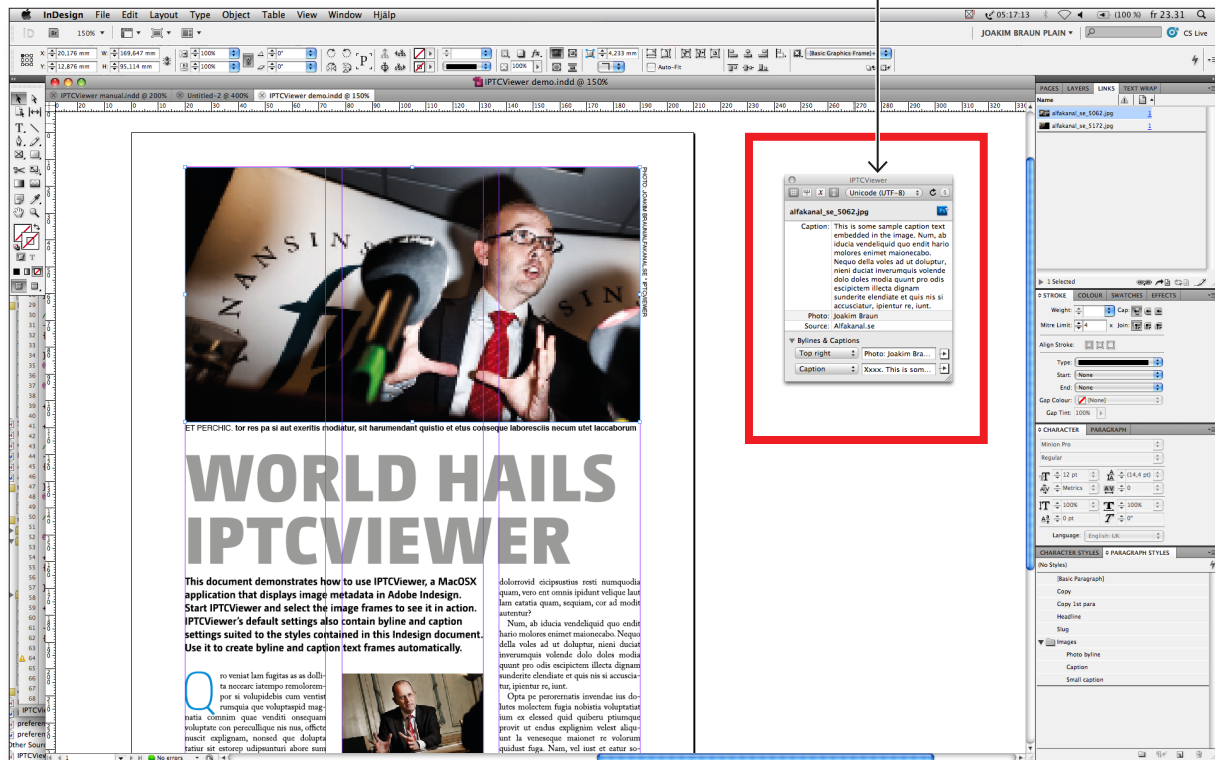


IPTCViewer is a floating panel that updates with metadata from the current image in Indesign.

IPTCViewer can also create caption and byline text frames from image metadata.



IPTCViewer 2.0

View image metadata in Indesign
and create byline and caption text frames

Release: January 7, 2012
Latest version: jfbraun.com/iptcviewer
Author: Joakim Braun joakim.braun@jfbraun.com
Pricing: Shareware, 30 Euros (PayPal to account joakim.braun@jfbraun.com)

User manual

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1. Introduction

IPTCViewer for MacOSX **displays image metadata** (IPTC and XMP) for selected images in Adobe Indesign. IPTCViewer handles JPEG, TIFF, EPS/AI/PDF and native Photoshop files.

IPTCViewer also creates **automatic photo captions and bylines** in Indesign. These can be positioned at any image frame edge and formatted with paragraph styles, object styles and color swatches of your choice.

Similar functionality is included in recent Indesign versions.

IPTCViewer's implementation is much more flexible in terms of content and formatting.

If you're doing professional newspaper or magazine layouts in Indesign for MacOSX, and handle a lot of photo agency material, you'll find IPTCViewer useful.

2. A note to users of earlier versions

This is a complete rewrite of IPTCViewer. You'll find it improved, easier to use and much more stable. But – you'll also need to set up all your byline and caption settings from scratch.

Some settings and options have been removed to make IPTCViewer more intuitive to use. The IPTC dialog and IPTC peeper have been rolled into the main panel. The handling of publications is much simplified (no more “scan a folder for settings files”).

3. License, pricing and registration

IPTCViewer is shareware. Please register your copy by paying **30 Euros per installation** (computer or individual user). Payment through **PayPal** (www.paypal.com), account **joakim.braun@jfbraun.com**. You will receive a registration code by e-mail. Select **Register** in IPTCViewer's main menu item (see next page) and enter the information into the registration dialog.

Please inquire about group or site licenses for multiple users.



The unregistered copy of IPTCViewer will append the text “IPTCViewer” to all captions and bylines created with it.

4. Installation

IPTCViewer comes as a Zip archive which also contains a sample Indesign document with images for demonstration purposes. Copy the **IPTCViewer.app** file (in the Zip archive) to any location on your hard disk.

5. What is image metadata?

Metadata is information stored in an image file, such as the photographer's name, caption text, photo agency identifiers and so on. This is embedded in image files as *IPTC-NAA records* and/or *XMP*. IPTC is an older binary format dating from the 1990s, while XMP is a modern, XML-based, extensible, Unicode-compatible format.

Text encoding issues. Until fairly recently, plaintext has been represented in files using 7-bit or 8-bit encodings. The same binary byte might refer to different characters on different platforms: The Mac would save plaintext files using the “Western (MacOS Roman)” text encoding, while Windows machines might use “Western (Windows Latin 1)”. The text files themselves contained no encoding information, so text could become mangled when moved between computing environments. Today most platforms use some form of Unicode for text storage, which eliminates most “funny character” problems. But when dealing with older files (and embedded image metadata often dates from the shooting date) the text encoding problem remains.

5. What is image metadata? *[continued]*

IPTC records. The IPTC-NAA metadata standard was developed in the early 1990s by the International Press Telecommunications Council. It did not provide for use of multiple text encodings in a developer-friendly manner. The result was that applications would save the metadata with unpredictable text encodings. IPTCViewer tries to detect and correct text encodings, but occasional text encoding issues will occur if you work in a multi-language environment. By using appropriate text encoding settings in IPTCViewer these problems can be largely avoided.

For more information about the IPTC-NAA standard, see www.iptc.org/site/Photo_Metadata/IPTC_Core_&_Extension.

For more information about XMP, see www.adobe.com/products/xmp/Metadata/IPTC_Core_&_Extension.

XMP. The XMP format is Unicode-based and so shouldn't suffer from text encoding problems – in theory. In practise photo agencies still mangle text occasionally by saving badly converted text into XMP.

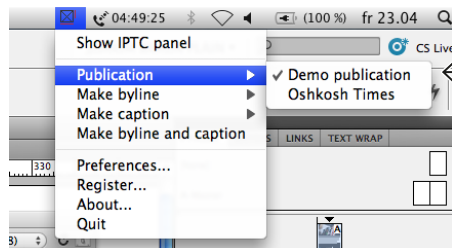
File format caveat. An image may contain both IPTC and XMP data, and have several copies of each. Many image formats are designed to be flexible and there is no single, predictable point where IPTC or XMP is invariably stored. IPTCViewer looks for metadata in a number of different locations, but depending on how the image file is written, IPTCViewer may not always find the metadata you know is there.

6. IPTCViewer's user interface

IPTCViewer doesn't have a menu bar of its own. Its user interface consists of:

a) Main menu item

This is a **menu item in the main menu bar** that looks something like this:



Publication submenu switches between sets of bylines and captions. (See also page 7.)

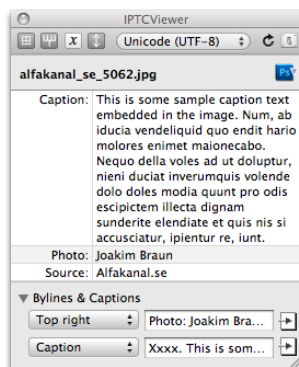
This menu is used mainly to load different publication settings. These contain byline and caption sets that you define, with metadata extraction and text frame formatting settings for each magazine that you work with.



IPTCViewer doesn't show up in the Dock or in the "Force Quit" dialog. Apple wants it this way. To force-quit IPTCViewer, use the Activity Monitor application.

b) IPTC panel – see page 5

The **IPTC panel** is a small window which looks like this:



This floating panel displays image metadata for selected image frames as you work in Indesign.

The **top section** contains the metadata – either in its entirety, or as a selection of user-customizable fields (to save screen real estate).

The **bottom section** contains text generated by byline and caption definitions that you set up in the Preferences dialog (see page 7). Click the buttons to the right of the text fields to **create the corresponding automatic text frames** in Indesign.

c) Preferences dialog – see page 6

The **Preferences dialog** is where you set up byline and caption definitions to suit the magazines you work on. It consists of four preference panes:

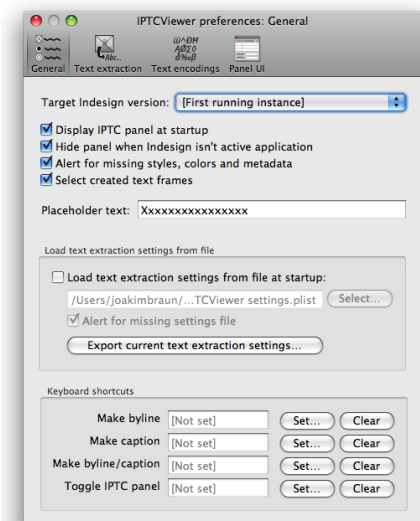
General: Various odds and ends.

Text extraction: The most important preference pane, with settings for assembly of byline and caption text by extracting data from single and multiple metadata fields, and how to position and format automatic text frames in Indesign.

Text encodings: How to deal with "funny characters" in metadata.

Panel UI: Settings that customize the IPTC panel.

The first of IPTCViewer's four preferences panes.



7. The IPTC panel

Toolbar and image file controls

1 Filter records: Typically, only a few metadata fields will be of interest to the user. A filter list of interesting fields can be defined in **Preferences** → **Panel UI** (see page 13). The filter is applied when this button is pushed.

2 Consolidate repeatables: Metadata records such as "Keyword" may occur multiple times. When this button is pushed, all such fields are consolidated into a single comma-separated field.

3 Use XMP: Images may contain both XMP and IPTC metadata. When button is pushed, IPTCViewer will display metadata from XMP, even if other (IPTC) data is available.

4 Resize automatically: Whether to resize the IPTC panel automatically to accommodate the metadata displayed.

5 Text encoding: The text encoding that the displayed metadata has been converted from.

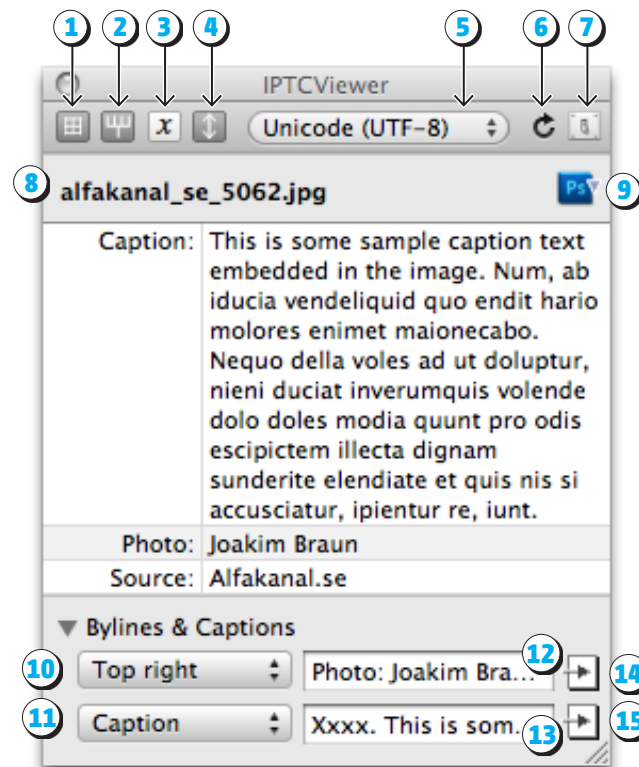
If **Use XMP** is selected, this button is deactivated (since XMP is always stored as Unicode).

6 Reparse image: Metadata is cached by default – each image file is only parsed once. If metadata in the image file is updated, this won't be reflected in the IPTC panel unless a reparsing is forced by pressing this button.

7 Preferences button: Click to display the **Preferences** dialog.

8 Image file: The name of the currently selected image file. Click to reveal the file in Finder. Right-click to reveal the folder hierarchy containing the file in a context menu.

9 Open file: Click to open the image file in the default editing application (as if double-clicked in Finder). Click and hold to get a selection of applications that can open the file. This context menu can be customized in **Preferences** → **Panel UI** (see page 14).



Press the option key while clicking the byline (14) or caption (15) button to create a text frame with placeholder text. See also page 6.

Byline and caption controls

*Bylines and captions specify the metadata that should be extracted from an image, and how the corresponding text frames created in InDesign should be positioned and formatted. You create sets of bylines and captions for each publication that you work on in **Preferences** → **Text extraction** (see page 7).*

10 Bylines: The button lists all the bylines defined in the current publication.

in the selected image, as specified by the currently selected byline.

11 Captions: The button lists all the captions defined in the current publication.

13 Caption text: The text extracted from the metadata in the selected image, as specified by the currently selected caption.

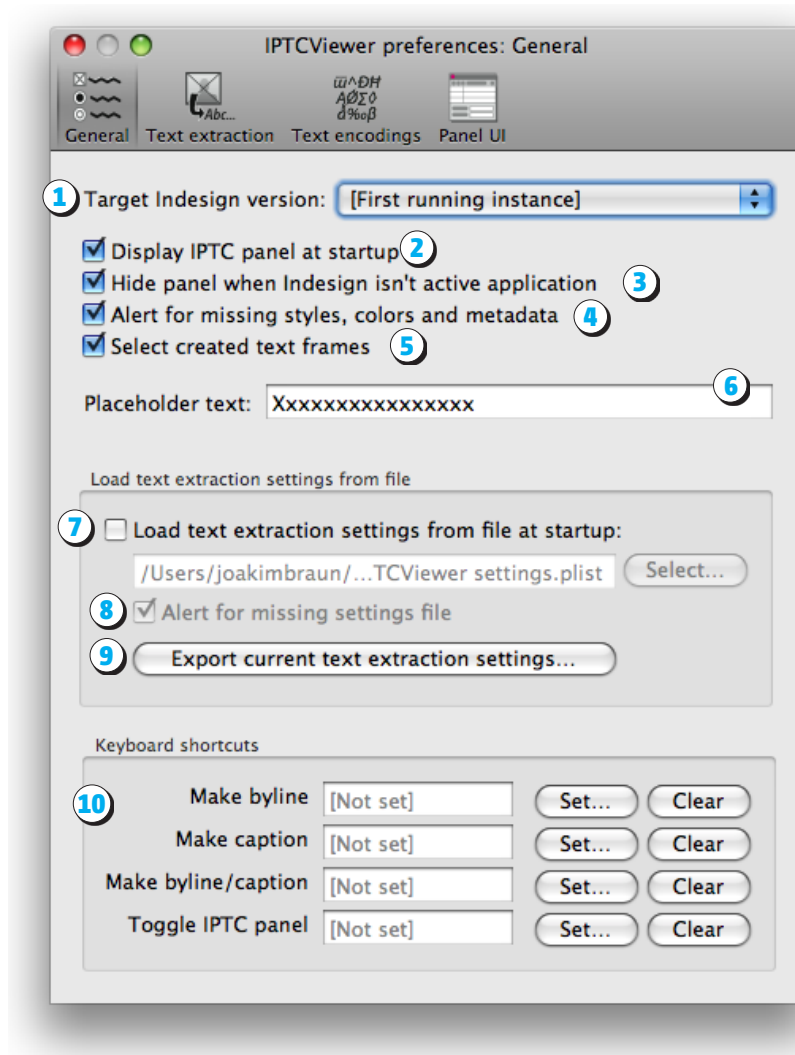
12 Byline text: The text extracted from the metadata

14 Create byline: Click this button to create a text frame

in InDesign with the extracted byline text, formatted according to the settings for the currently selected byline.

15 Create caption: Click to create a text frame in InDesign with the extracted caption text, formatted according to the settings for the currently selected caption.

8.1. Preferences: *General*



1 Target Indesign app: IPTCViewer needs to know which installed Indesign version (of possibly several) that it should communicate with. The button lists all installed Indesign application versions. The *First running instance* option means that IPTCViewer will attempt to communicate with the first Indesign version found in the system's list of running processes.

2 Display IPTC panel at startup: Whether to show the IPTC panel when IPTCViewer starts.

3 Hide panel when Indesign isn't the active application: Self-explanatory.

4 Alert for missing styles, colors and metadata: Bylines and captions can be set to format generated Indesign text frames

with a paragraph style sheet, object style and color swatch. If any of these are missing from the Indesign document, or if metadata required for the creation of the text is missing, an alert dialog is displayed.

5 Select created text frames: Select text frames that IPTCViewer creates in Indesign. If unchecked, the Indesign selection remains unchanged.

6 Placeholder text: Hold the *option* key while pressing the byline or caption buttons in the IPTC panel, and the corresponding text frame will contain this text instead of metadata content.

7 Load text extraction settings from file at startup: This is useful where multiple designers work on the same publications.

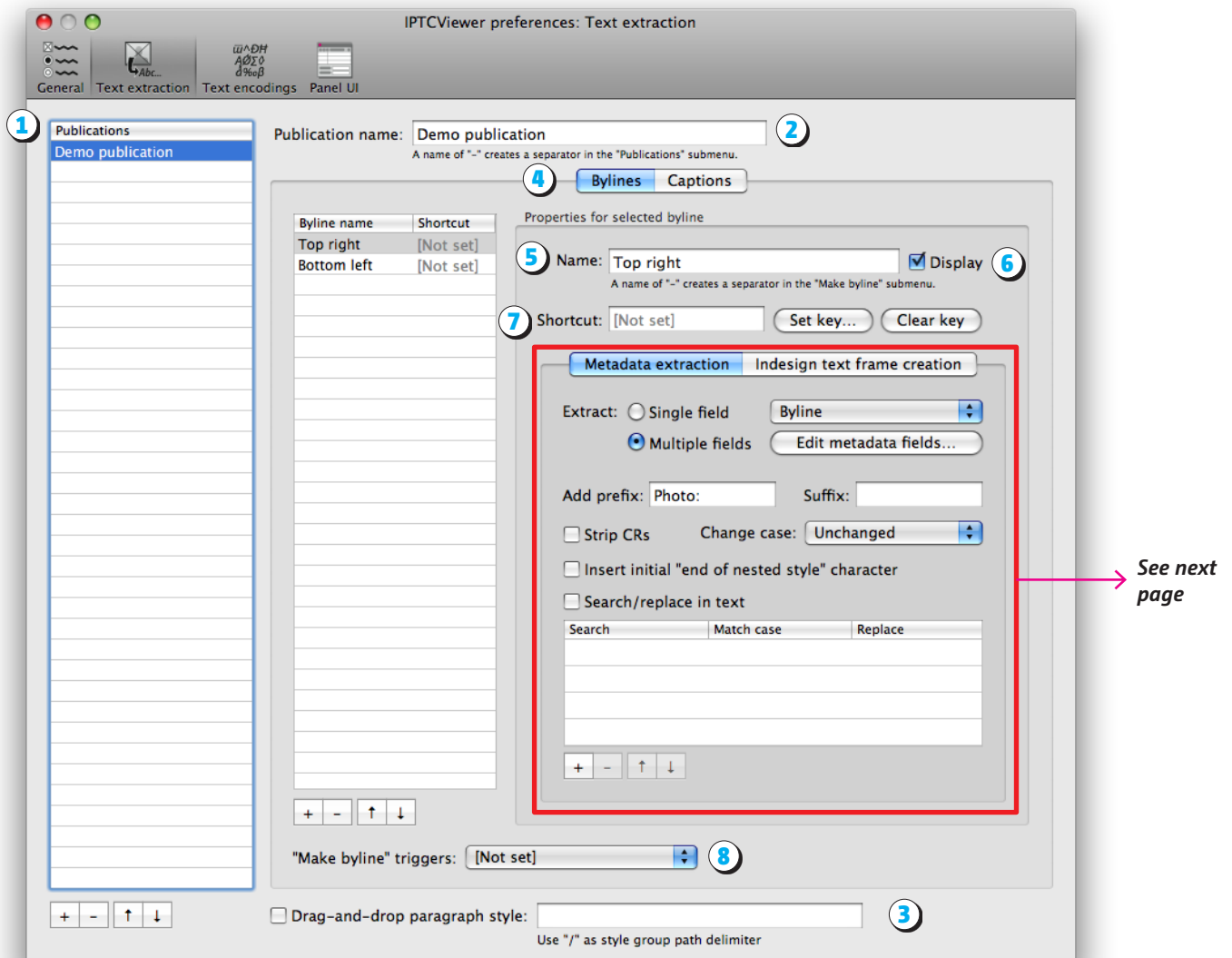
Everyone can use the same settings file stored on the network, with the correct settings for bylines, captions and text encodings.

8 Alert for missing settings file: Whether to display an alert if the settings file that should be loaded can't be found.

9 Export current text extraction settings: Save a file containing the current text extraction (byline and caption) and text encoding settings. This file can then be used as a settings file to load.

10 Keyboard shortcuts: These shortcuts (hotkeys) trigger various IPTCViewer actions. *(Because IPTCViewer lacks a menu bar, it's not possible to set IPTCViewer's shortcuts using System Preferences.)*

8.2.1. Preferences: Text extraction



Publications, bylines and captions

IPTCViewer assembles text from image metadata, and can create text frames in Indesign, formatted with the desired paragraph styles, object styles and color swatches. The settings for this are set up on a "per-publication" basis, since every magazine has its own requirements for the content, positioning and formatting of captions and bylines. For every magazine you work with in Indesign, you need to create a set of byline and caption definitions in IPTCViewer.

1 Publication list: Settings for metadata extraction and text frame formatting, for each magazine you work with in Indesign. (These show up in the "Publications" submenu – see page 4.)

2 Publication name: The name of the selected publication. A publication name of "-" (hyphen) creates a separator line in the "Publications" submenu.

3 Drag-and-drop paragraph style: Paragraph style to apply when drag-and-dropping text from the

IPTC panel table to an Indesign document. This is used if the checkbox is checked.

4 Bylines and Captions: The tabs contain the bylines and captions of the selected publication. Bylines and captions contain *metadata extraction* and *Indesign text frame creation* settings (see next page).

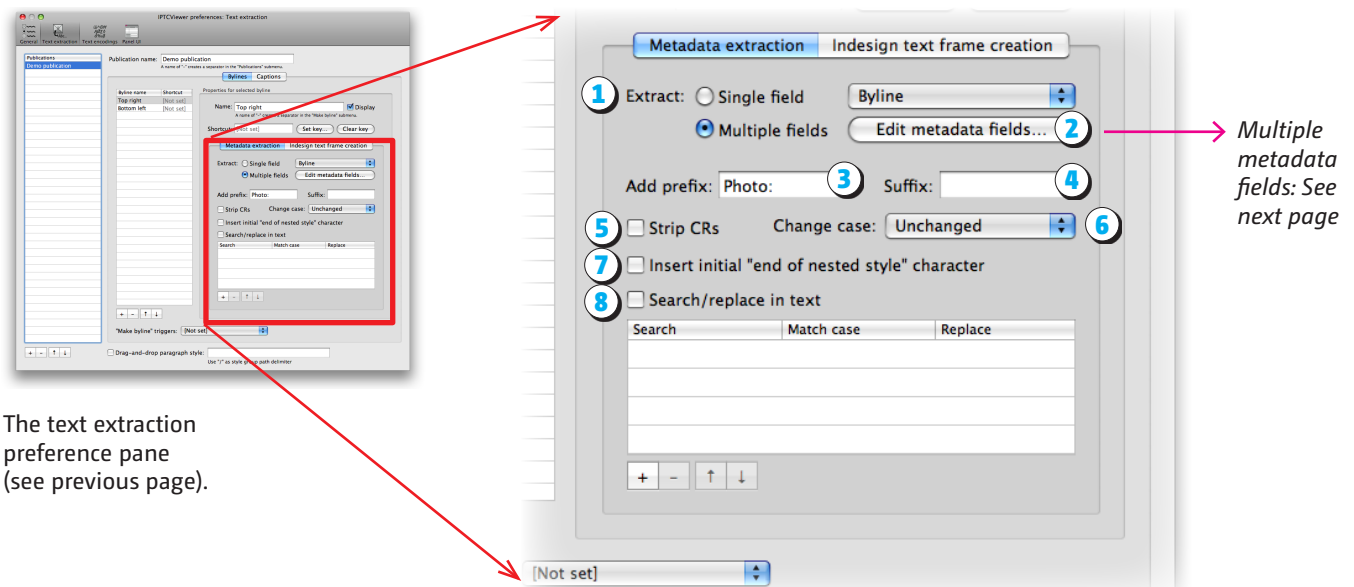
5 Name: The name of the selected byline or caption. A name of "-" (hyphen) creates a separator line in the "Make byline" (or "Make caption") submenu.

6 Display: Whether the byline or caption should be displayed in the menu and the panel buttons. (Hiding bylines or captions can be useful while developing new ones.)

7 Shortcut: The key combination that triggers the creation of an Indesign text frame using the corresponding byline (or caption) for text extraction and formatting.

8 Make byline/caption triggers: The byline (or caption) triggered by the keyboard shortcut for "Make byline" (or "Make caption").

8.2.2. Preferences: Text extraction [continued]



The text extraction preference pane (see previous page).

The **Metadata extraction** tab of the byline (and caption) settings for the selected publication. For each byline or caption, you define how its text should be assembled out of metadata extracted from an image file.

Bylines and captions: Metadata extraction

This tab of the byline (and caption) settings defines how metadata (IPTC or XMP) is extracted and assembled from image files. For information on how to deal with “funny characters”, see **Preferences → Text encodings** (page 12).

1 Extract: In the simplest case, the text extracted from image metadata is a **single field** (such as “Byline”). However, a photo caption might be required to read, for example, “John Doe/Someagency”, with the “Byline” field used before the slash, and the “Source” field after the slash. This is possible by selecting the **Multiple fields** radio button and setting up the corresponding metadata fields in the dialog triggered by **Edit metadata fields** (see next page).

2 Edit metadata fields: If the text extraction option **Multiple fields** is selected, press this button

to display a dialog (see next page) for defining the metadata fields to extract under what conditions.

3 Add prefix: Text to be added preceding any extracted metadata text. (This can be used to add a “Photo: “ string to photo byline text.)

4 Add suffix: Text to be added following any extracted metadata text.

5 Strip CRs: Whether to replace all newline/carriage return characters in the extracted text with space characters. This is mainly use-

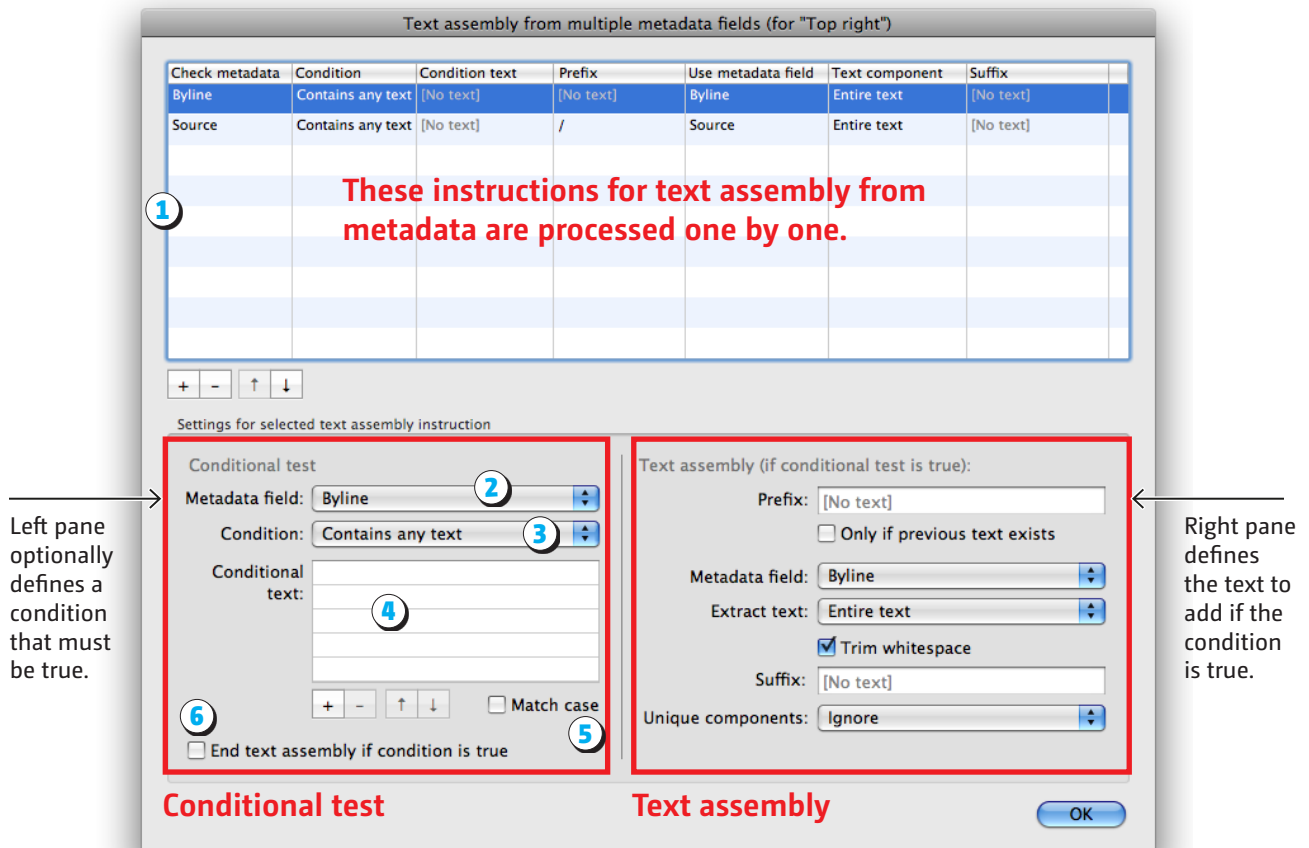
ful for captions where the Indesign paragraph style uses nested styles.

6 Change case: Whether to change the case of the extracted text. Options are *Unchanged*, *Uppercase*, *Lowercase* and *Word case*.

7 Insert initial “end of nested style” character: Possibly useful if the Indesign paragraph style used for formatting created text frames contains nested styles.

8 Search/replace in text: Useful for removing or changing some particular undesired metadata text (for instance, multiple spaces).

8.2.3. Preferences: Text extraction [continued]



Bylines and captions: Assembling text from multiple metadata fields

How do we create photo bylines like "Photo: John Doe/Nameless Images"? In this case, extracting a single metadata field (such as "Byline") is not enough. We need to extract both the "Byline" and the "Source" component, and add a slash character between them. Some images may not even contain "Byline" or "Source" metadata fields, and we must handle this case in some manner – otherwise, we may get a photo byline reading "Photo: /".

This dialog is used to create a sequence of instructions for assembly of byline or caption text from multiple metadata fields. It allows for simple conditional branching, so that text is assembled differently depending on the values of individual IPTC fields (or of the file name).

1 List of text assembly instructions: Text for bylines or captions is accumulated step by step when IPTCViewer processes the instructions in the list. The detailed settings for each instruction are selected using the panes and controls below the list. The left pane contains an **optional conditional test**. This makes it possible to create instructions that basically say: "If the file name contains 'nimgs', append the text 'Nameless Images' to the byline".

Conditional test

The condition in this section (if any) must be true for text to be generated.

2 Metadata field: The metadata to check for a conditional test.
Note: Not only metadata fields are available, but also a few more things like the image file name. In this way, it's possible to add conditional text depending on what the file name is.

3 Condition: The conditional test (such as **Contains** or **Doesn't contain**) to be evaluated against the metadata and the **conditional text**.

4 Conditional text: Text to be evaluated against, if a suitable conditional test is selected.

5 Match case: Whether text comparisons in the conditional test should be case sensitive.

6 End text assembly if condition is true: Whether to exit the text assembly loop if this condition is true, even if further assembly instructions exist.

8.2.3. Preferences: Text extraction [continued]

Bylines and captions: Assembling text from multiple metadata fields

[continued]

Text assembly

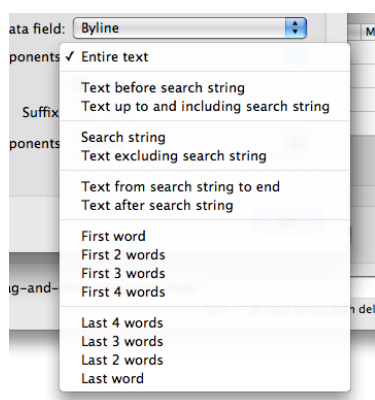
The settings in this section specify the text to be added if the conditional test is true.

7 Prefix: Text to be added before any other assembled text.

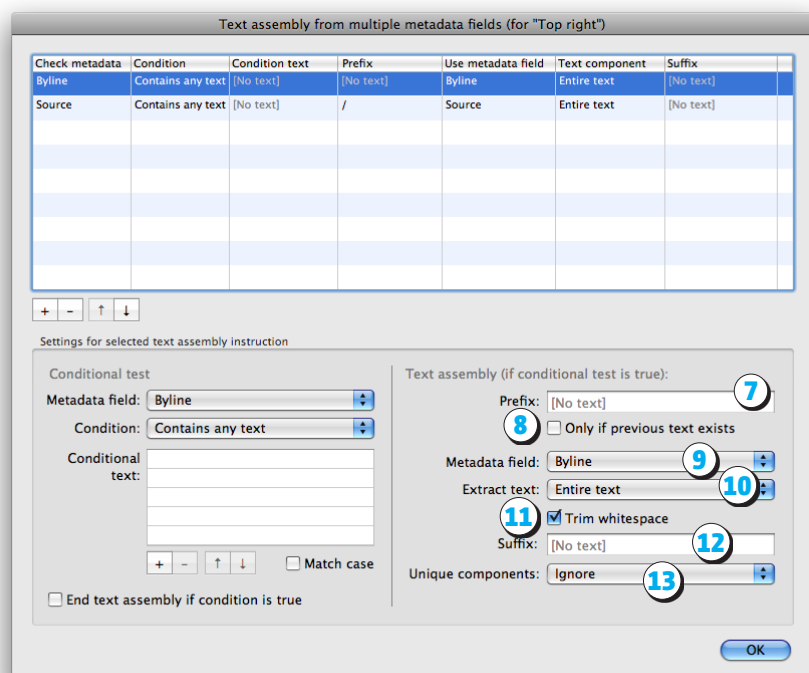
8 Only if preceding text exists: Add the prefix only if other text already exists (for instance, add a slash character if there's other text).

9 Metadata field: The metadata field from which text should be extracted.

10 Extract text: The part of the metadata field contents to extract. The options are:



Search string refers to any text (in the **conditional test** list in the left pane) that has caused the conditional test to evaluate to "true".

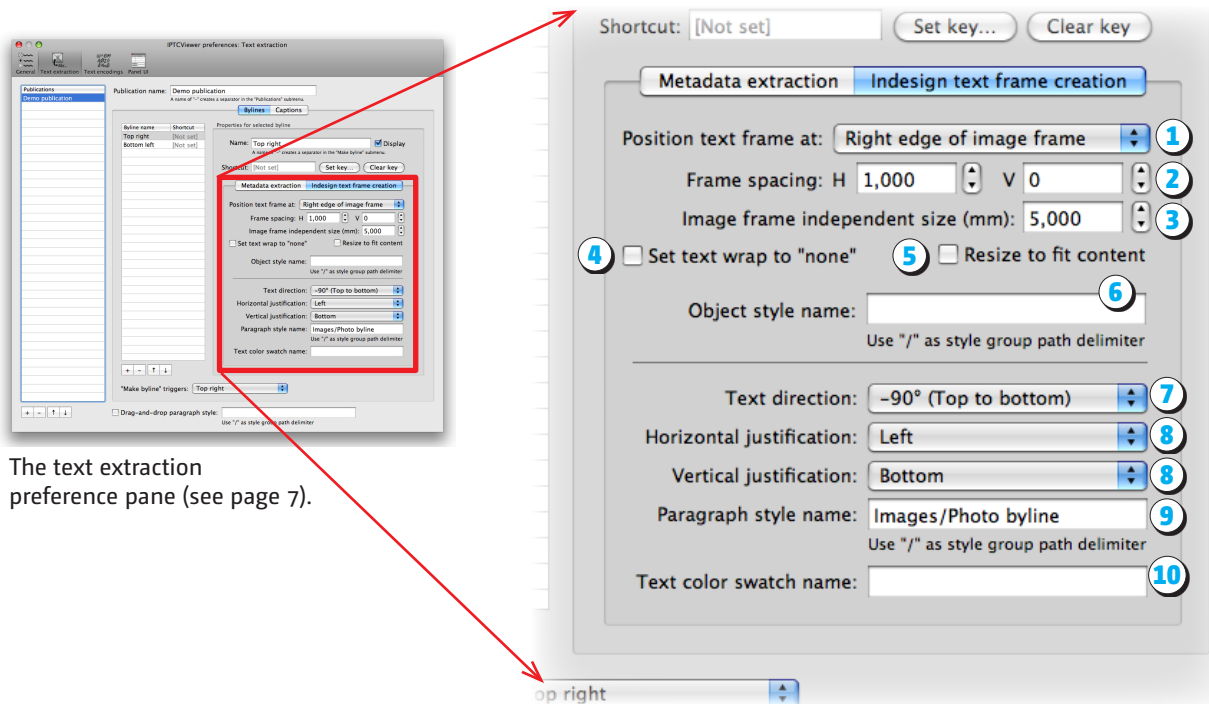


11 Trim whitespace: Remove leading and trailing "whitespace" characters (such as spaces and tabs) from extracted text.

12 Suffix: Text to add following extracted text.

13 Unique components: This setting makes it possible to avoid duplicate "text components" in longer bylines. If the selected part of the text already exists as a result of previous text assembly instructions, the text is not generated.

8.2.4. Preferences: Text extraction [continued]



The text extraction preference pane (see page 7).

Warning: The unregistered copy of IPTCViewer will append the text "IPTCViewer" to all captions and bylines created with it in Indesign.

The **Indesign text frame creation** tab of the byline (and caption) settings for the selected publication. Here is where, for each byline or caption, you define how text frames created in Indesign should be positioned and formatted.

Bylines and captions: Indesign text frame creation

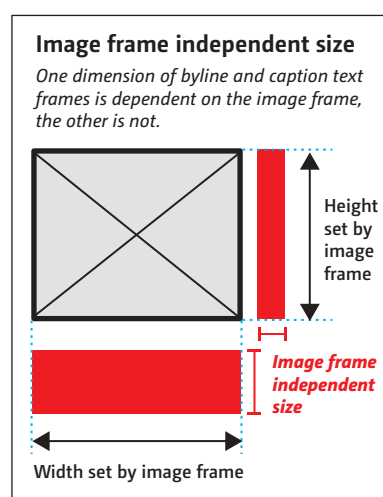
This tab of the byline (and caption) settings defines how Indesign text frames are positioned and formatted. For information on text extraction, see page 7.

1 Position text frame at: Positioning of the Indesign text frame relative to the image frame.

2 Frame spacing: The horizontal and vertical gap between the selected image frame and the text frame that IPTCViewer creates.

3 Image frame independent size: Text frames created for bylines or captions will have a height or width dependent on the length of the near edge of the image frame. The *other* dimension, which is *independent of the image frame*, is set by this value. *See figure at right.*

4 Set text wrap to "none": Text wrap of created text frames will be set to "none" (if unchecked, text wrap is set to the default for new text frames).



5 Resize to fit content: Resize created text frames to fit their text content. (**Note:** Newer versions of Indesign behave differently in this regard than earlier versions.)

6 Object style name: Name of an object style to apply to the created text frame. (*Indesign object styles are hierarchic. Use "/" as a style path delimiter.*)

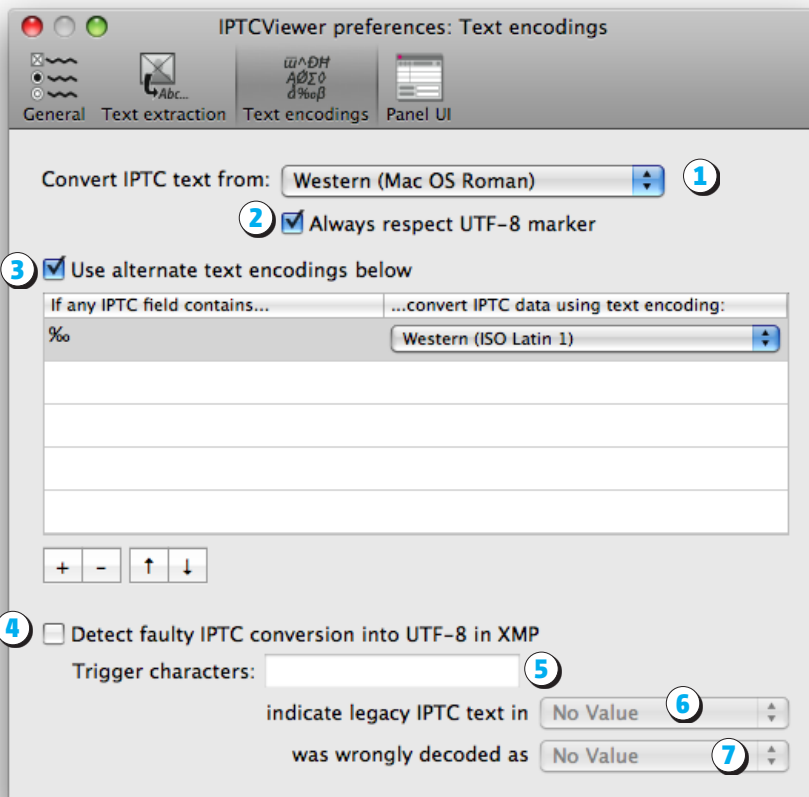
7 Text direction: The orientation of text in the created text frame.

8 Horizontal/vertical justification: Horizontal and vertical justification of text in the text frame.

9 Paragraph style name: Name of a paragraph style to apply to the created text. (*Indesign paragraph styles are hierarchic. Use "/" as a style path delimiter.*)

10 Text color swatch name: Name of a color swatch to apply to the created text, overriding the paragraph style's.

8.3. Preferences: Text encodings



How to eliminate text encoding problems

Text encodings are standards specifying the bit/byte sequences used to represent characters. “Funny characters” in image metadata are a familiar problem for designers working with image files that contain metadata in non-English languages (such as international news photographs). The legacy IPTC metadata standard had only very limited support for indicating the text encoding used for storage. Most software developers made arbitrary assumptions about the text encoding. When set up correctly using the settings in this pane, IPTCViewer largely eliminates these problems.

1 Convert IPTC text from: The default text encoding to convert IPTC metadata from. Typically this is one of the most common encodings, such as “Western (Windows Latin 1)”, “Western (ISO Latin 1)”, or “Western (Mac OS Roman)”, that works for most of your images.

2 Always respect UTF-8 marker: The legacy IPTC standard had only limited support for indicating text encodings. A marker for UTF-8 Unicode is commonly used with some reliability. Check the box to always respect such markers, regardless of other settings here.

3 Use alternate text encodings below: If “funny characters” still show up in text extracted using the

encoding selected in **Convert IPTC text from**, they can be eliminated using the list. The leftmost list column specifies a range of characters that trigger re-conversion from the text encoding in the right column.

4 Detect faulty IPTC conversion into UTF-8 in XMP: Occasionally photo agencies convert the IPTC in legacy files into XMP using faulty text encoding settings. The result is that the XMP contains “funny characters” even though it is correct UTF-8. The settings here can be used to fix this for display purposes.

Example: A photo agency has legacy files with IPTC encoded in MacOS Roman. It converts the text using a faulty ISO Latin 1 text encoding and stores it into XMP (in UTF-8 Unicode). The result is XMP in correct UTF-8

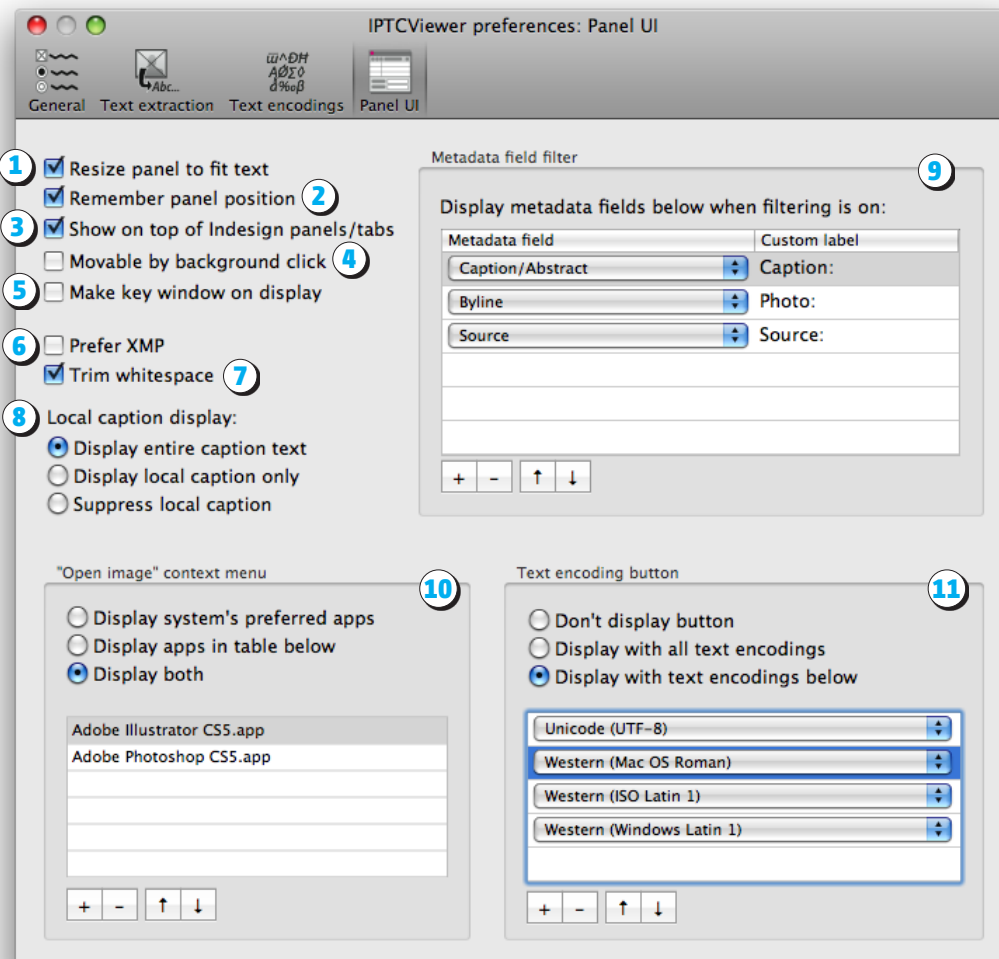
that nevertheless contains “funny characters”.
Solution: Convert the UTF-8 XMP text back into ISO Latin 1, then re-convert the result as if from MacOS Roman. This kind of three-step conversion is specified using the settings here.

5 Trigger characters: If any of these characters occur in the text as converted so far, assume XMP text was created using wrongly decoded legacy text.

6 Indicate legacy IPTC text in...: The actual text encoding used for the original, unconverted legacy IPTC text.

7 ...was wrongly decoded as: The faulty text encoding used to decode legacy IPTC data before saving it into XMP.

8.4. Preferences: *Panel UI*



1 Resize panel to fit text: This setting makes the panel resize itself vertically to accommodate the metadata displayed.

2 Remember panel position: Whether to save IPTCViewer's on-screen panel position between sessions.

3 Show on top of Indesign panels and tabs: If unchecked, IPTCViewer's panel is interleaved with Indesign's panels and tabs. If checked, the panel is always showed on top of (and never obscured by) Indesign's user interface.

4 Movable by background click: If checked, IPTCViewer's panel can

be moved by clicking anywhere in it (not only the title bar).

5 Make key window on display: Whether the panel should receive keyboard focus (become the "key window") when displayed. Typically you don't want this.

6 Prefer XMP: If both IPTC and XMP metadata are present in the image, display the XMP.

7 Trim whitespace: Remove leading and trailing "whitespace" characters (such as spaces and tabs) from extracted text.

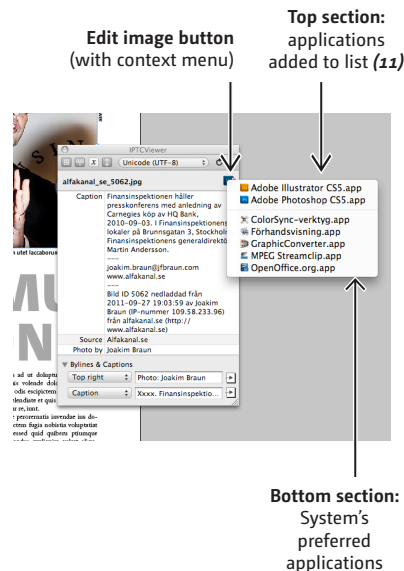
8 Local caption display: Some photo agencies add local-

language captions to foreign-language captions, separated by the string "****LOCAL CAPTION***". This setting lets you decide what to do: Display the original caption, the local caption or the entire text.

9 Metadata field filter: Images usually contain dozens of metadata fields. To a typical magazine designer, only the caption text, the name of the photographer and the name of the photo agency are of interest. A suitable filter here, with the interesting fields defined in the list, minimizes the clutter. *To use the filter defined here, press the "filter records" button in the panel toolbar (see page 5). Only fields added to the list here will be displayed.*

8.4. Preferences: *Panel UI [continued]*

10 “Open image” context menu: Clicking on the “open image” button in the panel opens the selected image in an image editing application. A single brief click opens the image in the system’s designated default editor for the image’s file type (say, Adobe Illustrator for *.ai files). Click-and-hold displays a context menu with all applications on the computer that can open the file type (the *system’s preferred apps* radio button). Additionally, applications added to the list here can be shown in the context menu (the *apps in table below* radio button). So if all you want to see in the menu are Illustrator and Photoshop, it’s possible to set it up here.



11 Text encoding button: Whether to display the text encoding in the panel’s toolbar, and whether it should contain all available text encodings (possibly many dozens) or a subset defined in the list.

9. Compatibility

The development and testing platform is Indesign CS5 on MacOSX 10.5.8. Any incompatibilities are most likely due to changes in Indesign’s AppleScript implementation between versions.

10. Technical notes

- The widely used **Fotostation** software from Fotoware currently doesn’t store metadata directly in EPS files, but caches it somewhere. This means that if you enter metadata in EPS files using Fotostation, the data will *not* show up in IPTCViewer.
- As noted above, IPTCViewer is a “LSUIElement” application, lacks a main menu bar and will not show up in the Dock or the “Force-Quit” dialog. To force-quit it, use the Activity Monitor application.

11. Acknowledgements

- TinyXML © 2000–2002 by Lee Thomason, www.grinninglizard.com, www.sourceforge.net/projects/tinyxml.
- SNDisclosableView © 2002 by Kurt Revis, www.snoize.com.

12. Support and suggestions

Questions, suggestions and bug reports are welcome: joakim.braun@jfbraun.com. You should normally get a reply within a day or two.

13. Legal

- This software is provided “as is”. *You’re using IPTCViewer entirely at your own risk*, with no express or implied warranties, liabilities or support promises whatever.
- You may not redistribute IPTCViewer for profit. That is, you may not include it in any software collection or service that you charge for in any manner without my prior written consent.
- Entire contents and the IPTCViewer application copyright © 2006–2012 Joakim Braun.

17. Version history

2.0 *January 6, 2012*

- Complete rewrite.

1.0.2 *February 26, 2009*

- Fixed error handling for missing and unparseable files.
- Some changes to the parsing engine.

1.0.1 *February 11, 2009*

- Fixed some cosmetic user interface glitches in the English version.

1.0 *February 10, 2009*

- Fixed endianness issues to make IPTCViewer work on Intel Macs.
- Revamped text instruction editor interface.
- Fixed various image parsing, stability and Cocoa Bindings bugs.
- Added CS3 support.