipper		strapless	ruffled collar	oversleeve		
metallic			surplice necklin	sailor collar	pagoda sleeve		
multicolored			sweetheart nec	shawl collar	petal sleeve		
navy blue			v-neck	tailored collar	puff sleeve		
orange				turtleneck	raglan sleeve		

Terms list in the Google Sheets template: features and feature values for drop-downs.



ribbon

CC00238

<http://vocab.getty.edu/aat/300014668>

Strips of fine textile, such as silk, satin, or velvet, often with a cord finish along both edges instead of selvage, forming a narrow strip or band,

Art and Architecture Thesaurus (AAT)

<https://opendatacommons.org/licenses/by/1-0/>

material

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taffeta

CC00245

<http://vocab.getty.edu/aat/300249434>

Crisp textile, typically in plain weave, sometimes with a fine crosswise rib and a smooth lustrous surface on both sides, originally of silk, now of

Art and Architecture Thesaurus (AAT)

<https://opendatacommons.org/licenses/by/1-0/>

material

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velvet

CC00247

<http://vocab.getty.edu/aat/300133711>

Warp pile weave, typically silk, with a short, soft dense pile produced by a supplementary warp that is raised in loops above the surface of the

Art and Architecture Thesaurus (AAT)

<https://opendatacommons.org/licenses/by/1-0/>

Layout from the Filemaker database to maintain the Costume Core terms, with related images and identification of a preferred URI and mapping to other vocabularies. Images are from Wikimedia Commons and can be viewed by the public in structured data through Wikidata (see links below).

id	display_nam...	features	description_text_en	URI	AATID	EFTID	WikidataID
CC00513	wrap skirt	skirtType	a skirt that wraps around the waist with an overlap of	http://www.wikidata.org/entity/Q1485316			Q1485316
CC00514	slashing	technique	decorative slit cut in any part of a garment, especially	http://vocab.getty.edu/aat/300254833	300254833		Q10461476
CC00515	clasp	closure	Fasteners made of two or more parts, often of metal,	http://vocab.getty.edu/aat/300239507	300239507		
CC00517	knickerbockers	pantsType	Loose-cut breeches banded at the knee.	http://vocab.getty.edu/aat/300214558	300214558		
CC00518	outerwear	ICOMtype	Garments worn over other garments as the outer layer,	http://vocab.getty.edu/aat/300209265	300209265		
CC00519	nightwear	function	Clothing worn at night, especially garments worn to	http://vocab.getty.edu/aat/300211604	300211604		
CC00520	tent	silhouette	dress that hangs loose from shoulder to below the hips,	http://www.wikidata.org/entity/Q10707950			Q10707950
CC00521	a-line	silhouette	triangular or A-shaped silhouette in clothing,	http://www.wikidata.org/entity/Q277835			Q277835
CC00522	shift	silhouette	Dresses which hang straight from the shoulders,	http://vocab.getty.edu/aat/300214100	300214100	10859	
CC00524	bloomers	pantsType	Drawers with full, loose legs gathered above or below the	http://vocab.getty.edu/aat/300210537	300210537		
CC00525	shorts	pantsType	Exposed bifurcated garments extending from the waist or	http://vocab.getty.edu/aat/300209930	300209930		
CC00526	skort	pantsType	full shorts made to look like a skirt, or shorts with a skirt-like	http://www.wikidata.org/entity/Q363031			Q363031

Table from the Filemaker database to maintain the Costume Core terms, with identification of a preferred URI and mapping to other vocabularies (can be downloaded for sharing in other places).

The screenshot shows the JSTOR Forum interface. On the left, there is a sidebar with a 'Lists' section containing various categories like 'Artstor Classification', 'Artstor Country', 'Cataloger Name', and 'Historic Dress: Closure'. The 'Historic Dress: Closure' list is selected and highlighted. The main content area displays a table of terms for this list. The table has columns for 'Term', 'Source', 'Definition', 'URI', and 'Term ID'. The terms listed include 'buckle', 'buttons', 'eyelets', 'frogs', 'grommets', 'hooks and eyes', 'lacing', and 'snaps'. Each row has a checkbox on the left for selection. The interface also includes a search bar and an 'Add New Term' button.

Term	Source	Definition	URI	Term ID
buckle	Art and Architectu...	Devices used for fastening consisting ...	http://vocab.getty....	27511495
buttons	Art and Architectu...	Disks, balls, or devices of other shape...	http://vocab.getty....	27511496
eyelets	Art and Architectu...	Small holes, usually round and finishe...	http://vocab.getty....	27511490
frogs	Art and Architectu...	Two-part fasteners for a coat, jacket, ...	http://vocab.getty....	27511485
grommets	Art and Architectu...	Metal or plastic ringlike devices that pr...	http://vocab.getty....	27511488
hooks and eyes	Art and Architectu...	Two-part fastening devices, as on a g...	http://vocab.getty....	27511486
lacing	Wikidata	Cord, tape, or ribbon used for fastenin...	http://www.wikidat...	27511487
snaps	Art and Architectu...	Fastening devices that close with a cli...	http://vocab.getty....	27511489

Costume Core terms as Lists in JSTOR Forum, imported via Excel.

#0-9	
<u>(B) A-Line</u>	
<u>27 rings</u>	
A	
<u>A line (3)</u>	
<u>A-line (8)</u>	
<u>A-line, floor length</u>	
<u>A: A-line</u>	
B	
<u>B: A-line</u>	
<u>bell</u>	
<u>Bell-shaped</u>	
<u>Below knee, fuller</u>	
<u>box pleats</u>	
C	
<u>Circle (2)</u>	
	A
	<u>a-line skirt (12)</u>
	B
	<u>bell skirt (3)</u>
	<u>bustle skirt</u>
	C
	<u>circle skirt (2)</u>
	F
	<u>flared skirt (10)</u>
	G
	<u>gored skirt (5)</u>

Before and after comparison of reconciled data in the Vassar College Costume Collection: prior free-text entries are replaced by controlled terms and are now entered via a drop-down list. See more examples at <http://vcomeka.com/vccc/references> (though some lists are still in the process of remediation)



A resource template for costume artifacts in a sandbox for Omeka S, combining classes and properties from the VRA, Dublin Core, and Costume Core ontologies.

Links:

Template for data entry using Google Sheets -

<https://docs.google.com/spreadsheets/d/1WdhQwCQjJwpUg-0qozrAewvbeKLo8qBbGEV9CBUnxA0/edit?usp=sharing>

Revised element definitions and crosswalks -

<https://docs.google.com/spreadsheets/d/1Q8yfU6PfcVgNSo-qwNBXftXibOllwlxHPHUGbQeODUQ/edit?usp=sharing>

Mapping Template -

<https://docs.google.com/spreadsheets/d/14VRelcZaYlbKLMpC05ZQbz-QC7NjQYkQcr-C52sWOYc/edit?usp=sharing>

Current list of terms with mapping to other standards -

[https://docs.google.com/spreadsheets/d/1vKaEX4CzQtqsKdELJHIXyz6imNJd\\_675MIS5bL-uYYg/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1vKaEX4CzQtqsKdELJHIXyz6imNJd_675MIS5bL-uYYg/edit?usp=sharing)

Costume Core ontology as RDF - <http://ardenkirkland.com/ontologies/CostumeCore/CostumeCore-o.3.4.rdf>

Google form for one object at a time data entry, resulting in a Costume Core formatted spreadsheet - <https://forms.gle/tQ1RXh1EA3DBn5VWA>

Wikidata tables with images and vocabulary IDs -

- Necklines-[https://www.wikidata.org/wiki/Wikidata:WikiProject\\_Fashion/To\\_Do/Necklines](https://www.wikidata.org/wiki/Wikidata:WikiProject_Fashion/To_Do/Necklines)
- Collars-[https://www.wikidata.org/wiki/Wikidata:WikiProject\\_Fashion/To\\_Do/Collars](https://www.wikidata.org/wiki/Wikidata:WikiProject_Fashion/To_Do/Collars)
- Sleeves-[https://www.wikidata.org/wiki/Wikidata:WikiProject\\_Fashion/To\\_Do/Sleeves](https://www.wikidata.org/wiki/Wikidata:WikiProject_Fashion/To_Do/Sleeves)

## Updated Timeline

- August 2019
  - Download existing datasets from both Vassar and Smith collections
    - remediation process, using OpenRefine and Excel, to match controlled vocabularies
  - Update Costume Core Definitions and Crosswalk - v0.4
  - Create template in Google Docs, with notes / tooltips, dropdown lists for terms, and example rows
  - Download relevant terms from AAT and EFT as “micro-thesauri” via SPARQL (via Getty and Wikidata SPARQL endpoints)
- September 2019
  - Refine Costume Core ontology RDF using open source Protege software
  - Work with a “sandbox” instance of Omeka S
    - Import Costume Core extension of VRA Core as RDF
    - Create resource template for clothing artifacts
- October 2019
  - Import Costume Core terms into a Filemaker database, to more easily track revisions and add images
  - Design structure of user testing process: “think-aloud” activity (recorded as screencast in Zoom)

- Searching based on a research question, and for a known object
    - Data entry using each different template, based on a photograph
- November 2019
  - Create Google Form to correspond to Google Sheets template, for one-at-a-time data entry
  - Visit to Smith - first cycle of user testing with Kiki Smith
  - Continued revisions to ontology and templates based on user testing
- December 2019
  - Remote support for Digital Angels process at LMU - second cycle of user testing with Monica Sklar and Leon Weibers
  - Creation of mapping template and process using Sheets
  - Adding images to Wikidata items before exporting via SPARQL to Costume Core terms database in Filemaker
    - Available to public in dynamic tables (see links)
  - Create template Filemaker database as another data entry option, using related tables with vocabulary terms
  - Draft documentation for each template / process
- January 2020
  - Addition of more concepts via AAT, EFT, Wikidata, and ICOM
    - Reconciliation with IDs, URIs, and definitions for all
  - Work with Smith and Vassar data
    - Remediation of entire data set to match Costume Core formats
    - Enriched data entry for 10 objects using more granular fields
  - Work with instance of JSTOR Forum for HistoricDress
    - Adapt existing cataloging forms to add Costume Core elements
    - Create short controlled vocabulary lists from ontology, using Excel
  - Third cycle of user testing
    - Visit to Smith - search tests (based on research question and known item search), guided data entry, card sorting
    - Visit to Vassar - search tests (based on research question), discussion of features needed for student / class use
  - Import sample data from Smith, Vassar, and UGA into Filemaker database template to test cross-collection compatibility
  - Re-import remediated data to Vassar Omeka instance
- February 2020
  - Continue to refine Costume Core ontology using open source Protege software
    - Update AAT / EFT URIs and labels as related in FileMaker database

- Continue work with a “sandbox” instance of Omeka S
  - Incorporate short Costume Core term lists as drop-downs, either using Custom Vocab module or adapting either the AutoSuggest or Rights Statements modules
- Copy templates / modules / etc. from Omeka sandbox instance to a new Vassar instance and from HistoricDress JSTOR Forum instance to Smith College Historic Costume Collection instance
- Re-import remediated data to Smith JSTOR Forum instance
- Share draft Toolkit with members of the VRA and CSA, seeking more feedback
- Pursue possibility of sharing JSTOR Forum Cataloging Form Template with interested institutions via a shared project
- March 2020
  - additional round of user testing with undergraduates at Smith and Vassar
  - Finalize documentation and downloadable templates / tools
  - Share online via my website, at <http://www.ardenkirkland.com/CostumeCore/>
  - Deposit toolkit contents in SU’s institutional repository, SURFACE
  - Submit a Final Report & Financial Statement
  - Share the toolkit through a presentation at the VRA conference in Baltimore
- June 2020
  - Lead hands-on practice with the Toolkit in a 3 hour workshop for the annual symposium of the Costume Society of America in NYC

## Collaborators and Partners

Arden Kirkland, Adjunct Instructor (Syracuse University) and Independent Digital Librarian, Project Manager

Kenisha Kelly, Lecturer of Costume Design, Vassar College Department of Drama, Project Participant

Kiki Smith, Professor of Theatre, Smith College, Project Participant

Added:

Pamela A. Prior, Costume Shop Coordinator, Vassar College Department of Drama, Project Participant

Holly Hummel, Senior Lecturer Emerita in Drama, Vassar College Department of Drama, Project Participant

Monica Sklar, Assistant Professor and Liaison to the Historic Clothing and Textiles Collection, University of Georgia, Project Participant

Leon Weibers, Associate Professor of Costume Design, Loyola Marymount, Project Participant