Material Issues: Lighting, Digital Imaging, and Physical Objects

Ohio Digitization Interest Group
March 31, 2014

Amy McCrory
Digital Imaging Specialist
The Ohio State University Libraries
1. Digitizing glass slides

2. Photographing books in 3D
Digitizing glass slides
Magic lantern projector
Magic lantern projection
Pose plastique
Pose plastique model
Pose plastique model slide
Pose plastique slide
Name of manufacturer on the tape: Kliegl Brothers Stage Lighting
Flatbed scanner, very simplified diagram
Reflected light

Reflective cover

light  lens
Transmitted light

Transparency adapter cover

light

light  lens


dark
Reflected image

Reflective cover

light  lens
Transmitted image
Watercolor sketches from manufacturer’s catalog

C13 THE SNAKE CHARMER.

C14 SPRING.

C15 STATUE OF LIBERTY.

C16 THE SALUTE.
Photographing books in 3D
Photographing books in 3D

1. Study photographic lighting
Photographing books in 3D

1. Study photographic lighting
2. Think about the physical properties of the objects
Photographing books in 3D

1. Study photographic lighting
2. Think about the physical properties of the objects
3. Think about how light will interact with them
Photographing books in 3D

1. Study photographic lighting
2. Think about the physical properties of the objects
3. Think about how light will interact with them
4. Create a backdrop that won’t interfere with the objects
THE HOLY BIBLE
CONTAINING THE
OLD AND NEW
TESTAMENTS:
WITH THE
APOCRYPHA
TRANSLATED
Out of the Original Tongues,
AND
With the former Translations diligently compared and revised,
By the special Command of King James I., of England.
WITH AN
INDEX.

United States of America,
PRINTED AT THE PRESS IN WORCESTER, MASSACHUSETTS,
BY ISAIAS THOMAS.
Sold by him in Worcester 7 and by him and Congre, at Town's Square, No. 43, New-ran Senate, Boston.
The names and order of all the Books of the Old and New Testament, with the name of their Chapters, and the leas at how they begin.

The holy Gospell of Iesu Christ.

The Argument.

The bookes called Apocalypsee.

The bookes of the New Testament.
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<th>Books of the Old Testament</th>
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<td>2 Kings</td>
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<td>Joel</td>
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<td>Jonah</td>
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<td>Zechariah</td>
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<td>Malachi</td>
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**The books called Apocrypha,**

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<tr>
<td>Tobias</td>
<td>12</td>
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<tr>
<td>Judith</td>
<td>12</td>
</tr>
<tr>
<td>1 Maccabees</td>
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<td>2 Maccabees</td>
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<td>Esther</td>
<td>12</td>
</tr>
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<td>Daniel</td>
<td>10</td>
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<tr>
<td>Mark</td>
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</tr>
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<td>34</td>
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<td>6</td>
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</tr>
<tr>
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<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Colossians</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>1 Thessalonians</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: The leaves are counted from the beginning of the book.
The booke of Iofuah, whom the Hebrews call Jofuah.

The first Chapter.

1. The Lord spake by Iofuah, in the hand of Samaria, in the days of Joram the son of Ahab, and Jehu the son of Nimshi, [in] the twenty and second year of Akab, king over Israel.

2. And the word of the Lord came to Iofuah, saying,

3. Thus saith the Lord, Take thee a weight of gold, of six hundred shekels, according to the money of the land, and put it in thy bosom, and say, The Lord sayeth, I will give this marks, [for] this shall be a token to thee of the word of the Lord.

4. And take thee a book of the books, and write in the book this word, I will destroy this city, and the Lord will give it to the Chaldeans for a prey, and to the Babylonians for a spoil, because they have utterly provoked me to anger.

5. And lo, I will bring evil upon this place, and upon the inhabitants thereof, even all the curses that are written in this book, because they have not hearkened to the voice of the Lord, nor done according to all that is written in this book of the law.

6. For this city is insensible of all the furies of the Lord, which he brought upon them, and they have not feared him, nor spoken of it, nor has this come into their mind.

7. Therefore thus saith the Lord, I will bring upon this place all the evil that is written in this book, and the prophets of Israel and of Judah shall cry over it, saying, because the inhabitants thereof have not hearkened to the words of this book, which the Lord spake by Iofuah the prophet, to the inhabitants of Jerusalem, and to all Judah, and to all the inhabitants of the cities of Judah.

8. Therefore thus saith the Lord, because thou hast not hearkened to the words of the prophets which I sent thee by my servants the prophets, but hast said, I will not hear, therefore shall the house of David fall by the sword, and this house shall be a sign of mourning, and a [place of] Guang over all the houses of Judah.

9. For I will make Jerusalem a desolation, a city of mourning, and a howling, and a sighing, and a place of mourning, and a place of desolation forever.

10. And it shall be said of this house, This is the house that is built by unclean hands, and for this shall the inhabitants of Jerusalem and all Judah weep, and all the inhabitants of all the cities of Judah shall howl over it, saying, What a desolation that is, what a desolation.

11. Therefore thus saith the Lord, I will make this city a desolation, a place of mourning, and all the houses of the city shall perish, and none shall be left.

12. And the Lord shall give Judah to the Babylonians, and all the inhabitants thereof shall be carried away captive, and every one shall go into his own place, saying, The Lord, I have sinned against him, and I have done that which is evil.

13. And they shall fall by the sword, and by the famine, and by the pestilence, and they shall be taken away out of this place, and none shall be left.

14. Therefore thus saith the Lord, I will stretch forth my hand upon this city, and upon all the inhabitants thereof, and I will make them a desolation, a place of mourning, and a howling, and a sighing, and a place of desolation forever.

15. And I will cause famine to be in the land, and the sword to sweep over it, and the pestilence to be in all the cities thereof, and I will destroy all the inhabitants of this city, and none shall be left.

16. Therefore thus saith the Lord, I will stretch forth my hand upon this city, and will destroy all the inhabitants thereof, and I will make them a desolation, a place of mourning, and a howling, and a sighing, and a place of desolation forever.

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30. Therefore thus saith the Lord, I will stretch forth my hand upon this city, and will destroy all the inhabitants thereof, and I will make them a desolation, a place of mourning, and a howling, and a sighing, and a place of desolation forever.
3D setup
Curved paper creates a smooth background
Light the object enough to get detail in dark areas
Plain bindings still have interesting features, like texture
Signs of wear should be emphasized, not downplayed
Flat overhead shot is pretty dull
3D shot with raking light is much more interesting
Some books show better in a composition than as lone volumes
Low contrast can be cool too
Low contrast can be cool too
Low contrast can be cool too
Some items are so pedestrian, it’s hard to reveal their significant qualities—but keep trying
Some items are so pedestrian, it’s hard to reveal their significant qualities—but keep trying
Some items are so pedestrian, it’s hard to reveal their significant qualities—but keep trying
Some items are so pedestrian, it’s hard to reveal their significant qualities—but keep trying
Scale
Scale
Scale
Scale
Scale
Very large items present their own problems. This one won’t stand up on its own
Reflective surfaces
Reflective surfaces
Too much light creates glare on the gold letters, making them unreadable
Blocking light with a small piece of black cardboard reduces glare
Lit from sides, text is readable but not too bright
Lessons

Have at least one person present to assist

• arranging and supporting items
• turning pages
• positioning lights
• blocking light
• critiquing shots
• coming up with new ideas when you’re burned out
Lessons

Have supplies on hand

• weights
• clear exhibit tape
• book props
• black cardboard (for blocking light)
• white foam core (for reflecting light)
Lessons

Get an inventory/shot list

While you are busy thinking about setup, lighting, and taking shots from multiple angles, you need a highly organized process underneath, so you don’t lose track of where you are.

Organization up front allows you to do things on the fly, be more creative.