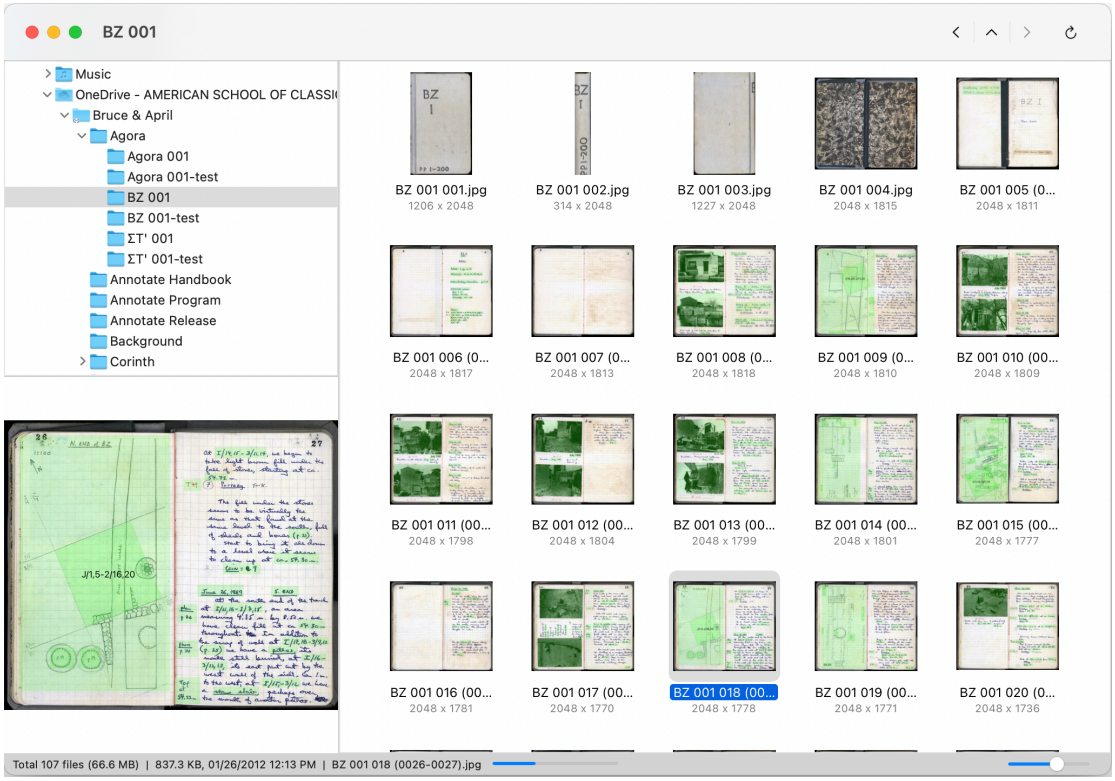
Annotate Pro Handbook

Overview

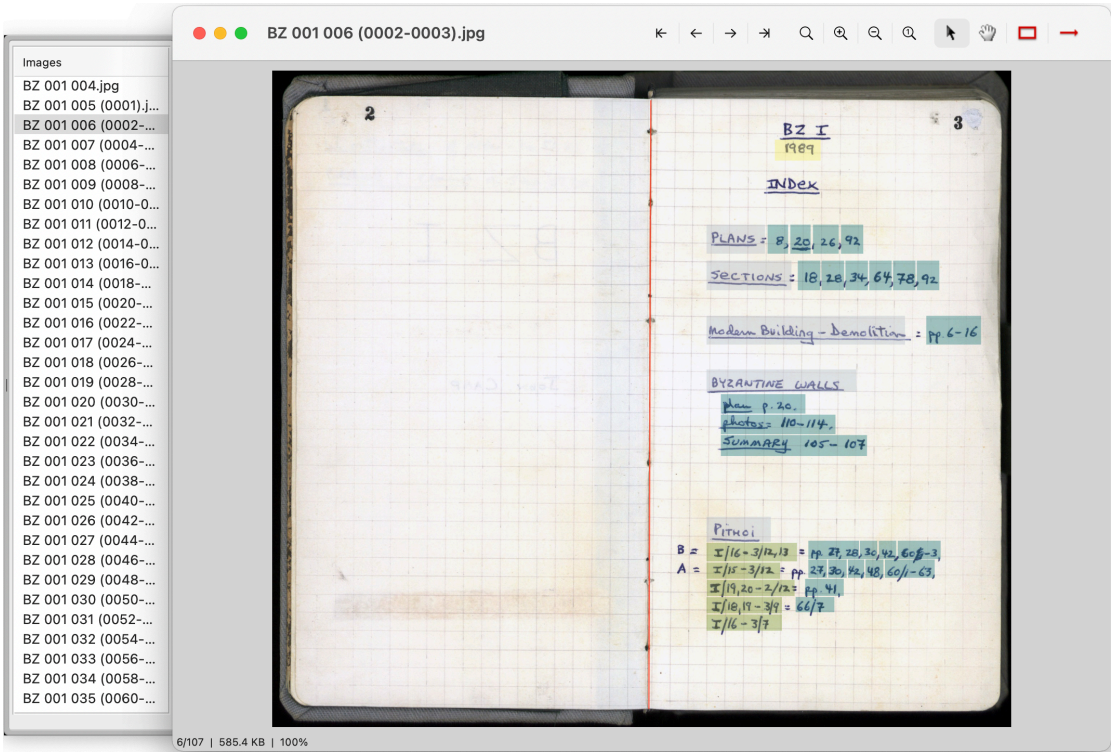
Annotate Pro makes it easy to create annotations on top of digital images or scans. Annotations allow you to capture important information from each page for indexing and searching. Annotations can also be used to create hyperlinks inside documents or to other external resources. Annotations can be used on websites or in mobile applications to create hypertext documents from scanned archival material. Annotate Pro was created for digitizing the Athenian Agora excavation records and is being released to the public so it can be used on other digital humanities projects.

Getting Started

The initial browser window is separated into three panes: (1) the top left pane is used for navigating the folder hierarchy, (2) the right pane shows the images inside the currently selected folder, (3) the bottom left pane shows a larger preview of the selected image. Click an image once to select it. Double click an image to open it. Open an image to create or edit annotations.



After opening an image you can start annotating. In the image window, you can use the toolbar in the top right to navigate between images, zoom, select, move, and create annotations.



TIP: After opening an image, it is useful to select *Show the Image List Drawer* from the *View* menu (the image list drawer appears on the right in the above screenshot). This drawer lists all the images in that particular folder and allows you to easily navigate between them.

Drawing Annotations

There are a few things to keep in mind when beginning to draw annotations.

1. Always remember that **annotation boxes might eventually become clickable buttons**. This means that annotations should always be as large as possible without overlapping each other.
2. Consider the goal of the annotation. Annotations can be created to enter data for the purpose of indexing and searching

or to be used as internal or external links. Keep in mind what will be most helpful to future users while annotating.

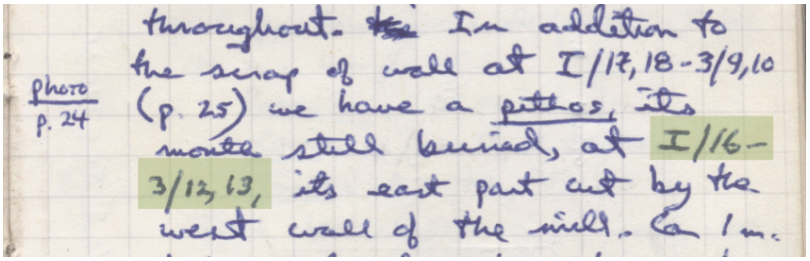
Normally you use the **rectangle tool** (⌘4) to draw annotations. Place the mouse cursor on the page, hold down the left mouse button and drag to create a box. Then adjust the box's size and position if necessary.

The **polygon tool** (⌘5) can be used for drawing center lines and for outlining images that are too skewed to be captured with the rectangle tool or are irregularly shaped.

To **select an annotation**, click on it with the left mouse button. You can select multiple annotations by holding down the command ⌘ key while clicking on individual annotations in order to add them or remove them from the selected set. When the **select tool** (⌘1) is active, you can drag with the mouse to create a selection box around the desired annotations.

To **move an annotation**, simply drag it to a new position. You can also use the arrow keys to move or nudge selected annotations by small increments. To **resize an annotation**, drag one of the blue corner handles. To **delete an annotation**, select an annotation (or multiple annotations) and press ⌘← (the *delete* key).

If you wish to annotate data that crosses a line break, create an annotation on the first line, and then **duplicate the annotation** (⌘D or hold down the *alt* ⌥ key while dragging the first annotation) and place the copy on the second line as shown below.

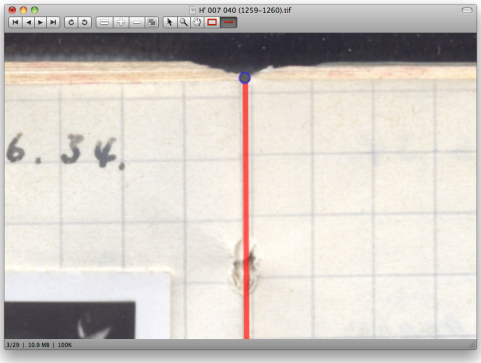


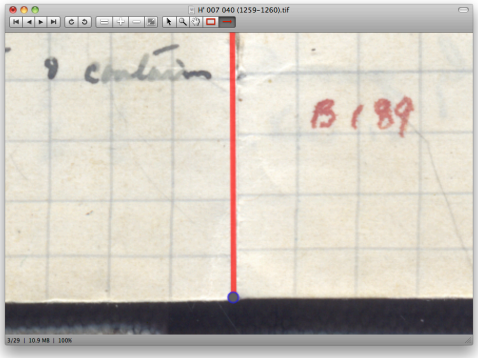
Note: In general, you should never create overlapping annotations. Drawing an annotation on top of other annotation is only permitted in certain situations that are specified in the handbook. For these situations, holding down the *alt* ⌥ and *command* ⌘ keys will allow you to start drawing an annotation on top of another one.

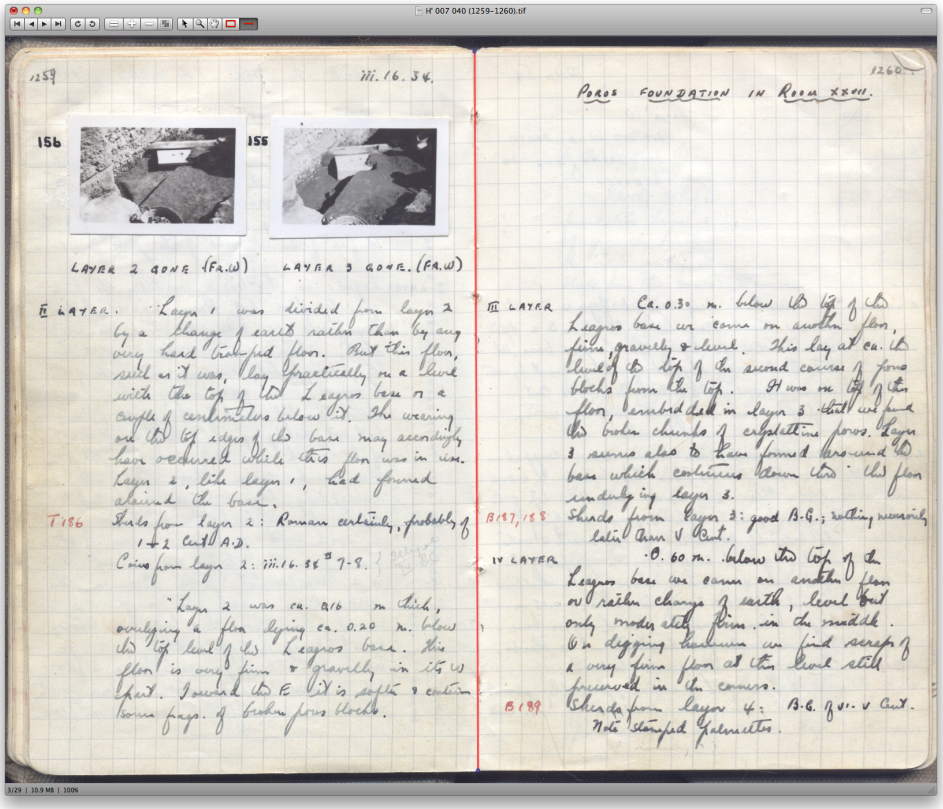
Drawing Gutter Lines

The polgyon tool can also be used to draw lines. Gutter lines can be drawn on page spreads to mark the gutter where two pages meet. This line will be used to align and scale each successive page spread during page turning animations.

Using the polygon tool, click once at the top middle point where the pages meet, and then right-click (or ctrl ^ left-click) at the bottom middle point, creating a two-point line along the gutter of the page spread. Adjust the endpoints of the line if necessary.







Adjusting Annotations

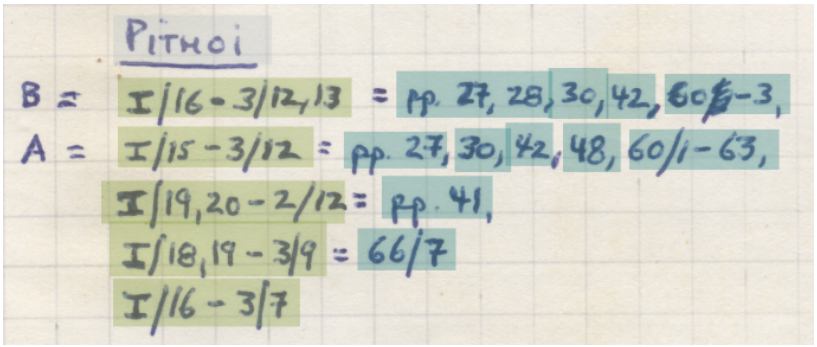
Since annotations may eventually be turned into clickable buttons, it is important that the layout of the annotations on a page be as neat as possible and as regular as the underlying text permits.

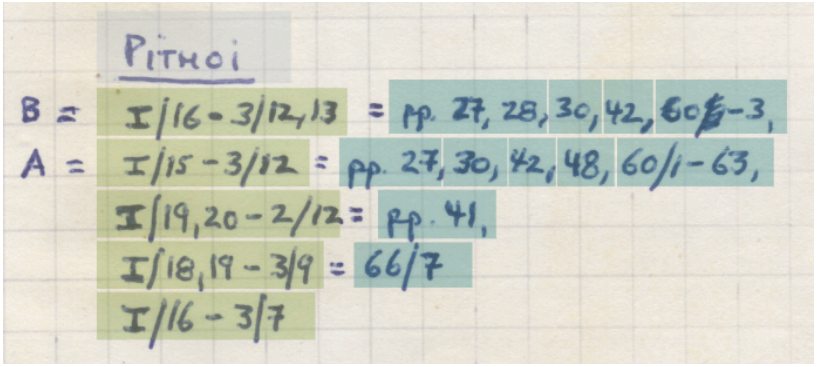
The edges of multiple annotations can be aligned by first selecting them and then choosing one of the options from the *Annotations* > *Align* menu: align Left Edges (⌥⌘←), Centers, Right Edges (⌥⌘→), etc.

Multiple annotations can be resized to the same size by first selecting them and then choosing one of the options from the *Annotations* > *Resize To* menu: resize to Smallest Width (^⌘←), Smallest Height (^⌘↓), Smallest Width and Height, etc.

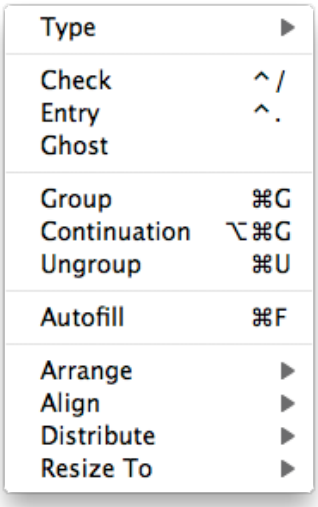
Annotations can be evenly distributed by first selecting them and then choosing one of the options from the *Annotations* -> *Distribute* menu: horizontally (^⌥⌘→), or vertically (^⌥⌘↓).

Learning the keyboard shortcuts for these commands is helpful as they will likely be used frequently. Compare the following two pictures, the first
after drawing the annotations, and the second after judicious use of the align and resize commands.





Contextual Menu

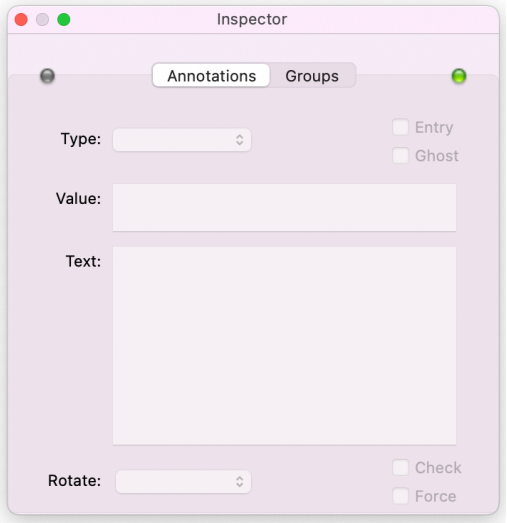


Right clicking with the mouse on an annotation will display a pop-up contextual menu. This menu contains the most frequently used commands for editing and adjusting annotations.

TIP: To draw and type annotations quickly, place one hand on the keyboard over the A-S-D-F keys. Use the mouse to draw an annotation and then immediate press one of the shortcut keys listed above. When the inspector window is hidden (⌘I toggles the visibility of the inspector window), the control key (^) does not need to be held down while assigning annotation types, instead you can simply press the shortcut key by itself (e.g. press the D key after drawing an annotation in order to "type" it as a Date annotation).

TIP: Once all the annotations are drawn and assigned a type, align and resize them using both the mouse and the keyboard shortcuts. After this, you should not have to use the mouse again and can enter the metadata using only the keyboard as described below. By minimizing the switching back and forth between the mouse and keyboard, one can annotate much more quickly.

Inspector Window



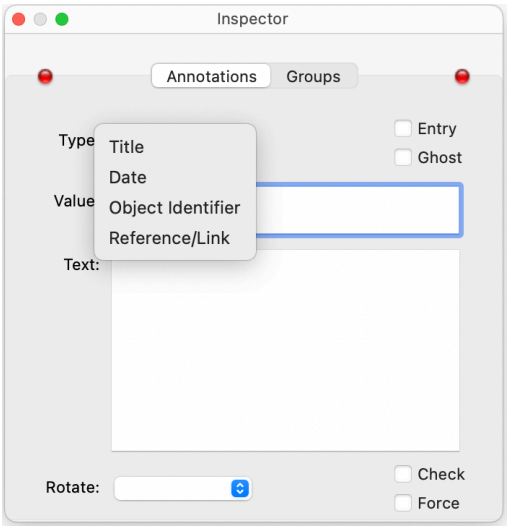
After drawing an annotation the **Inspector** window will open. This is where the data associated with an annotation box will be entered.

The Inspector is a floating window which can be placed anywhere on the screen.

Selecting an annotation (or multiple annotations) while the inspector window is open will allow you to see, enter, or edit the metadata associated with the selected annotations. The visibility of this window can be toggled by pressing ⌘**I.** Indicator lights in the top corners of the inspector window turn green when metadata is valid.

> **Tip: Learning the keyboard shortcuts within the Annotation program will allow you to annotate very quickly. Almost all menu commands and toolbar buttons have keyboard shortcuts.**
>
> Most keyboard shortcuts are activated by pressing and holding one (or a combination) of the three modifier keys and then pressing another key at the same time. The three modifier keys are: the **control** key (^ or *ctrl* depending on the keyboard); the **option** key (⌥ or *alt*); and the **command** key (⌘ or or *cmd*). To learn the keyboard shortcuts, consult the menubar at the top of the screen. Each command in a menu will have the associated keyboard shortcut listed next to the command name.

Annotation Types



Annotate Type is selected from a dropdown menu at the top of the Inspector window. This indicates what type of metadata is entered in a specific annotation. Users have the ability to create as many Annotation types as needed, though it is recommended to keep the number of types as low as possible for clarity and ease of use.

The program has four annotation types at install. They are: Title, Date, Object Identifier, and Reference/Link.

The **Title** reference type will be valid with any text.

Date can be written either in the European style of day-first or the American style of month-first. As long as the date parses correctly

(i.e. the indicator light turns green), it does not matter which format you use.

The **Object Identifier** type can be used for catalogue/object numbers and the like.

Reference/Link can be used to link to outside source material.

To learn how to edit and add Annotation Types please see the Customization section of the handbook.

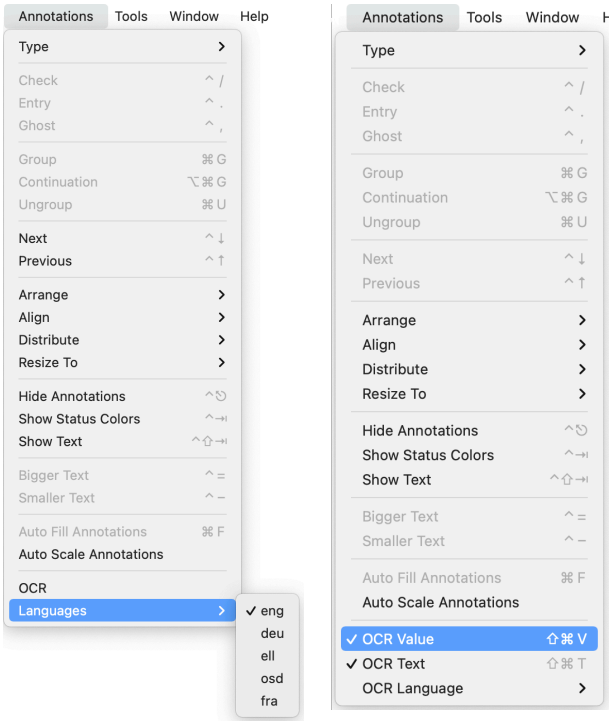
Entering Metadata

After drawing an annotation, select the Annotation Type from the dropdown menu in the Inspector window or use the keyboard shortcut associated with that type (ex. control(^)D). Then enter the metadata in the **Value** and/or **Text** fields. In addition to typing the metadata into the appropriate fields you have the options of using **OCR** or **Dictation**.

OCR

Optical Character Recognition or **OCR** is a language detection script that when selected will detect and transcribe the text an annotation box is drawn over.

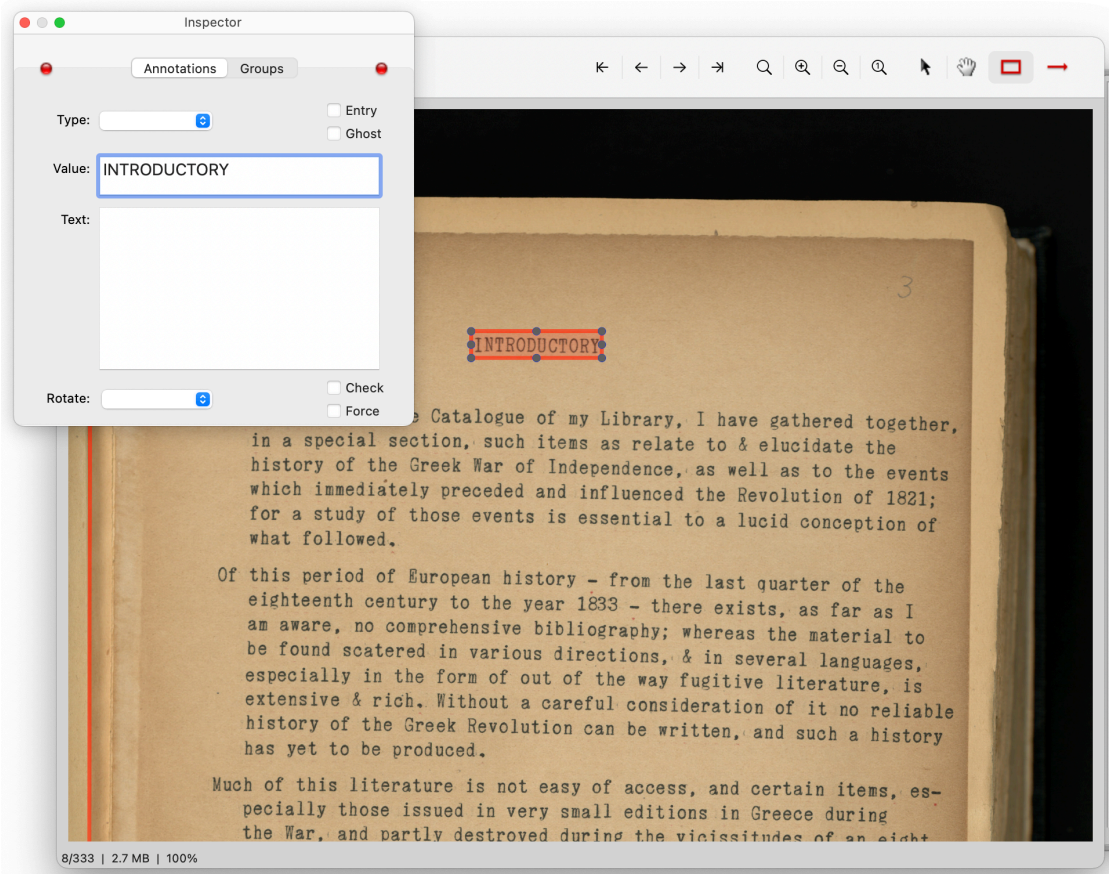
To begin using the OCR feature, navigate to the **Annotations** menu at the top of the screen, then hover over **Languages.** A dropdown menu with the possible languages will appear; select the appropriate one. The text created by the OCR feature can be inserted into the Value and/or Text fields. To assign the field(s) navigate back to the **Annotations** menu and select **OCR Value** and/or **OCR Text.** A check will appear next to these options when they are active. It is possible to use them individually or together. They can be switched on and off at any time.



> **Tip:** The OCR engine works best on single lines of text. Selecting a paragraph usually works, but sometimes not. You can try redrawing the annotation with more or less margin around the text and usually it will produce a

result eventually. Pay close attention as the resulting text may need minor corrections.

Tip: OCR works better on typed text than hand-written. If you are creating annotations for hand-written text, you may wish to turn OCR off.

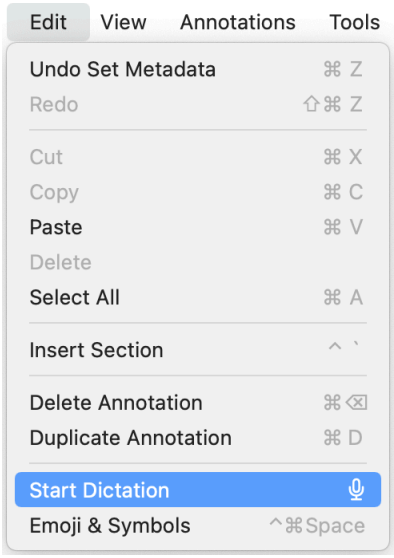


Annotate Pro comes equipped with English language OCR support. To add additional languages to the OCR function see the Customization section of this handbook.

Dictation

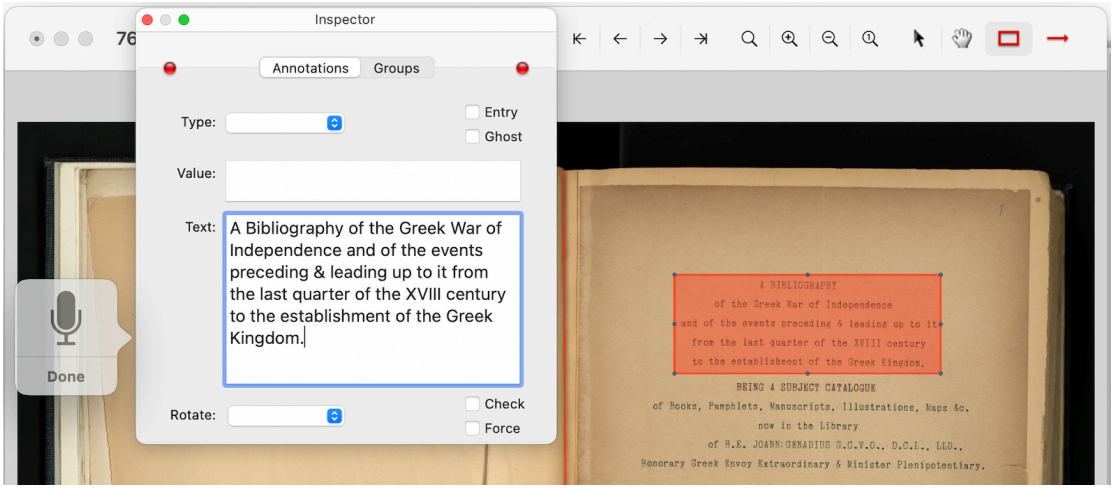
The final option for entering metadata is **Dictation.** This tool can be useful when long passages of text need to be entered as metadata.

To enable **Dictation**, draw and select the appropriate annotation(s), click in the **Value** or **Text** field where the metadata should go, and navigate to the **Edit** menu at the top of the screen and select **Dictation**.



Tip: If dictation is enabled in the System Preferences, pressing the "fn" key twice will enable dictation.

A microphone window will appear. Simply speak the text to be entered and click **Done** or press the "fn" key twice to end the dictation.



- Value and Text Fields

The **Value** field is best used for short pieces of data, such as Object Number, Elevation, Grid, etc. If other annotations within the document will link to this annotation the data entered into the **Value** field will need to be replicated exactly. If that is the case, the **Entry** box will need to be checked (see more on this below).

The **Text** field is best used for longer pieces of information, such as descriptions of objects, drawings, contexts, etc.

Rotate

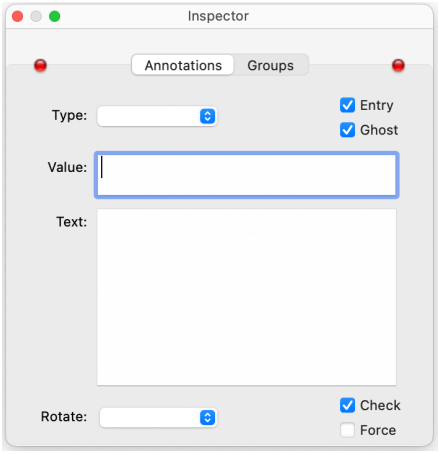
The **Rotate** dropdown menu within the **Inspector Window** can be used for annotations that correspond to drawings, graphs, or anything that me be entered on the page at a different orientation. By selecting one of these options the metadata will record how the associated annotation should be rotated, which could be useful if extracting these annotations later.

Metadata will be validated as it is entered. The inspector window has two small indicators in the top corners. The indicator in the top left corner shows whether the metadata for the currently selected annotation is **valid (green)** or **invalid (red)**. The indicator in the top right corner shows the status of the entire page: if all annotations on a page have valid metadata and are grouped, then this light will turn green, otherwise it will be red.

> **TIP:** To enter metadata quickly, select the top-left annotation on the page, open the inspector window by pressing ⌘I if necessary, then start entering metadata into the appropriate fields. Use the TAB key to move between fields in the inspector window, and the RETURN key (or ^↓) to move to the next annotation box on the page. It's possible to not have to use the mouse at all while entering metadata. (The RETURN key, however, will *not* move to the next annotation if the metadata in the current annotation is invalid).
>
> **TIP: Multiple annotations can be edited simultaneously.** Once several annotations have been selected, enter or edit the metadata in the inspector window. This will set the same metadata on all the currently selected annotations. In general, the user should always try to be aware of what annotations are selected when editing metadata (selecting multiple annotations and then typing into the inspector window can erase previously entered metadata if the user is not careful).
>
> **TIP:** If there are many annotations on a page with similar metadata (if there are several elevations on a page, for example, that all begin with 53.xxx meters), it might be more efficient to set up one annotation as a "template" (in this case an elevation annotation with "53." as metadata)

and then drag copies of this template to the appropriate positions on the page. Then when adding the metadata for the individual elevations, the user will only need to enter the missing part of the elevation. This is especially useful in the Finds, Coins, and Pottery notebooks where similar information is often repeated from one entry to the next.

Entry, Check, and Ghost

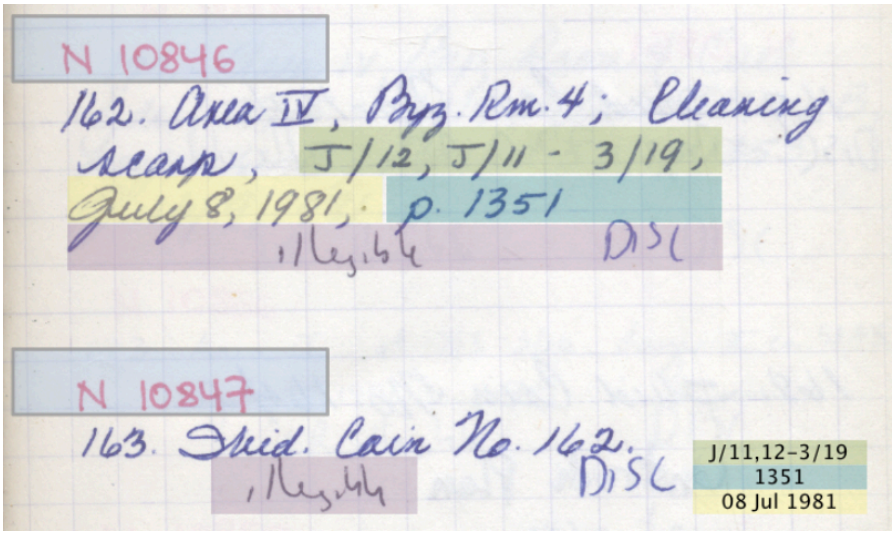


There are several checkboxes inside the inspector window that are used for qualifying annotations.

The **Entry** checkbox (^.) is used to distinguish an *entry* from a *cross-reference.* If two annotations are created with the same metadata in the Value field and one of them has entry checked, in the final format the unchecked annotation (a cross-reference) will be a link that takes the user to the **entry**. Annotations marked as an entry will be outlined in gray to distinguish them from simple cross-references.

The **Check** button (^/) at the bottom of the inspector window should be checked whenever there is any doubt concerning an annotation or the metadata associated with it. These will be easy for the user to return to and check/correct.

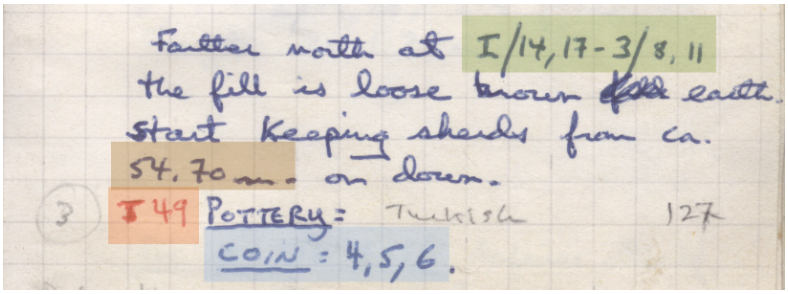
An annotation should be marked as a **Ghost** (^,) when pieces of data are implied but there is no actual text to annotate (see the picture below from an Agora Coins notebook). Ghosting is also used when multiple groups share a piece of metadata. The positions of the "ghosted" annotations are not important since they will not be turned into clickable buttons (but they should not cover up any existing text). Ghosted annotation boxes will always display the metadata that has been entered.



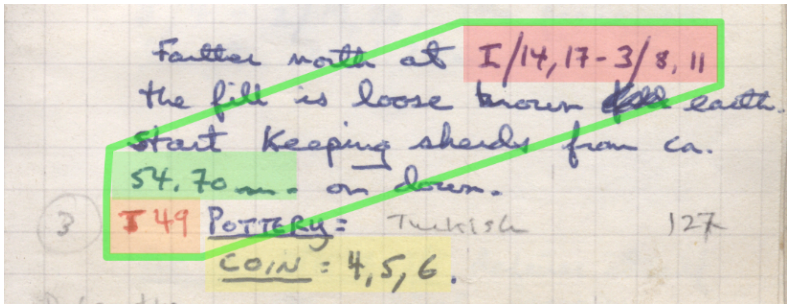
Annotation Color Modes

Annotations on a page are colored depending on which *mode* the program is currently in. There are three modes: normal, status, and text.

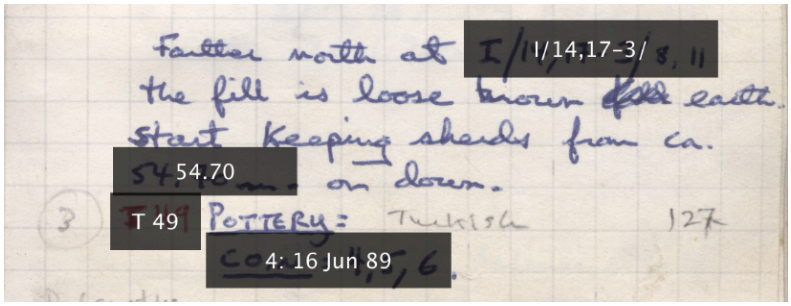
In **Normal Mode** annotations are colored by their "type" (In this example from the Athenian Agora, Grid = green; Elevation = brown; Lot = orange, Coin = blue, etc.).



In **Status Mode** annotations are colored by their status (e.g. green = valid and grouped; yellow = valid but ungrouped; red = invalid; orange = check metadata). In Status mode annotation groups will also be outlined in green. The user can toggle between normal and status modes by pressing ^TAB.



Text Mode can be toggled on and off by pressing ^SHIFT+TAB. In text mode the annotation boxes are black and show the metadata text that has been entered overlaid on top of the annotation boxes. A quick way to check the data is to repeatedly toggle text mode on and off and compare the text on the page with the metadata that has been entered.



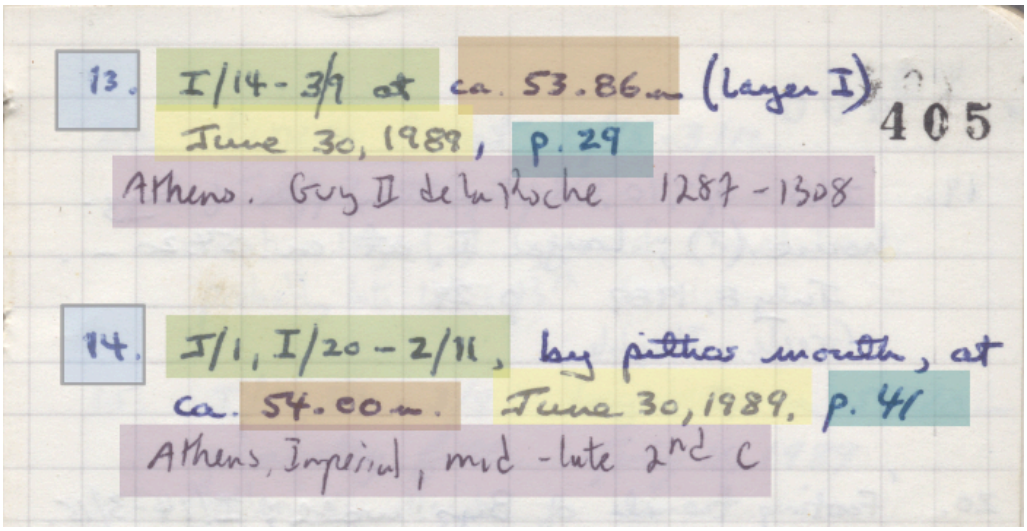
Grouping Annotations

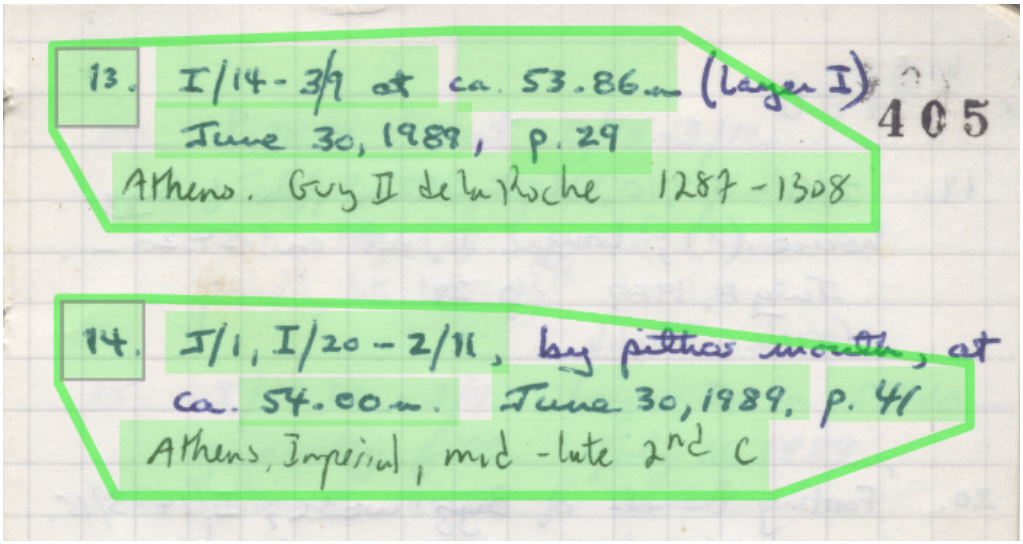
The procedure for grouping annotations is as follows:

Select multiple annotations on a page that "go together" and then press ⌘G to group them together.

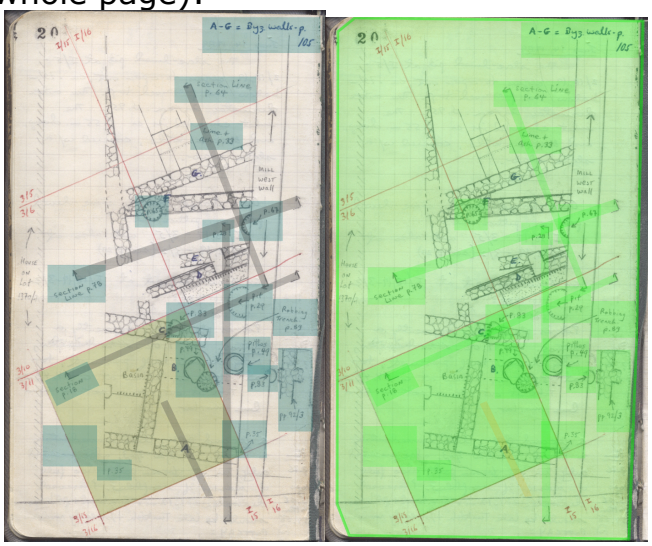
Determining which annotations on a page "go together" can be difficult sometimes and it helps to understand that the annotation groups are fundamentally hints to the *computer* about which annotations on a page go together, they are never displayed to the end user.

> **Tip:** An easy example group to conceptualize are the **Lot, Find, and Coin Groups** in the Pottery, Finds, and Coins notebooks from the Ancient Agora. Each group is simply all the annotations that make up one lot, find, or coin entry.

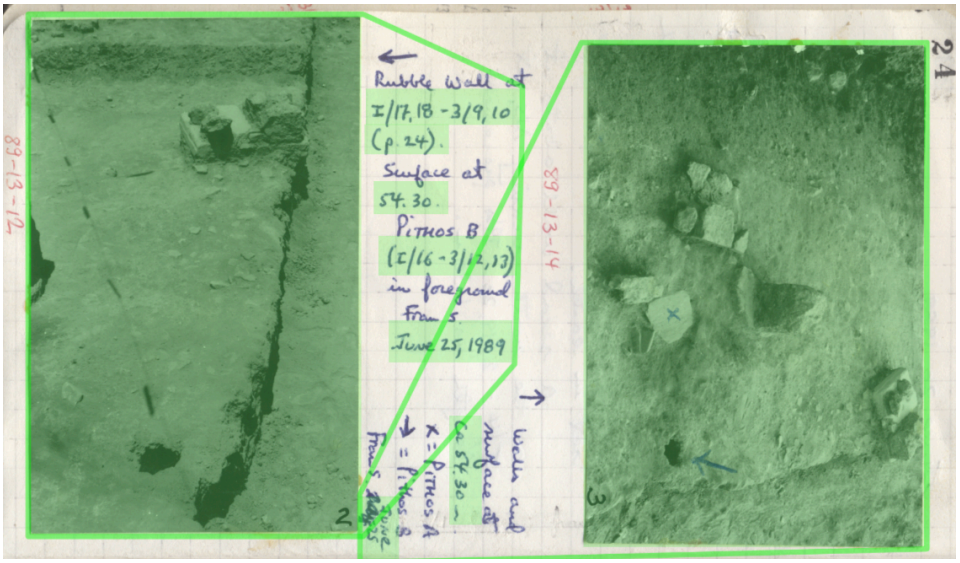




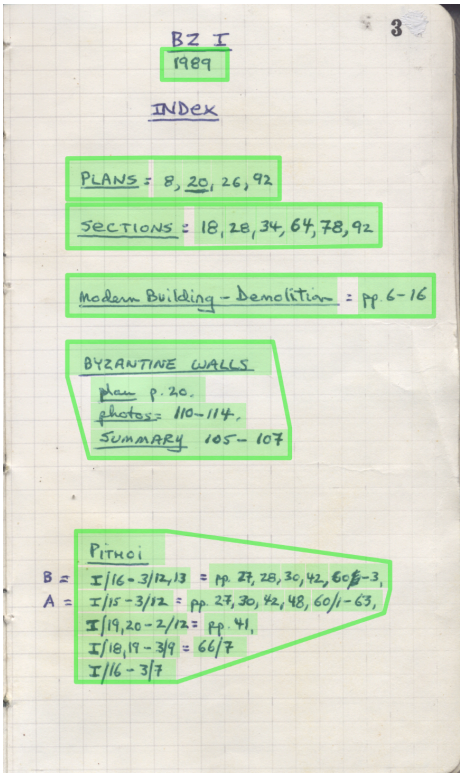
Plan and Cross-Section groups are also rather straightforward. They simply group the Plan or Cross-section annotation together with all the annotations that are on the plan or cross-section (typically the whole page):



Photograph groups are similar. They group a Photograph annotation together with all the annotations that "go with" the photograph such as Grids, Dates, and Elevations (usually any annotations that are inside the photograph's caption).



Index groups are thematic sections within an index. An index can be difficult to group correctly. In the final interface, clicking on an index annotation will return a list of all the notebook pages that are inside that particular index group.



Grouping Principles

Switch to "Status mode" (^TAB) when grouping annotations. The groups will be outlined in green as in the pictures above. The user can also use the groups tab in the inspector window to view and select any group (or annotations) on a page.

An annotation can only exist in one group at a time. If an annotation is grouped that is already inside another group, it will simply leave the previous group and join the new one.

Annotations can be ungrouped by pressing ⌘U. Instead of ungrouping an annotation, however, it is usually easier to simply group it again with other annotations. It will automatically leave its previous group and join the new one.

An annotation can be grouped by itself. If an annotation does not "go with" any other annotations on the page, it can be grouped by itself. If an annotation, however, goes with several *different* groups on a page, then you need to decide whether to group the annotation by itself or whether to ghost the annotation. In general ghosting annotations into multiple groups should only occur when groups share important metadata and where the goal is to convert each group into a database record (this applies to the entries in the Finds, Coins, and Pottery notebooks, and to the Photograph groups in the Notes notebooks). In most other situations it's best to group this kind of "shared" annotation by itself.

If there are annotations at the top of a page that "go with" the last group from the previous page spread, then they should be grouped as a **continuation (⌥⌘G). A continuation group is simply a group that continues from the previous page.** A continuation will be treated the same as a group for that particular page but the computer will eventually merge the continuation group with the last group of annotations on the previous page, specifically the group located at the bottom right of the previous page spread.

Exception: If annotations continue from a page that is *not* the previous page spread (sometimes a context will be continued from many pages earlier in the notebook), then these annotations should *not* be grouped as a continuation since the computer will not be able to intelligently resolve the page jump.

Every annotation on a page needs to be grouped before the page is marked as valid.

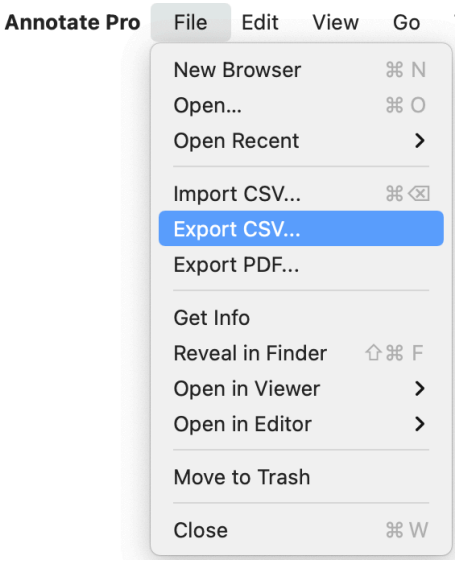
Importing and Exporting Metadata

It is possible to export and import metadata in .csv files.

Exporting

After annotations have been created on the images, the entire folder's metadata can be exported to a .csv file.

With the folder selected in the initial browser window, navigate to the File menu at the top of the screen and select **Export CSV...**



Choose a folder and the .csv file will be saved there. The annotation metadata may now be views in Excel, Numbers, or imported into other databases.

Importing

To import metadata into Annotate Pro, navigate to the File menu, select **Import CSV...** from the dropdown menu, and then select the CSV file to import.

If the CSV file does not indicate where on the image the annotations should be placed they will go to the image corners. They can then be manually moved to the correct locations on the image.

Tip: Exporting and then importing metadata can be extremely helpful for making multiple changes quickly. Within the CSV file commands such as Search and Replace can be used to quickly alter metadata to then be imported back into Annotate Pro.

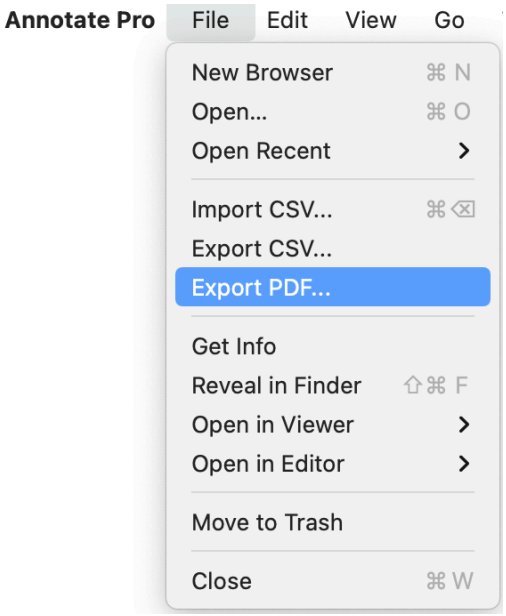
For example, if a project wants to switch from "B.C." to "B.C.E." for their dating principles the user could find and replace within the CSV file and then import those annotations to make the changes throughout. This is also a good way to spot check data for any typos or irregularities.

It is also possible to create your own CSV file using the same column names as an exported CSV file. Custom CSV files must have either a **"filename"** or **"path"** column to identify the file where the annotations belong. If the size in the **"size field"** of the table does not match the size of the image on the disk, Annotate Pro will automatically scale the annotations.

Exporting to PDF

Once the annotations have been made the user can export the folder to a PDF. Links between entry and non-entry annotations will be clickable in this format. It is also possible to link to outside materials. Annotations entered for searching and indexing only will not be visible.

To export to PDF, select the folder in the initial browser window and navigate to the File menu at the top of the screen. Select **Export PDF...** and then choose a location where the file will be saved.



> **Tip:** Annotated PDFs can be very useful for sharing documents, particularly those with Table of Contents and/or Indexes.

14. Example Workflow for Annotating Notebook Pages

1) Draw a line annotation to mark the page spread gutter.

2) Draw annotation boxes over relevant pieces of information.

3) Assign an “type” to each annotation box.

4) Adjust the alignment and sizes of the annotation boxes.

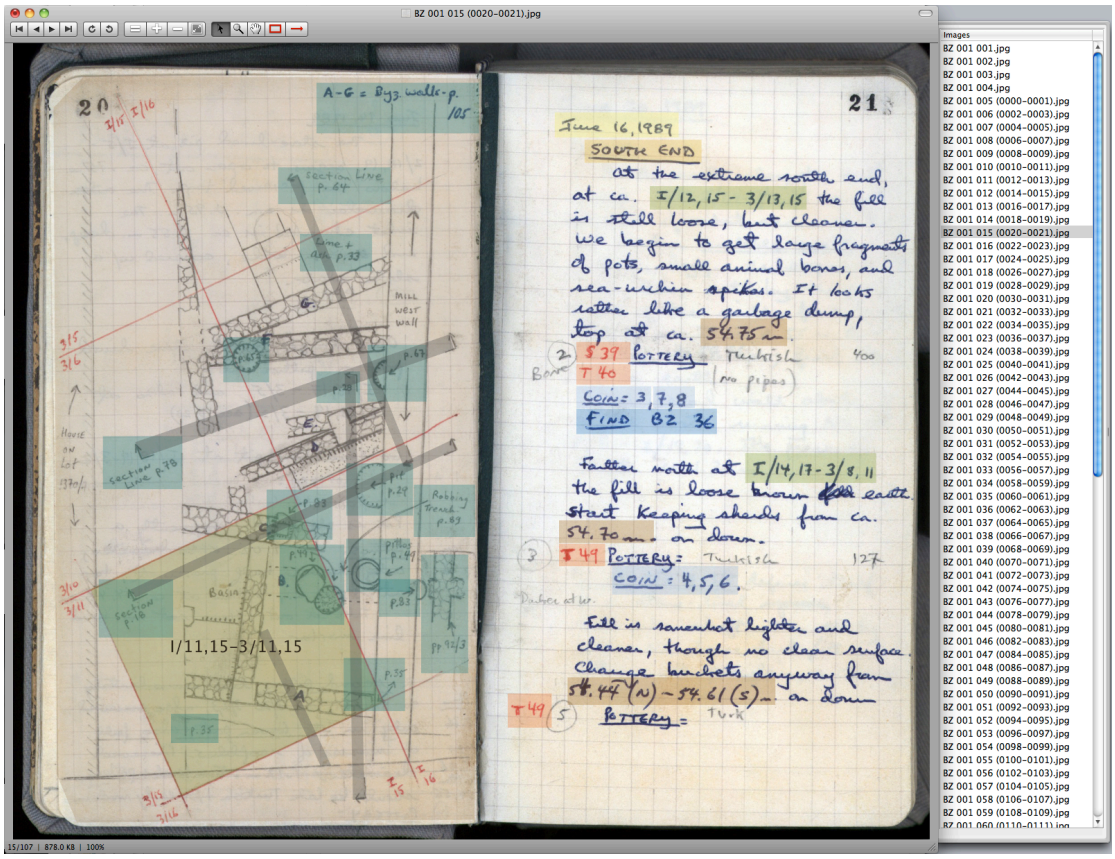
5) Enter the annotation metadata into the inspector window.

6) Group multiple annotations together.

7) Check all annotation metadata on the page.

8) Proceed through entire folder.

9) Export to CSV and/or PDF as needed.


BZ 001 015 (0020–0021).jpg
Images
BZ 001 001.jpg
BZ 001 002.jpg
BZ 001 003.jpg
BZ 001 004.jpg
BZ 001 005 (0000–0001).jpg
BZ 001 006 (0002–0003).jpg
BZ 001 007 (0004–0005).jpg
BZ 001 008 (0006–0007).jpg
BZ 001 009 (0008–0009).jpg
BZ 001 010 (0010–0011).jpg
BZ 001 011 (0012–0013).jpg
BZ 001 012 (0014–0015).jpg
BZ 001 013 (0016–0017).jpg
BZ 001 014 (0018–0019).jpg
BZ 001 015 (0020–0021).jpg
BZ 001 016 (0022–0023).jpg
BZ 001 017 (0024–0025).jpg
BZ 001 018 (0026–0027).jpg
BZ 001 019 (0028–0029).jpg
BZ 001 020 (0030–0031).jpg
BZ 001 021 (0032–0033).jpg
BZ 001 022 (0034–0035).jpg
BZ 001 023 (0036–0037).jpg
BZ 001 024 (0038–0039).jpg
BZ 001 025 (0040–0041).jpg
BZ 001 026 (0042–0043).jpg
BZ 001 027 (0044–0045).jpg
BZ 001 028 (0046–0047).jpg
BZ 001 029 (0048–0049).jpg
BZ 001 030 (0050–0051).jpg
BZ 001 031 (0052–0053).jpg
BZ 001 032 (0054–0055).jpg
BZ 001 033 (0056–0057).jpg
BZ 001 034 (0058–0059).jpg
BZ 001 035 (0060–0061).jpg
BZ 001 036 (0062–0063).jpg
BZ 001 037 (0064–0065).jpg
BZ 001 038 (0066–0067).jpg
BZ 001 039 (0068–0069).jpg
BZ 001 040 (0070–0071).jpg
BZ 001 041 (0072–0073).jpg
BZ 001 042 (0074–0075).jpg
BZ 001 043 (0076–0077).jpg
BZ 001 044 (0078–0079).jpg
BZ 001 045 (0080–0081).jpg
BZ 001 046 (0082–0083).jpg
BZ 001 047 (0084–0085).jpg
BZ 001 048 (0086–0087).jpg
BZ 001 049 (0088–0089).jpg
BZ 001 050 (0090–0091).jpg
BZ 001 051 (0092–0093).jpg
BZ 001 052 (0094–0095).jpg
BZ 001 053 (0096–0097).jpg
BZ 001 054 (0098–0099).jpg
BZ 001 055 (0100–0101).jpg
BZ 001 056 (0102–0103).jpg
BZ 001 057 (0104–0105).jpg
BZ 001 058 (0106–0107).jpg
BZ 001 059 (0108–0109).jpg
BZ 001 060 (0110–0111).jpg
15/107 | 878.0 KB | 100%
20
A-G = Byz. walls-p. 105
Section Line p. 64
Lime + Ash p. 33
Mill west wall
House on Lot 137a/b
Section Line p. 78
Pit p. 29
Robbing Trench p. 83
Section p. 18
Basin
I/11,15–3/11,15
21
June 16, 1989
SOUTH END
at the extreme south end, at ca. I/12,15 - 3/13,15 the fill is still loose, but cleaner. We begin to get large fragments of pots, small animal bones, and sea-urchin spikes. It looks rather like a garbage dump, top at ca. 54.75 m.
2 S 37 POTTERY Turkish 400
Bone T 40 (no pipes)
COIN: 3,7,8
FIND BZ 36
Farther north at I/14,17 - 3/8,11 the fill is loose brown earth. Start keeping sherds from ca. 54.70 m. on down.
3 S 49 POTTERY: Turkish 127
COIN: 4,5,6.
Fill is somewhat lighter and cleaner, though no clean surface. Change buckets anyway from 54.44 (N) – 54.61 (S) m. on down
T 49 (5) POTTERY: Turk

Customization

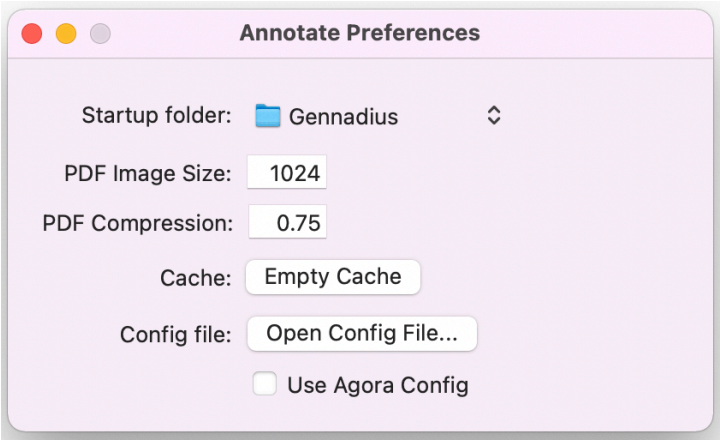
Annotate Pro can be customized to better fit the needs of specific projects. Annotation Types may be edited, added, and removed and new OCR languages may be installed.

- Considerations

To begin, assess what information on the images should be annotated. It will be important to decide how many categories of annotation types the project will require and what those types will be. These annotation types can be changed updated as needed. If existing data is being imported into the program keep in mind the necessary annotation types for this data as well.

- Adding and Editing Annotation Types

You have the ability to create and remove annotation types as needed. To do so, navigate to the Annotate Pro dropdown menu at the top of the screen and select **Preferences**. From there, select the button labeled **Open Config File...**



This will open a .txt file, in which new annotation types can be created and unwanted ones can be removed. To create a new annotation type, simply enter the following with the desired customizations by replacing the red text.

type: EXAMPLE TYPE
shortcut: E
color: RGBA(0.957, 0.945, 0.290, 0.400)
valid:

The first row will assign the name of the annotation type, the second determines the keyboard short cut assigned to that type, the third represents the color of that annotation type on the page, and the fourth determines what criteria must be met to make the entry valid.

This can be replicated for as many annotation types as desired. Simply delete these three rows to remove any unwanted types.

Tip: notes can be added to the configuration file as long as the row beings with a pound sign (**#**). This may be helpful if multiple users are editing the configuration file and need to leave each other notes.

- Adding New OCR Languages

To begin using OCR languages, the user will need to visit the OCR engine located here: **https://tesseract-ocr.github.io/tessdoc/Data-Files.html**

Individual languages can be downloaded from here: **https://github.com/tesseract-ocr/tessdata_best**

After downloading the appropriate language file(s) copy them into the "tessdata" folder located here: /Users/<name>/Library/Application Support/Annotate Pro/tessdata/

Agora Data Principles

The data principles for the Athenian Agora that were created alongside Annotate Pro are included here. These principles may provide examples of ways to organize metadata and annotate consistently.

General Data Entry Principles

Data entry principles will need to be determined based on the data in question and the needs of each project. It is highly recommended to write and share these conventions so data is entered consistently. The following are the metadata principles for the Ancient Agora, which may be helpful.

- **Metadata Principles for Ancient Agora**

Always write out abbreviations. For example, cardinal directions such as S, N, E, W, SW, NE, etc. should be entered as: South, North, East, West, Southwest, Northeast. Abbreviated building names such as SWFH should be entered as: Southwest Fountain House. Chronological periods such as LR, Byz, and LH should be entered as: Late Roman, Byzantine, and Late Helladic.

Use final periods (.) only when typing titles or multiple sentences (e.g. “Pit to the west of Wall A. Dug to bedrock.”). Do not use final periods in basic annotations such as dates, chronologies, or headings (i.e. the heading annotation “Poros Foundation” should not have a final period).

The words Lot, Basket, and Deposit should be capitalized when used in titles.

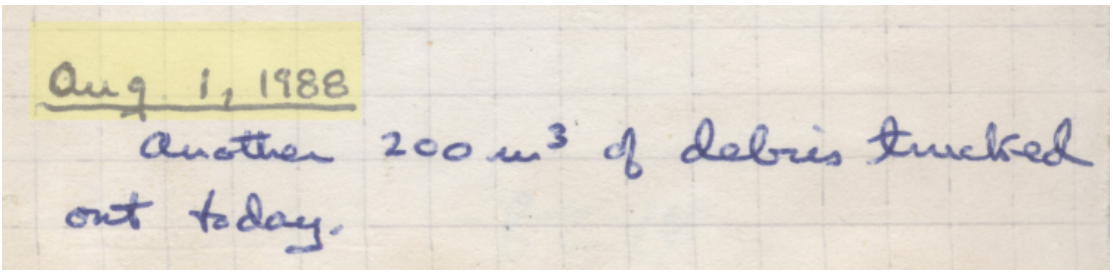
Use a single quote (') when you need to type a prime symbol.

When entering metadata, do not enter qualifiers such as question marks (?), “ca.”, “m.”, “ff.” etc. The goal is to record unqualified data that will help guide a user to a specific location in the notebooks. Once there, users can judge the certainty, value, or nature of the data from the local context by themselves.

Whenever metadata text is not legible, enter as much as you can and replace any illegible words with "/…/". Make sure you indicate that this annotation needs to be checked by clicking the "Check" box in the inspector window.

Date (^D)

Date annotations are modern excavation dates and are found throughout the notebooks. Date annotations are either specific dates or a date range.



Examples:

30 Sep 1969	[day month year]
30 IX 1969	[day month year]
Sep 1969	[month year]
1969	[year]
1969-1970	[year-year]
Aug-Sep 1969	[month-month year]
30 Sep-10 Oct 1969	[day month-day month year]
15-30 Sep 1969	[day-day month year]

You should be able to enter a date or date range as it is written in the notebooks and it will parse correctly.

Never use commas when entering dates. The only acceptable punctuation in a date field is a hyphen. Any other punctuation characters will make the date invalid.

Months should never be entered as numbers. Months should be entered either as a three letter month abbreviation (e.g. Jan; Feb; Mar, etc.) or as a Roman numeral as they are commonly written in the notebooks (where i=Jan, ii=Feb, iii=Mar, iv=Apr, v=May, vi=Jun, vii=Jul, viii=Aug, ix=Sep, x=Oct, xi=Nov, xii=Dec).

Years from 1921 to 2020 can be abbreviated to the last two digits (e.g 21 = 1921; 20 = 2020). Any years before 1921 must be written out fully (e.g. 1915; 1894). Years before 1800 are invalid.

Use hyphens (-) for date ranges. The annotation program does not accept non-contiguous date ranges. If you have a list of dates that contains a gap (e.g. 15, 20-23 Sep 1969), then you must create multiple date annotations, one for each range inside the list of dates (e.g. 15 Sep 1969; 20-23 Sep 1969).

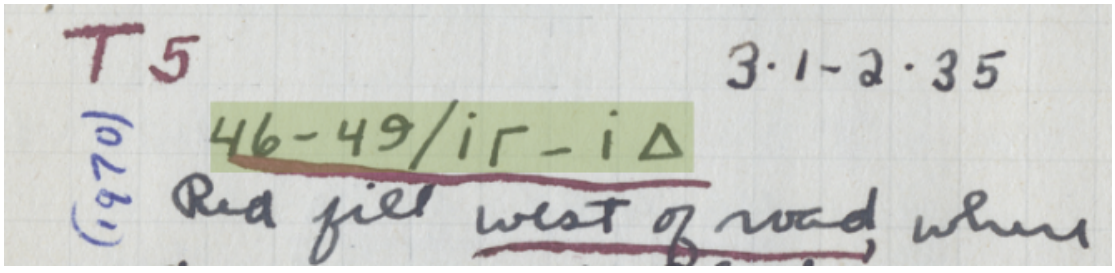
If dates are obviously a range but written as a list (e.g. 18, 19 Jun 1991; or Sep, Oct 1969) then you should enter these as a range with a hyphen (e.g. 18-19 Jun 1991; Sep-Oct 1969).

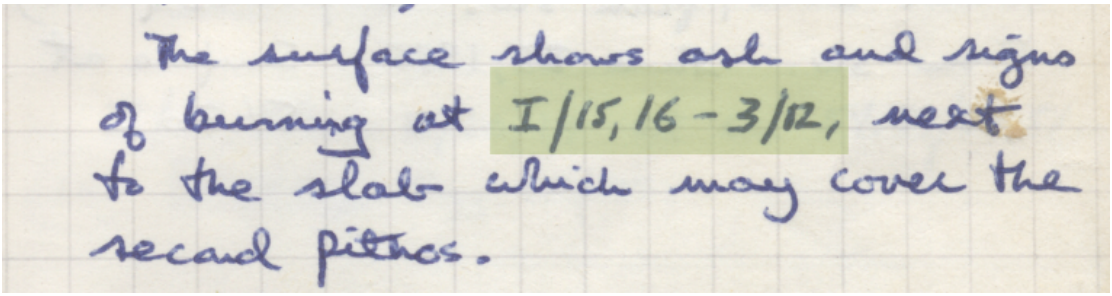
Sometimes dates in the notebooks are written simply as numbers (e.g. 5.4.37; 3.6.54) where it is ambiguous which number is the month and which is the day. In these cases, make sure you determine which format the author uses for writing dates (European style or American style). When you enter these kinds of dates, you will need to determine which number is the month and then write it out (e.g. 5.4.37 = 4 May 37 or 5 Apr 37)

Grid (^G)

Grid annotations designate geographical locations within the ancient Athenian Agora (the "x,y" spatial coordinate ranges). Two different grid systems have been used during the history of excavations: the **old grid** system, and the **new grid** system. Each notebook will use either the old or the new grid system depending on when it was written.

Both grid systems can designate any 1 meter square within the Agora (or larger areas by using ranges of grid squares). In the old grid system, each Section has its own unique local grid. The new grid system is a single uniform grid covering the entire Agora site. Both grid systems are complicated and will take some time to learn.




The surface shows ash and signs of burning at I/15,16-3/12, next to the slab which may cover the second pithos.

Examples:

46-49/ΙΓ-ΙΔ	[old grid]
106/ΜΣΤ	[old grid]
13/ΚΗ-ΚΛ	[old grid]
15-16/Γ-ΙΕ	[old grid]
I/15,16-3/12	[new grid]
K/8-4/6	[new grid]
J/17,18-1/6	[new grid]
O/5,N/10-6/8,11	[new grid]
J/20,K/3-3/13,4/1	[new grid]

Grid (^G) cont.

The format of an **old grid** reference conforms to the following pattern: "number-part <slash> letter-part" (where the number part represents a measurement in meters along one axis of a Section, and the letter part represents a measurement in meters along the other axis). A hyphen (-) is used to express a range of meters (e.g. 1-8/Γ-Θ = meters 1 through 8 along one axis and meters Γ through Θ along the other axis).

The letter part uses the following traditional method of counting using Greek letters to represent numbers:

	Α =	1
	Β =	2
	Γ =	3
	Δ =	4
	Ε =	5
	ΣΤ =	6
	Ζ =	7
	Η =	8
	Θ =	9
	Ι =	10
	Κ =	20
	Λ =	30
	Μ =	40
	Ν =	50
	Ξ =	60
	Ο =	70
	Π =	80
(Koppa)	Ϙ =	90
	Ρ =	100
	ΡΙ =	110
	ΡΚ =	120

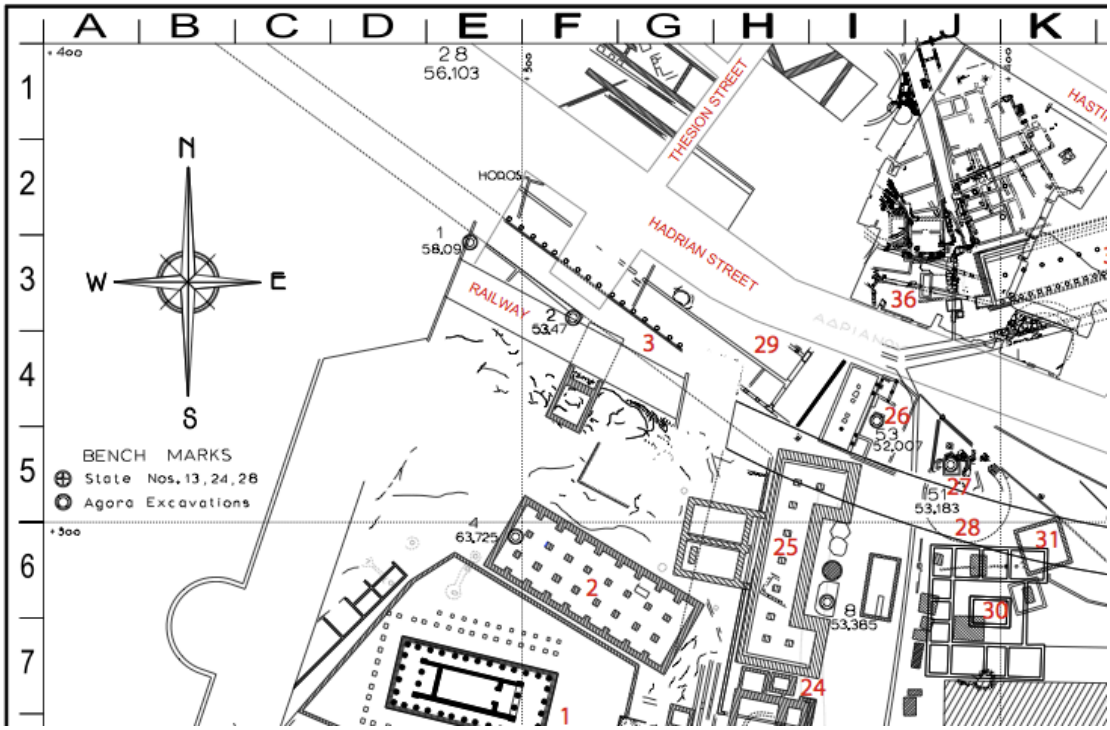
Combinations of these letters can be used to create numbers:

ΙΔ	= 14
Δ-Ζ	= 4-7
ΛΑ-ΞΗ	= 31-68
ΜΘ-ΡΚΣΤ	= 49-126

You should always enter the old grids exactly as they are written (i.e. with the Greek letters). You should not try to convert the letters to numbers. The letter equivalents are only here for your reference.

Grid (^G) cont.

The **new grid** system is based on 20-meter grid squares designated by a *letter* (east/west, x-axis) and a *number* (north/south, y-axis). Pictured below is the north-west corner of the Agora. The 20-meter grid squares are designated by the letters along the top of the map and by the numbers going down the left side. For example: "A 1" is the first 20-meter grid square in the top left corner; while "K 7" is the 20-meter square at the bottom right of the picture.



New grids that are written with just a letter and a number (and which designate a 20-meter square) are sometimes referred to as **new grid areas** (e.g. A 1; F 4; K 7).

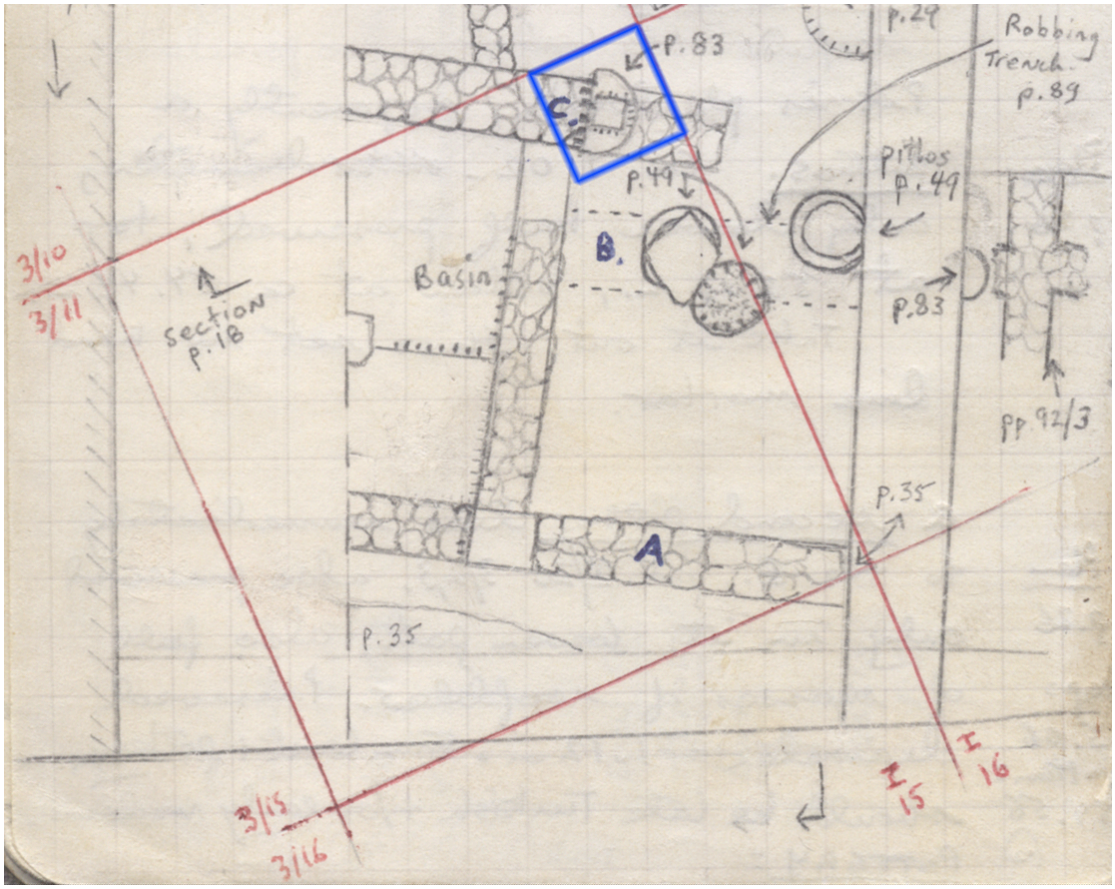
Each 20-meter **new grid area** is further subdivided into 1-meter grid squares that can be designated in the following manner: "new-grid-area-letter <slash> meters-across-within-this-area <hyphen> new-grid-area-number <slash> meters-down-within-this-area" = "letter/number-number/number" as in the following examples:

J/7-**5**/15 = inside new grid square "J 5" on the map above, 7 meters over in this square, 15 meters down.

K/1,2-**4**/7,20 = inside new grid square "K 4" on the map above, 1 to 2 meters right in this square, 7 to 20 meters down. (Note the use of commas to separate the meter ranges within the square).

Grid (^G) cont.

Here is a plan that uses the **new grid system**. Grid components are marked in red on the plan: I/15, I/16, 3/10, 3/11, 3/15, and 3/16. The first thing we can say about this plan is that it is inside the 20-meter "I 3" new grid area (since all the components begin with either "I" or "3"). The 5x5 meter red square drawn on the plan runs west-east from the I/10,11 red line (which is not labeled) to I/15,16, and north-south from the 3/10,11 red line to 3/15,16. So the new grid for the interior of this red square can be designated as: "I/11,15-3/11,15".



Since each precise new grid reference designates a 1-meter square box and not a line or point (i.e. I/15-3/11 designates the 1-meter blue square box located in the top-right corner of the red square), this means that new grid meter offsets are the *upper-bounds* of a grid square. For example, there is no *zero* meters over or down as in "I/0-3/0" (this grid would be invalid). A new grid reference like "I/1-3/1" implies the whole square running from 0 to 1 meters over, and from 0 to 1 meters down in the same way that the blue square above (I/15-3/11) implies the whole square from 14 to 15 meters across, and from 10 to 11 meters down.

Grid (^G) cont.

Here are some general rules for entering grids. As long as you follow these rules and enter the grids as they are written in the notebooks, the grids you enter should validate (although sometimes the grids on the page are not written correctly and you will need to correct them yourself or ask for help).

The only grid references that contain spaces are new grid areas (like "J 5" or "I 3"). All other grid references should never contain spaces (e.g. "I / 15 - 3 / 11" should be entered as "I/15-3/11").

The only punctuation characters allowed in grid references are: commas, slashes, and hyphens (, / -).

Old grids always use Greek letters for the letter part while new grids always use English letters for the letter part.

The format of a grid reference should always follow one of the following patterns (where the parenthetical parts are optional).

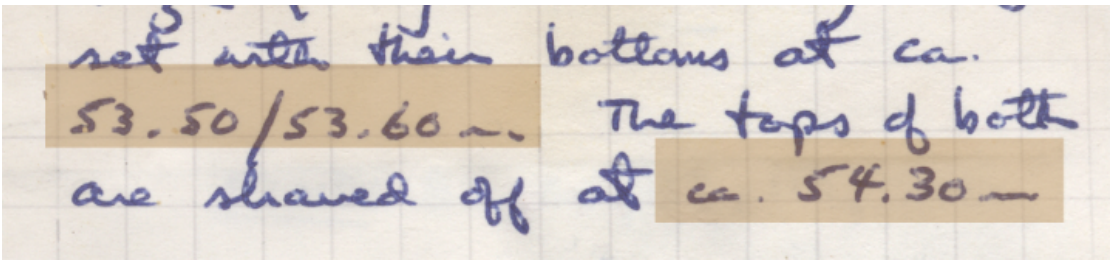
old grid = number(-number)/letter(-letter)
new grid = letter/number(,number)-number/number(,number)

For practice, here is a list of incorrectly written grids (the first column) with their corrections (the second column).

15/Γ-16/ΓΕ	15-16/Γ-ΓΕ	(range issue)
8/I-9/IA	8-9/I-IA	(range issue)
K/1,K/2-3/5,3/6	K/1,2-3/5,6	(range issue)
J/1,J/7-2/20	J/1,7-2/20	(range issue)
J/20,21-2/13,14	J/20,K/1-2/13,14	(no 21 meters)
K/4,6-1/19,21	K/4,6-1/19,2/1	(no 21 meters)
J/18,K/2-3/20,3/8	J/18,K/2-3/8,20	(range order)
2/16-J/17	J/17-2/16	(letter part first)
J/1-3-3/14-15	J/1,3-3/14,15	(punctuation)
J/16;J/20-4/2;3/17	J/16,20-3/17,4/2	(punctuation)
J/20;K/3-3/13;4/1	J/20,K/3-3/13,4/1	(punctuation)
J/1,I/20-3/12,13	I/20,J/1-3/12,13	(letter order)
K/1,J/20-3/2	J/20,K/1-3/2	(letter order)

Elevation (^E)

Elevation annotations are height measurements above sea-level (the "z" spatial coordinate). Within the ancient Athenian Agora, elevations are typically within the range of 30 to 60 meters.



Examples:

53.20
51.34-54.32
40.53 (-3.8)
50.53 (+1.4)

Only enter the elevation number. Do not enter any question marks (?), "m.", "ca.", or any other qualifiers that might be written in the notebooks before or after the elevation.

Use hyphens (-) to express elevation ranges, do not use slashes (e.g. "53.50/53.60" should be entered as: 53.50-53.60).

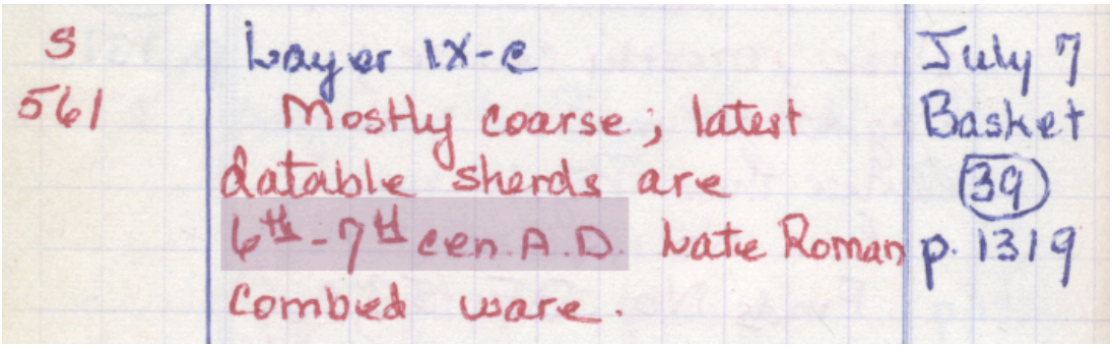
When there are more than two elevations written for a range as is common in the notebooks (e.g. "52.20/52.09-52.13/51.97"), then you should create a single elevation annotation and only enter the minimum and maximum values in the range (e.g. 52.20-51.97).

If you encounter a list of elevations or a non-contiguous range of elevations (e.g. "53.50, 53.60-53.61, 54.12") then you will need to create multiple elevation annotations, one for each elevation range.

Do not enter a relative elevation without a benchmark.
Many times you will encounter relative elevations (e.g. "-1.2m."). These relative elevations are based on benchmarks (sometimes a benchmark for that particular day, sometimes a benchmark for that particular excavation season). You need to determine the actual benchmark and then enter the relative elevation as an offset in the following format: "benchmark (offset)". For example, an elevation written as "-1.32m." with a benchmark of "53.11m." should be entered as: "53.11 (-1.32)".

Chronology (^C)

A chronology annotation is a phrase that dates a pottery lot, coin, or find. A chronology can be expressed in many different ways: as a specific year, a range of years, part of a century, multiple centuries, a historical period, or in the case of coins, as an issuing authority.



Examples:

523 B.C.
Late 4th A.D.
6th to early 5th century B.C.
Hellenistic
Arcadius, 395-408 A.D
Theodosius II

Do not enter any question mark (?) or "ca." or any other qualifier written in the notebook before or after a chronology.

Write out all abbreviations: LR = Late Roman, Byz. = Byzantine, LH IIIA = Late Helladic IIIA, etc.

Do not use the abbreviation "c." for century or centuries (e.g. 2nd c. A.D. should be entered as: 2nd A.D.). Use Arabic numerals for the centuries (e.g. 1st B.C.; 2nd A.D.). Do not use Roman numerals like I, II, IV for centuries.

When a chronology is expressed in centuries or absolute numbers, always enter a final B.C. or A.D. Do not type any space between the letters or periods of B.C. or A.D. Sometimes you will encounter a chronology where B.C. or A.D. is not indicated (e.g. "Late 4th"). In these situations, you need to determine and then add the appropriate B.C. or A.D. indicator (e.g. Late 4th B.C. or Late 4th A.D.).

Chronology (^C) cont.

Always use a hyphen (-) to represent a chronological range (e.g. 180-159 B.C. and not 180/59 B.C. or "180 to 159 B.C."). Do not type any spaces before or after a hyphen.

In the Pottery notebooks, only the latest chronology should be annotated in a lot entry. The lot entries in the Pottery notebooks usually include a series of chronologies for all periods represented in a lot. In these cases, only the latest chronology (i.e. the date closest to now) should be annotated since it is the most important and the one used to date the pottery lot (the latest chronology will usually be the first listed or the most prominent in a lot description). When intrusions are indicated, these chronologies should generally be ignored. Consult with a supervisor if you are unsure which chronology is the most important to annotate.

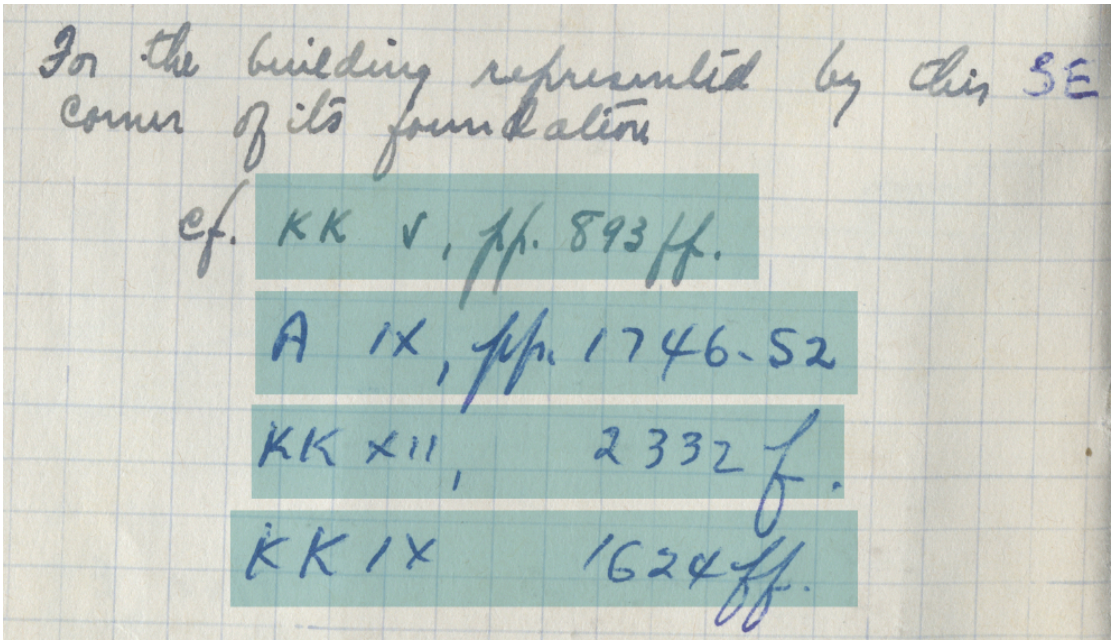
Do not annotate any chronologies within the Notes notebook that are written next to lot numbers. These are temporary chronologies (usually written in pencil) assigned to lots before the pottery is fully analyzed. The final chronology for the pottery lot will be written (and annotated) in the Pottery notebooks.

Do not annotate a chronology unless it provide at least some date information. Coin entries will sometimes have the word "Illegible" written instead of a date. If this is the only information provided, then this phrase should not be annotated as a chronology. If however you encounter a phrase such as "4th c. B.C. Illegible" or "Roman, Illegible" then these phrases should be annotated as chronologies since they do provide at least some date information.

Chronologies should be entered as consistently as possible.
It might help to understand the reasons for having strict typing conventions for chronologies. Eventually each chronological phrase will be manually converted into numeric years. For example, "523 B.C" will be converted to the number -523, and "4th B.C." will be converted to the numeric range -399 to -300. By converting a specific chronological phrase to a range of numbers once, you can automatically convert every occurrence of this particular chronological phrase in every notebook into a searchable and sortable numeric range.

Reference (^R)

Reference annotations are references to other notebook pages. As mentioned in the introduction, you can reference any page in any notebook at the Agora by simply providing a Section and a page number. The notebook volume numbers are helpful but they are optional and not required.



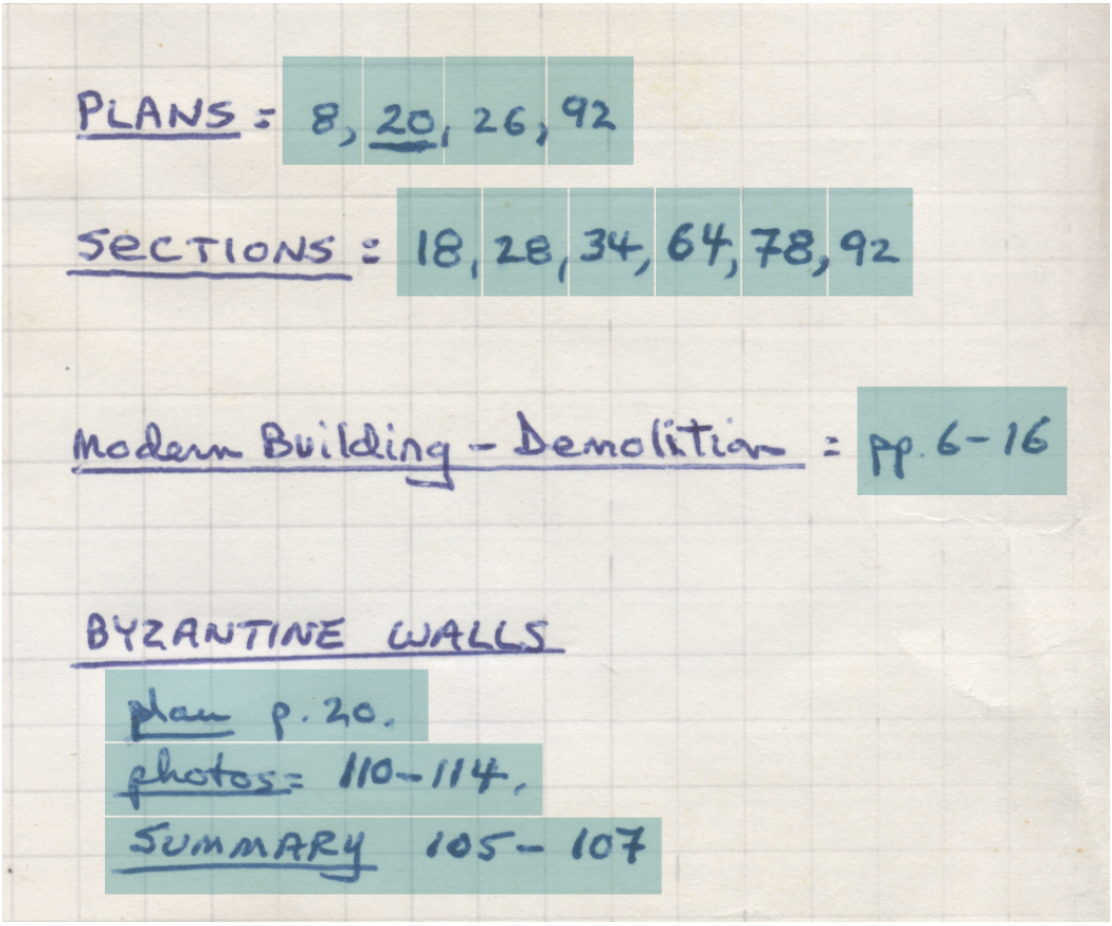
Examples:

A IX 1746-1752	[section volume page-range]
ΣT III 573	[section volume page]
ΔΔ 38-42	[section page-range]
BΘ 1764	[section page]
66-78	[page-range]
456	[page]

Most of the time you will enter a reference annotation as simply a number (e.g. 456). When no Section is present, it is assumed that the reference is to a page in the current notebook or Section.

In order to reference a page in a notebook from a different Section, use a *fully qualified page reference* in the form: "Section <space> Volume <space> Page" or (omitting the optional volume number) as "Section <space> Page" (e.g. ΣT III 573; BΘ 1764).

Do not include any page qualifiers when entering reference annotations. Qualifiers such as "cf." "p." or "ff." should never be entered (e.g. "KK V, pp. 893ff." = KK V 893; "cf. pg. 456f." = 456).



If a page reference is qualified by a title that is not otherwise annotated like "Plan pg. 20" or "Summary 105-107" then the annotation box should cover the entire phrase but only the actual page number(s) should be entered.

Use a hyphen (-) to enter page ranges (e.g. 1-5). Slashes should be converted to hyphens when a page range is implied (e.g. "1929/1931" = 1929-1931).

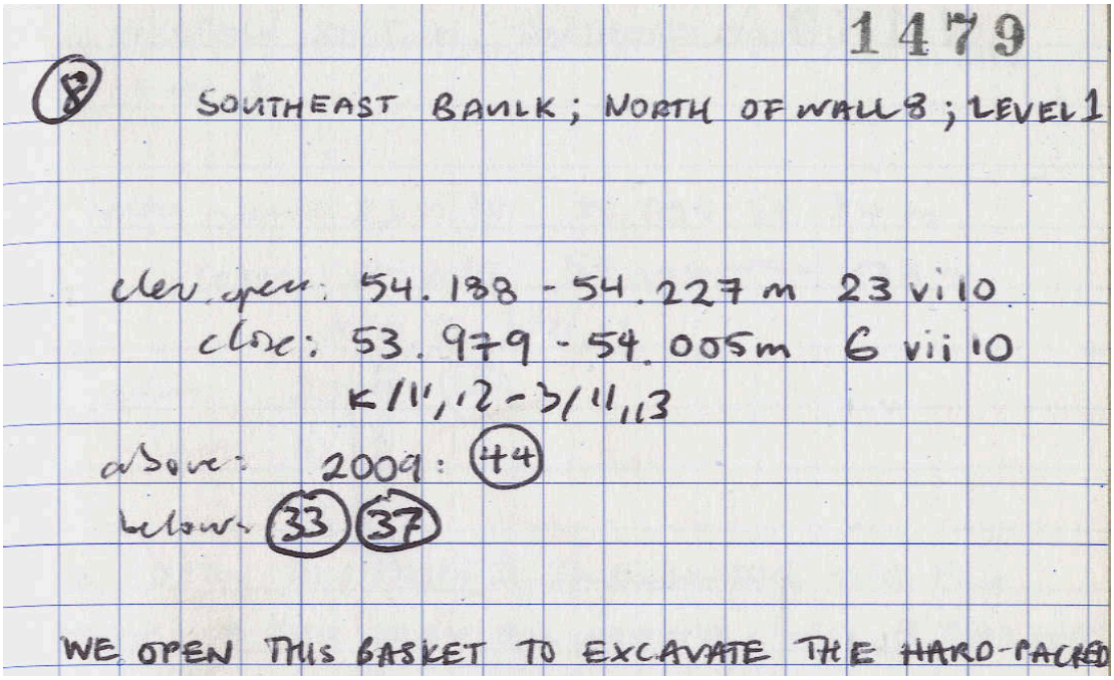
Write out all page abbreviations (e.g. "1175-6" = 1175-1176).

For lists of pages that are non-contiguous (e.g. "1, 8, 10-11, 15") you must create separate annotations for each page range.

Exception: if the right hand page in a notebook spread references the left hand page, or vice-versa, then you should *not* create annotations for these references. (Clicking on a page reference annotation will jump the user to the spread with that page. If the destination spread is the same as the source spread, then you will simply be creating a self-referential link that will confuse the user.)

Basket (not annotated)

Sections at the Agora are excavated as a sequence of independent archaeological contexts (Baskets, Lots, and Deposits). You should start to become familiar with the archaeological contexts used at the Agora and how they are referenced and recorded in the notebooks.

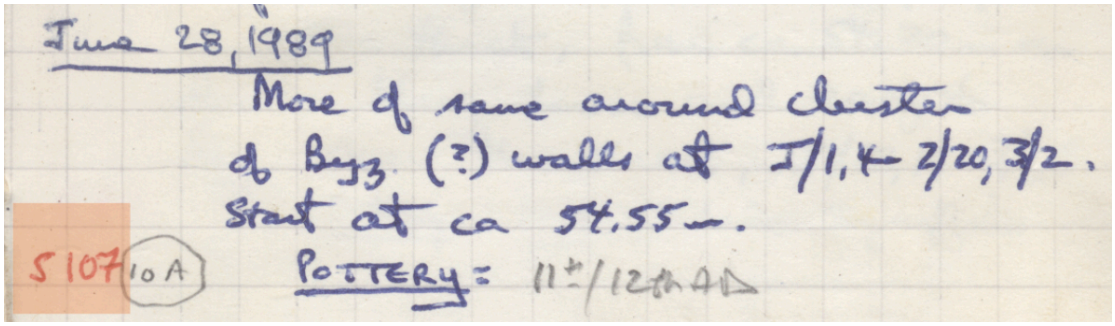


Baskets are the smallest units of excavation that are recorded in the notebooks (one floor layer, one road surface, one layer in a well, etc.). All material from a "basket" context is initially kept separate for analysis. Baskets are numbered sequentially during an excavation season and are written in the notebooks as a number with a circle around it as shown above. Since the use of baskets is a relatively recent development at the Agora, we will not be annotating them (although you should be able to recognize them when you see them). At the end of an excavation season, baskets are analyzed and combined into lots (you can think of baskets as temporary lots).

TIP: If you are annotating a Notes notebook that uses baskets, then you should try to create annotation groups based on baskets (i.e. all the annotations in a basket should be grouped together). Otherwise you should try to group by lot (i.e. all annotations that make up a lot should be grouped together).

Lot (^S)

Lots (sometimes called "pottery lots") are the material remains (one or more baskets) from a single archaeological context. Lots are the smallest unit of *storage* in the Agora (i.e. all material from each lot is stored separately and can be re-analyzed in the future if necessary).



Examples:

Lot ΠΘ 5	["Lot" Section number]
S 107	[container-type number]
T 54	[container-type number]
4321	[number]

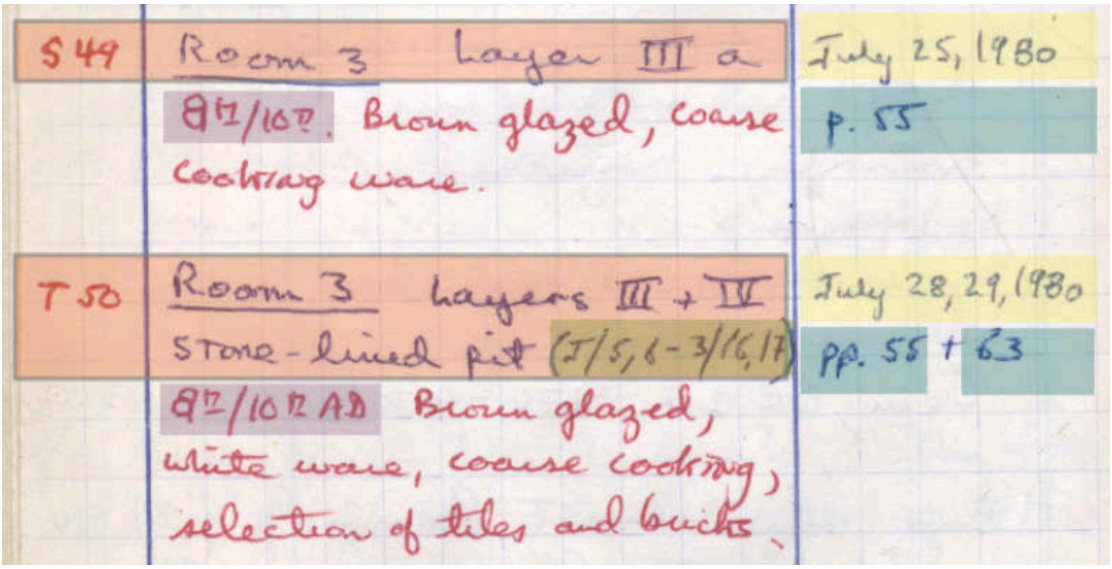
Lots are uniquely identified by the Section where they are located and by a running serial number that begins with 1 in each Section (e.g. Lot ΠΘ 1, Lot ΠΘ 2, ... Lot ΠΘ 145; Lot BE 1, Lot BE 2, ...). In the notebooks, however, you will often see lots written in red pen like **S 107**, **T 50**, or **548** where the Section letters are simply assumed (from the notebook) and where the Latin letter preceding the lot number (when present) conveniently designates the type of storage container used for the contents of that lot (S = sack; T = tin; B = box; BB = big box; E = envelope).

When entering lot numbers, always include the storage container letter when present (e.g. S 107). Otherwise enter the lot number as a simple number (e.g. 548). If you need to enter a lot number from a different Section, then you should use a fully qualified lot number in the format: "Lot" <space> Section <space> number (e.g. Lot ΠΘ 145). Use a hyphen (-) for lot ranges and expand abbreviated numbers (e.g. "T 245-8" = T 245-248).

Note: the word "Lot" is necessary in a fully qualified lot number in order to distinguish it from a find number. If a Section is not present in a lot number, then the current notebook Section is assumed.

Lot (^S) cont.

Lot annotations have two fields in the inspector window: a "Lot" field for the actual lot number, and a "Title" field for the lot title. Lot titles should only be entered for lot entries in the Pottery notebooks, not for lot cross-reference annotations such as those found in the Notes notebooks. **Only enter a lot title if one is present in the text. Do not do research in order to find a lot title.**



Lot annotation boxes in the Pottery notebooks should cover both the lot number and the lot title and be marked as entries in the inspector window. Duplicate the lot annotation if the lot number and title are not together. All other annotations inside the lot title (such as elevations or grids) should then be created on top of the lot annotation (as pictured above). There is no need to use the polygon tool in situations like this. Simply create a smaller rectangle annotation on top of the larger annotation while holding down the *alt* ⌥ and *command* ⌘ keys.

Lot entry groups will eventually be converted into database records. This means that data *implied* in a lot entry but not explicitly present (such as grids and elevations) should be ghosted into each appropriate lot entry group. **The goal is to have at least one grid and one elevation annotation (or ghost) inside each lot entry group so the lots can be spatially located.**

Note: Only ghost grids and elevations that are accessible from the current context (i.e. from a previous lot group or from the page titles and headings). Do not look in the Notes notebook or do any other research in order to determine a grid or an elevation for a lot.

Lot (^S) cont.

The lots in the Pottery notebook are usually arranged hierarchically where the headings on each page combined with the lot title specify a precise location within a trench or Section:

Area II; Early Altar; Room 3; Layer IIIa

Every lot title should include this full hierarchy. For example, in the picture on the previous page, the lot titles begin at the "Room 3" level but you should still enter the full hierarchy as follows: "Area II; Early Altar; Room 3; Layer IIIa"; and "Area II; Early Altar; Room 3; Layers III and IV; Stone-Lined Pit".

Each distinct component of a lot title (i.e. each level in the hierarchy) should be written in **Book Title Case** and separated by a semi-colon (;). Any other punctuation characters used for separators (commas, colons, etc.) should be changed to semi-colons.

All abbreviations in lot titles should be fully expanded (e.g. enter "and" instead of "&"; "Northwest Side" instead of "NWSd", etc.).

Lot titles should *never* include the actual Section or Notebook but they should include any major divisions within a Section:

~~Section A;~~ Drain 1 Area; Layer VI;
~~BE IX;~~ East Half; Area south of Byzantine Room with Floor
BZ North; Room 5; Layer 6

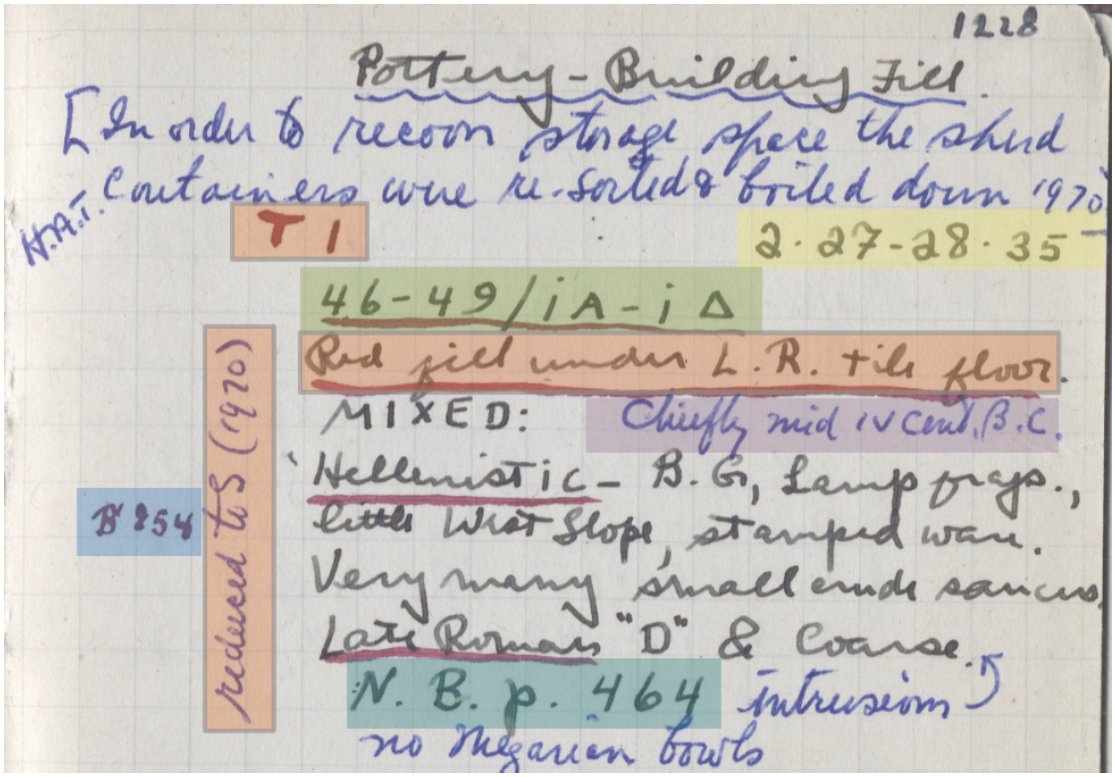
In general, grids and elevations should not be included in the lot titles unless they are part of a phrase. Consider the following lot titles as examples of when to keep grids and elevations in the title and when to leave them out.

Chapel; ~~J/13/18-2/8,11;~~ Fill between walls at 52.3-52.4m.
Room 4; ~~54.3m.;~~ North-South walls at J/16,18-1/20,2/6
South Area; Room 2; Below 51.32m.

Note: When you include a grid or elevation within a title, it should still always be annotated separately (or ghosted into the group). Titles are never scanned for grids or elevations so having a grid or elevation inside a title is not the same as having a specific grid or elevation annotation inside a group. This is a general principle that applies to all annotations with titles.

Lot (^S) cont.

Occasionally you will encounter **reduced lots** (lots which have been combined with other lots into a new lot). In these situations, both lot numbers (the original lot number and the reduced lot number) should be annotated as lot entries and then grouped together with the rest of the lot annotations as a single lot group. You may need to ghost the reduced lot number into multiple lot groups.



When lots are divided into **sub-lots** (e.g. S 12 a; S 12 b; S 12 c), only the main lot number should be annotated as a lot entry. All sub-lot annotations should then be grouped together with the main lot number to form a single lot group.

Lot (^S) cont.

The steps for annotating pages with lot entries are as follows:

1) Create annotation boxes for the lot numbers (which should completely cover the lot numbers and lot titles), dates, references, the primary chronology, and any grids, elevations, finds, coins, and deposits. Create heading annotations for any bibliography references in the lot entries.

2) Create ghost annotations for any elevation, grid, or deposit not present in a lot entry but implied from previous lot entries or from the page headers. Any grids, elevations, or deposits that are inside the lot title should be annotated on top of the lot annotation itself. Use the *arrange* options to position annotations on top of each other.

3) Align, resize, and arrange the annotation boxes.

4) Enter the metadata for all annotations. Lot entry annotations should include the full hierarchical title, written in title case, with each component of the title separated by a semi-colon (;). Don't forget to mark the entry checkbox for lot entry annotations.

5) Group all annotations in an entry together.

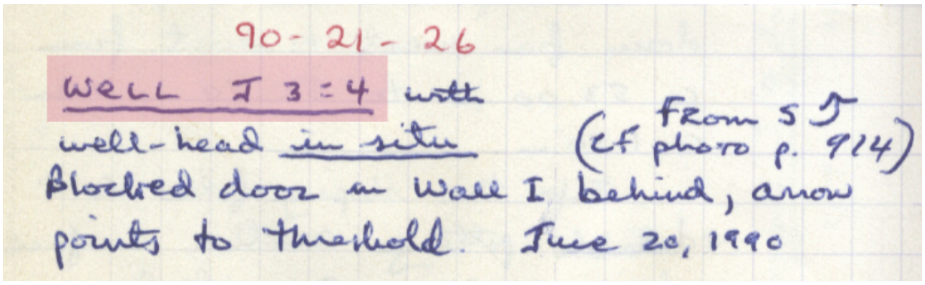
6) Check the metadata for errors and mistakes by switching back and forth between Text Mode and Status Mode (^SHIFT+TAB).

Tip: Because lot entries often follow a consistent layout and style, it is usually faster to copy and paste entire lot entry sets (i.e. all annotations that make up a lot entry) and then adjust and tweak the annotations within each lot entry as necessary.

Tip: You can assign metadata to multiple annotations at once by selecting all relevant annotations and then entering the appropriate metadata. Copy and paste prefix metadata that is common between multiple annotations and then fill in the particular variations for each annotation individually (i.e. paste the hierarchical titles onto all lot entry annotations and then add the individual lot titles to the existing prefixes).

Deposit (^T)

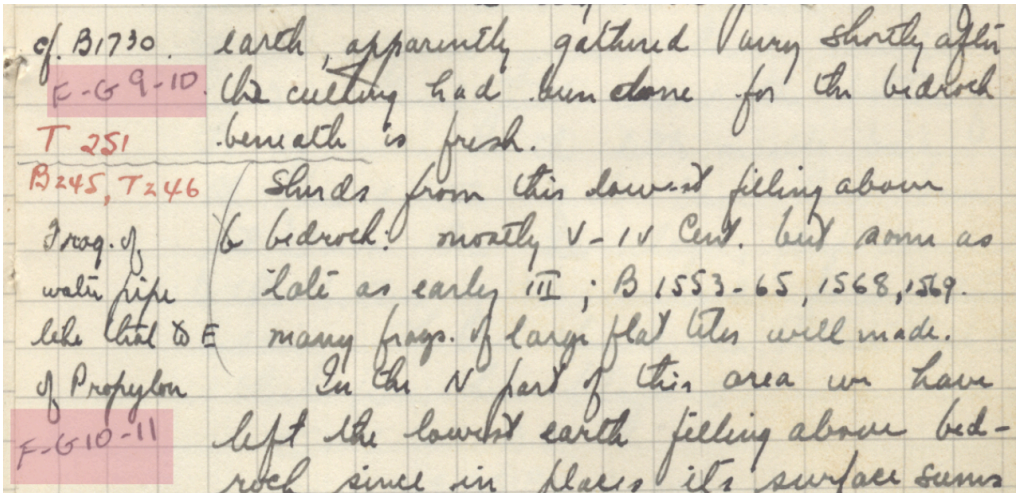
Deposits are contexts (one or more lots) that refer to any closed physical unit (well, cistern, grave, pit, etc.) in which the recovered finds present sufficient homogeneity to be of value in the study of type, style, or chronology.


90-21-26
WELL J 3:4 with well-head in situ (cf photo p. 914) From S ↑
Blocked door in Wall I behind, arrow points to threshold. June 20, 1990

Examples:

J 3:4	[area : number]
F-G 9-10	[area range]
A-B 1-2:3	[area range : number]

Deposit numbers are designated by a new grid area (e.g. J 3), a colon (:), and a sequential number starting with 1 within that particular 20 meter square (e.g. J 3:1, J 3:2, J 3:3, J 3:4).


of. B1730.
F-G 9-10
T 251
B245, T246
frag. of water pipe like that to E of Propylon
F-G 10-11
earth, apparently gathered very shortly after the cutting had been done for the bedrock beneath is fresh.
Sherds from this lowest filling above bedrock mostly V-IV Cent. but some as late as early III; B 1553-65, 1568, 1569. many frags. of large flat tiles well made.
In the N part of this area we have left the lowest earth filling above bedrock since in places its surface seems

Sometimes deposits cover multiple new grid areas and are written as a range (e.g. F-G 9-10) sometimes with a colon and sequence number, and sometimes without.

Deposit numbers are often preceded by the deposit type (e.g. Pyre C 10:2; Well J 2:1). The deposit type should never be written as part of the deposit number but it should be covered by the deposit annotation box and can be entered in the deposit "Title" field.

Find (^F)

Every find in the Agora has two primary identification numbers: a **Section Number,** and an **Inventory Number.** Both of these numbers are usually written on the object itself in permanent ink.

A **Section Number** is a unique identifier given to an object as soon as it is discovered and serves as an initial tracking number. It is based on the *location* (i.e. Section) where an object is found and a running serial number that starts with 1 in each Section (e.g. BZ 1, BZ 2, BZ 3; ΔΔ 1, ΔΔ 2, ΔΔ 3). **Section letters should always be typed in Greek using the Greek keyboard.**

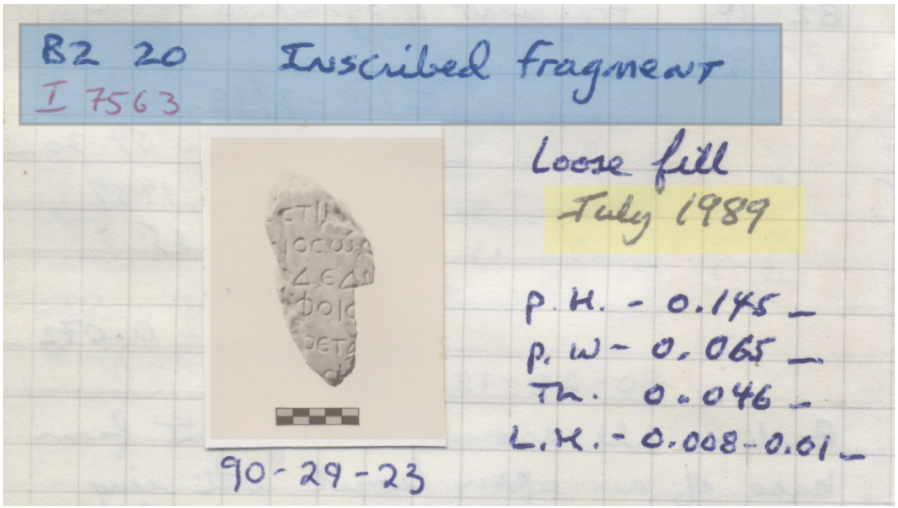
An **Inventory Number** is a unique identifier given to an object after it has been fully cleaned and cataloged. It is based on the following list of *object type* abbreviations and a running serial number that starts with 1 in each type category (e.g. P 1, P 2, P 3; ST 1, ST 2, ST 3). **Inventory letters should always be typed in English using the English keyboard.**

A = Architecture
B = Bronze
BI = Bone and Ivory
G = Glass
I = Inscription
IL = Iron and Lead
J = Jewelry and Gems
L = Lamps
MC = Miscellaneous Clay
N = Coin
P = Pottery
S = Sculpture
SS = Stamps and Seals
ST = Stone
T = Terracotta
W = Wood

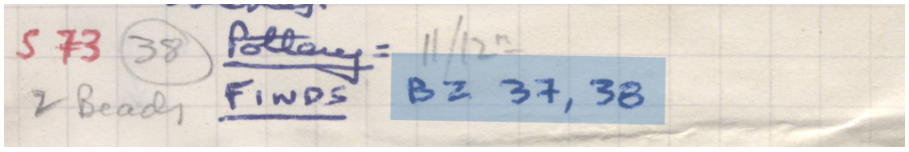
An Inventory Number represents a single object. If an object is discovered in fragments, it might have multiple Section Numbers associated with it. For example, a large ancient inscription might be made up of several fragments discovered in different locations. Each fragment of the inscription will have its own unique Section Number, but the inscription as a whole should have only a single Inventory Number (e.g. the inscription **I 236** consists of fragments **ΣΤ 604, ΘΘ 207,** and **ΕΛ 87**).

Find (^F)

Find annotations in the Finds notebooks should cover all find numbers and the find title and be marked as entries in the inspector window. Whenever the Inventory Number and Section Number are both present, you should always prefer the Inventory Number. The title of the find does not need to be entered.



Find annotations in the other notebooks are cross-references to the find entries and usually only the Section Number will be provided. In these cases, enter the Section Number in the "Find" field.



Use hyphens (-) to express a range of *consecutive* find numbers and always expand any abbreviated numbers (e.g. "BZ 37, 38" should be written as: BZ 37-38; and "BZ 124-5" as: BZ 124-125).

Section Numbers and Inventory Numbers are sometimes followed by a "BIS" or "TER" which indicates a reused find number. These suffixes should be entered after a separating space in capital letters (e.g. BZ 37 BIS; I 7563 TER).

Find numbers should always be entered as follows: "letter <space> number" (with an optional <space> BIS/TER suffix).

Tip: Pressing ^` will insert the current Greek Section letters into any text you are typing (meaning you won't have to switch to the Greek keyboard in order to enter a Section Number).

Find (^F) cont.

The steps for annotating pages with find entries are as follows:

1) Create annotation boxes for the find numbers (which should cover the find numbers and find title), dates, references, grids, elevations, and any mugshots, chronologies, or deposits. Create heading annotations for any bibliography references in the find entries.

2) Create ghost annotations for any elevation, grid, or deposit not present in a find entry but implied from previous find entries or from page headers.

3) Align, resize, and arrange the annotation boxes.

4) Enter the Inventory Number for the find entry annotation in the inspector window (only enter the Section Number when the Inventory Number is not present). Don't forget to mark the find annotation as an entry.

5) Group all the annotations in an entry together.

6) Use autofill **(⌘F)** to lookup the metadata for the rest of the annotations within an entry group. (Since autofill uses internal databases, it will only work from within the Stoa of Attalos.)

7) Check all the metadata for errors and mistakes by switching back and forth between Text Mode and Status Mode. (Negative numbers for multiple mugshots will often not be autofilled correctly and so these will need to be adjusted manually.)

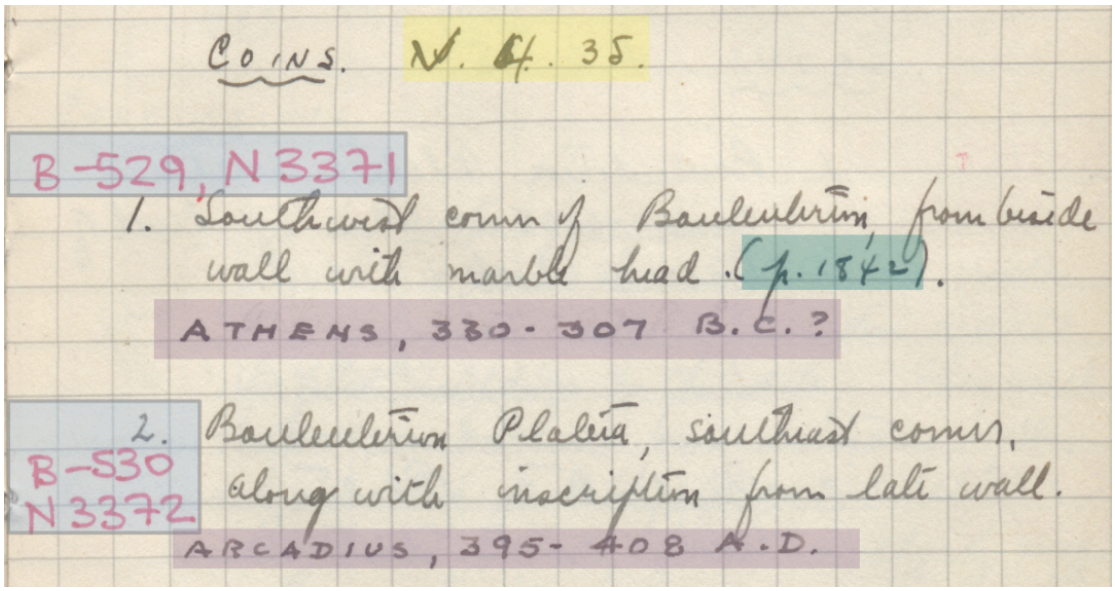
Tip: You can assign metadata to multiple annotations at once by selecting all relevant annotations and then entering the appropriate metadata. Copy and paste prefix metadata that is common between multiple annotations and then fill in the particular variations for each annotation individually.

Tip: You can autofill an entire page of annotations by first creating all the annotations on a page, enter only the Inventory Numbers in the find entry annotations (these are used to lookup the rest of the entry metadata), group each entry separately, select all annotations on the page, and then select autofill. Afterwards, make sure you double check all the metadata (by toggling back and forth between Text Mode and Status Mode) to make sure the autofilled data matches the data written on the page.

Coin (^V)

Coins have been tracked by various methods during the history of excavations in the Agora, and this has resulted in several different methods of identifying and referring to coins. The easiest way to understand coin numbers is to understand this history.

Originally, all the coins that were found on a particular day were simply listed sequentially at the end of each day's excavation notes. These coins are identified by a **Coin-of-the-Day Number** which consists of the *date* and a sequence number for that particular day (e.g. 4 May 1935, Coin #1; 4 May 1935, Coin #2).



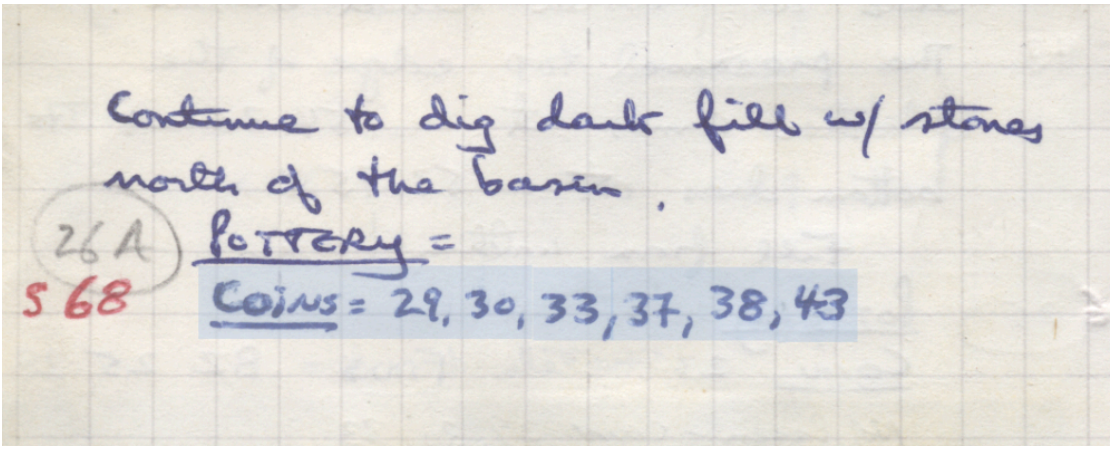
Eventually (in the early 1970s) this system became cumbersome and it was decided to assign **Section Numbers** (e.g. B-529, B-530) and **Inventory Numbers** (e.g. N 3371, N 3372) to coins as well as finds. Since Section Numbers for finds already existed (BZ 1, BZ 2, etc.), a new sequence number was started for coins that used a **hyphen** instead of a space (BZ-1, BZ-2, etc.).

This means that the only way to distinguish a Find Section Number (or a "Find Number") from a Coin Section Number (or a "Coin Number") is by observing the separating character (space or hyphen) between the Section letters and the sequence number. In Section BZ, for example, there will be a find "BZ 1" and there will be a coin "BZ-1" that are two different objects.

BZ 1, BZ 2, ... ΔΔ 1, ΔΔ 2, ... = Find Numbers = Section Numbers
BZ-1, BZ-2, ... ΔΔ-1, ΔΔ-2, ... = Coin Numbers = Section Numbers

Coin (^V) cont.

Whenever you encounter a reference to a coin in one of the notebooks, you must always determine whether this is a Coin-of-the-Day Number (4 May 1935, Coin #1), a Coin Section Number (B-529), or an Coin Inventory Number (N 3371). This can be difficult at times because sometimes only a number is written.



In these situations, you must determine which system of coin recording is being used in the notebook. If you determine these numbers to be Coin Section Numbers, then the fully qualified number or range should be entered (e.g. BZ-29-30; BZ-33; BZ-37-38; BZ-43). If they are Coin-of-the-Day Numbers, then only the sequence number of the coin should be entered in the "Coin" field (e.g. 29-30; 33; 37-38; 43) and the date should be entered in the separate "Date" field. **All Coin-of-the-Day Numbers need to have a date in order to be valid and you should only enter a date for a coin if it is a Coin-of-the-Day Number.**

Many times multiple identifiers are present in which case the Coin Inventory Number is the preferred number, followed by the Coin Section Number. **Coin-of-the-Day Numbers should only be entered when no other coin identifier is present.**

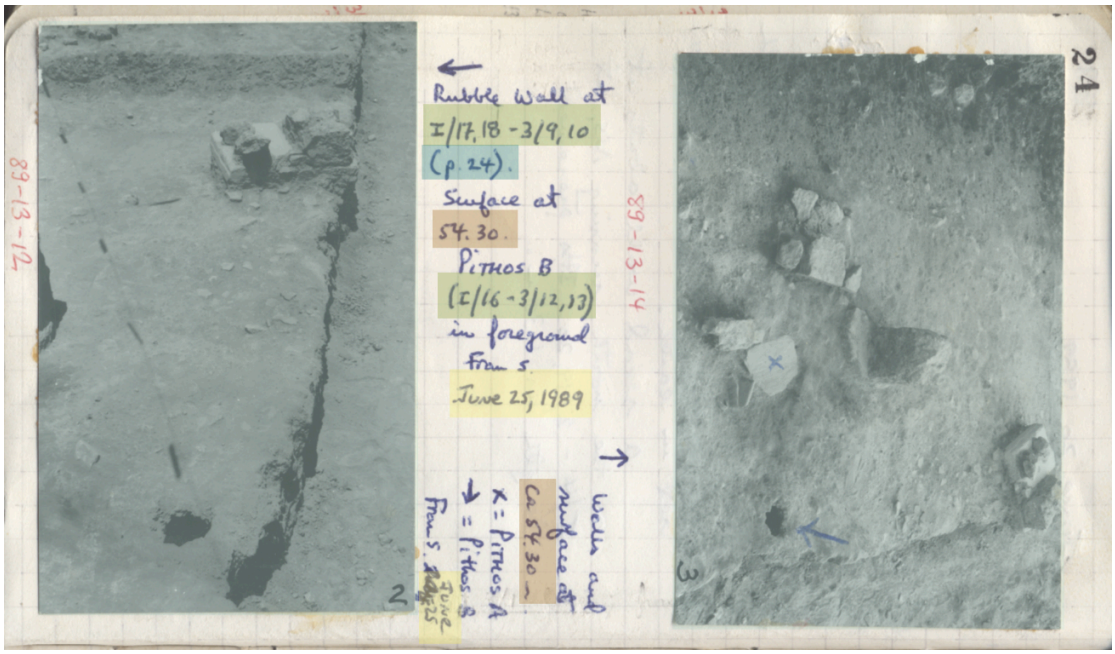
If a coin entry has been marked as "Not a coin" then you should still enter the Coin Section Number provided.

When grouping coin entries that use Coin-of-the-Day Numbers, you should not try to group the date annotation at the top of the page with any of the coin entry groups.

Coin entries should be annotated similar to find entries. You should be able to use autofill for coin entries in any Section between Section A and Section H alphabetically.

Photograph (^A)

Photograph annotations are outdoor excavation photographs that have been glued into the excavation notebooks (not to be confused with mugshots which are small contact photographs of finds).



Since the photographs are often skewed, use the **polygon tool** for creating the photograph annotation boxes.

For every photograph annotation, fill out the **negative**, **title,** and **rotate** fields in the inspector window.

The **negative** number for the photograph will usually be written on the photograph or next to it (often in red ink). Several different formats of negative numbers have been been used in the history of excavations in the Agora:

XIL-42	[roman (1..79) - number (1..100)]
80-102	[number (80..88) - number (1..800)]
98-4-2	[number (77..11) - number - number (1..36)]
78-12-25A	(as previous but with a letter suffix)
123	[number]

The **title** of a photograph should be entered as full English sentences (or at least sentence fragments) with proper punctuation such as final periods. Grids and elevations should be included in photograph titles only if they are part of a phrase within the title.

Photograph (^A) cont.

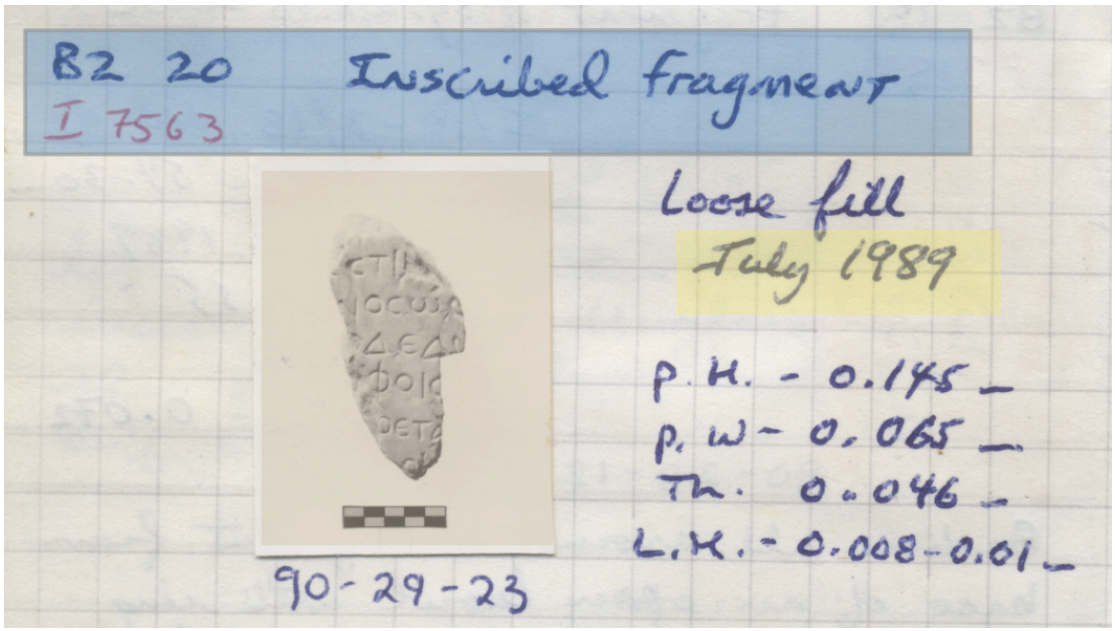
For each photograph annotation, set the **rotate** field value from the drop-down menu (^[= 90º Left; ^] = 90º Right; ^\ = None; ^’ = 180º). Always select the amount the photograph *should be rotated* in order to be right-side-up (*not* how much the photograph is currently rotated).

Photograph groups will eventually be turned into database records so it is important that all annotations that “go with” the photograph are grouped together. If annotations are shared between two photographs on a page (such as dates, grids, elevations, etc.), the user can **ghost** the relevant annotations into the photograph group that is missing them.

Negative numbers that don’t have an associated photograph should be annotated as photographs. In the final interface, clicking on a photograph annotation will link to a full screen version of the original photograph. This means that photograph annotations can be either real photographs pasted into the notebooks, or simple negative numbers without photographs. Clicking on either will produce the same result.

Mugshot (^Q)

Mugshot annotations are small contact photographs of finds that have been glued into the Finds notebooks.



Mugshot annotations will eventually be cropped out of the notebook pages and used as visual icons for the finds. This means that you should use the **rectangle tool** for creating the annotation boxes (unless the mugshot is extremely skewed). The find should be centered in the annotation box and the box should be as large as possible without going outside the border of the contact print.

For every mugshot annotation, fill out the **find, negative,** and **rotate** fields in the inspector window.

The **find** field should follow the same typing conventions as find annotations (i.e. always prefer an Inventory Number over a Section Number).

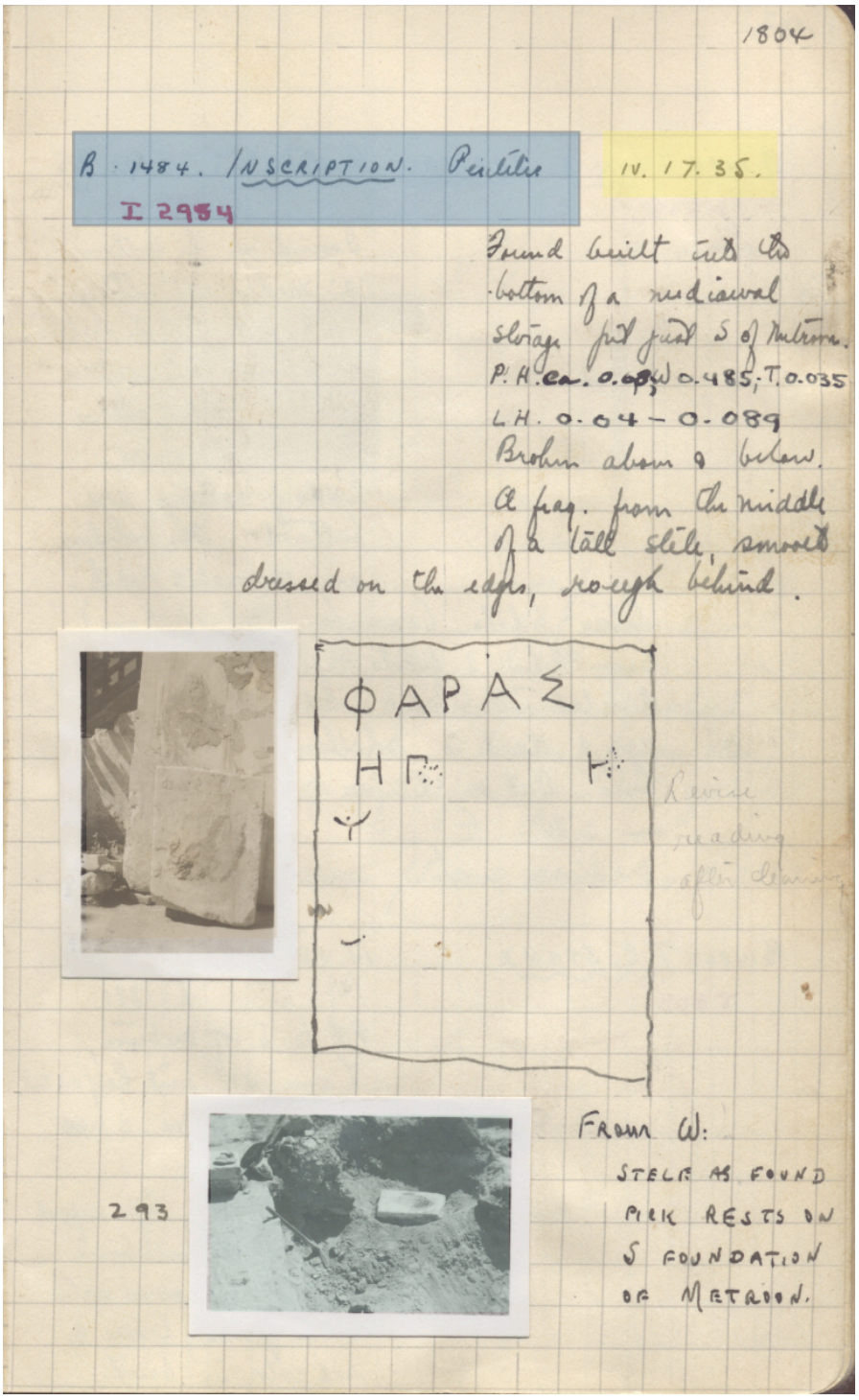
The **negative** field should follow the same conventions as photograph negative numbers. Sometimes the negative number is not present (generally negatives before 1977) in which case the negative field should remain blank.

The **rotate** field should follow the same conventions as the photograph annotations.

Negative numbers without contact prints inside a find entry should be annotated as photographs and not as mugshots.

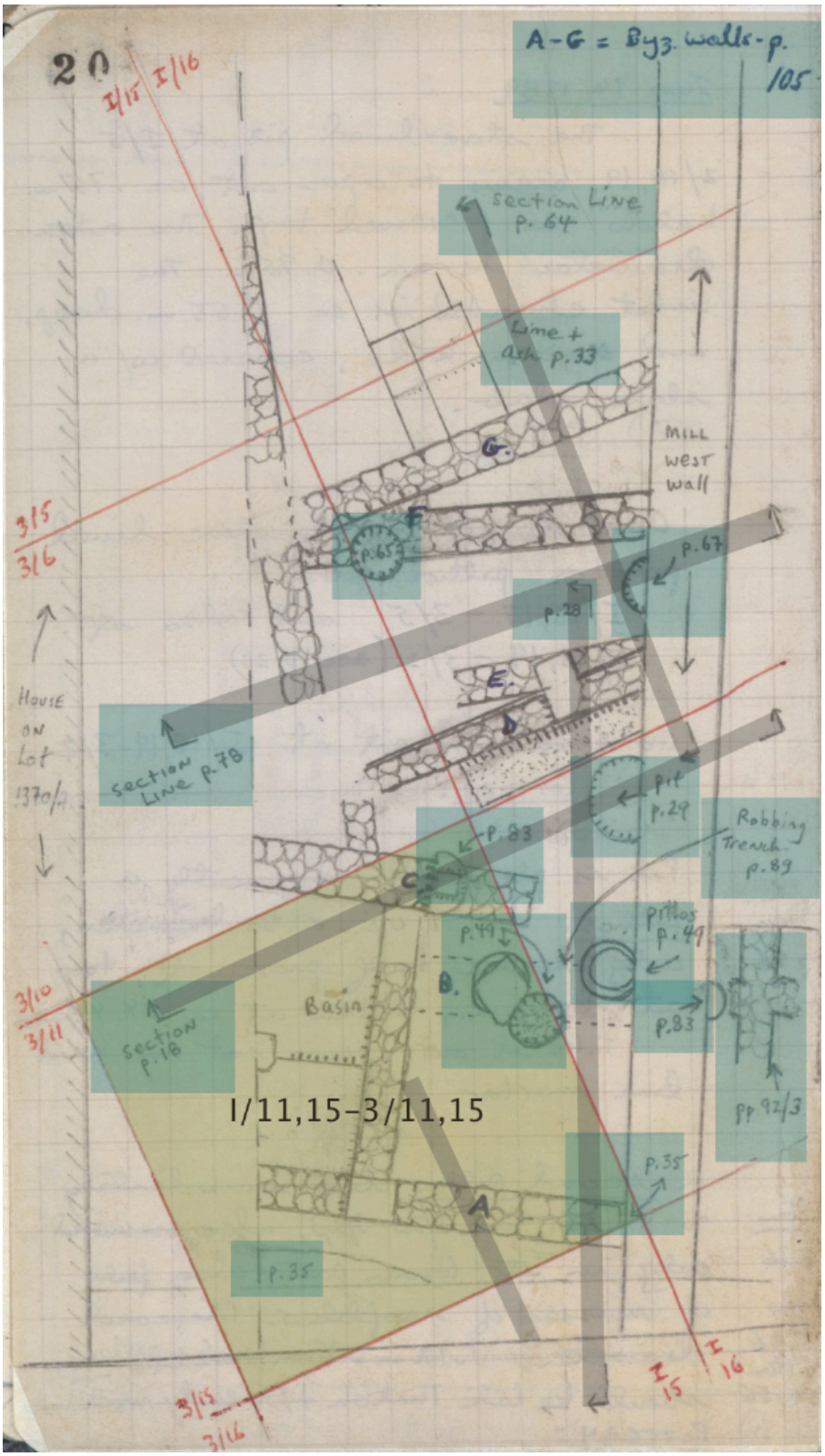
Mugshot (^Q) cont.

The difference between a mugshot and a photograph annotation is not always clear. The goal is to have at least one good mugshot for each find to use for quick visual identification. Images of objects *in situ* should usually be treated as photograph annotations if a good mugshot image already exists. Consider the following find entry where one image of the find is annotated as a mugshot (sepia color) and one as an outdoor photograph (aqua color).



Plan (^Z)

Plan annotations are top-view plans drawn inside Notes notebooks, sometimes pasted into the notebooks as foldout sheets.



Plan (^Z) cont.

The steps for annotating a page with a top plan are as follows:

1) Create annotations for all references, headings, and elevations within the plan itself (occasionally you will find dates, lots, deposits, finds, and chronologies on the plan that should also be annotated).

2) Annotate all cross-section lines marked on the plan using the polygon tool. Usually these cross-section lines will include arrows showing the direction the cross-section is "looking". The cross-section annotation boxes should at least cover these arrows (i.e. it should be wide enough to create a clickable button).

3) Enter the metadata for these cross-section annotations inside the inspector window. In the **page** field, enter the notebook page where the cross-section is located. In the **title** field, enter the title of the cross-section (as written on the page containing the actual cross-section). Set the **rotate** field value of these cross-section annotations so that the arrows are pointing roughly in the direction of the top of the notebook page.

4) If grid lines are indicated on the plan, then create a ghosted grid annotation which will be used to position, scale, and rotate the plan. Using the polygon tool, create a grid annotation that outlines the largest visible grid square on the plan (without going outside the plan boundaries). In the inspector window for this annotation, enter the grid reference for the outlined grid square and mark the annotation as a ghost.

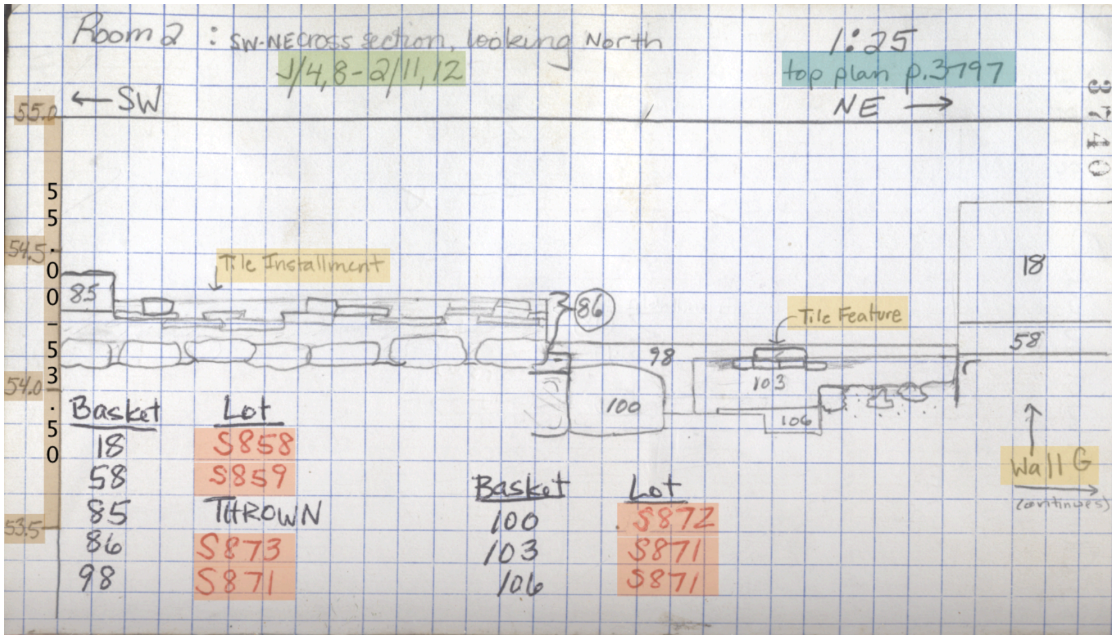
5) Create a single plan annotation that covers the entire plan (including the title and all annotations on the plan). This plan annotation will be used to crop the plan from the notebook page so use the rectangle or polygon tool as appropriate.

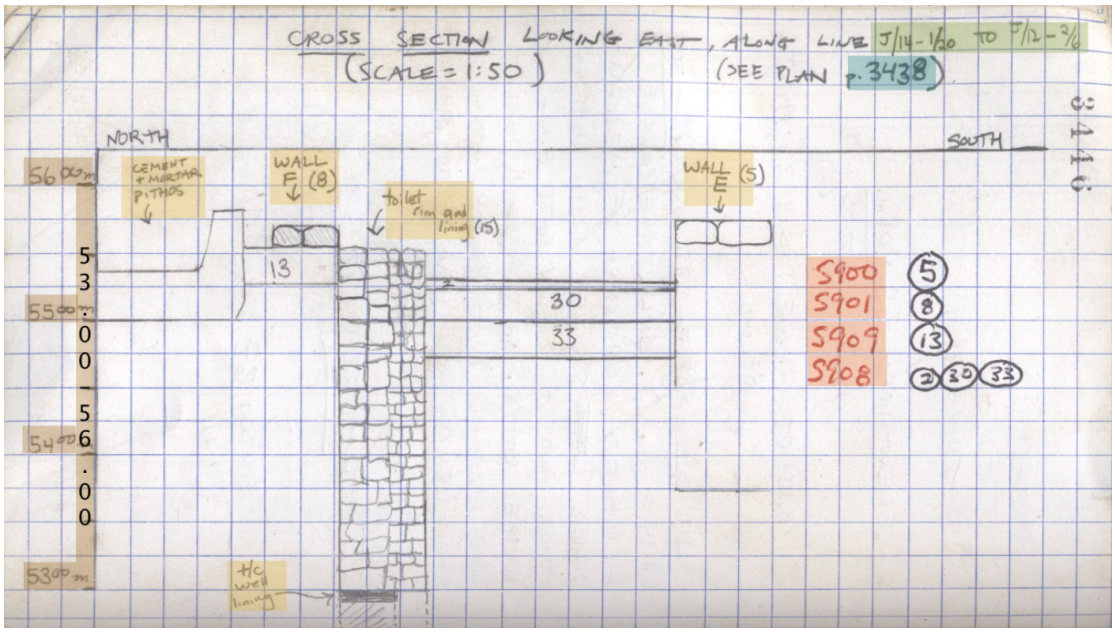
6) Enter the metadata for the plan annotation inside the inspector window. In the **page** field, enter the notebook page this plan is on (or page range if it covers both notebook pages, or zero if there are no notebook page numbers). In the **title** field, enter the title of the plan using full English sentences and proper punctuation. Set the **rotate** field value to how much the whole plan should be rotated in order to be right-side-up.

7) Select all annotations on the plan (including the plan annotation itself) and group them together as one large plan group.

Cross-Section (^X)

Cross-Section annotations are cut-away side-views drawn inside the Notes notebooks, sometimes pasted into the notebooks as foldout sheets. Usually they will correspond to cross-section lines draw on top-plans.





Cross-Section (^X) cont.

The steps for annotating a page with a cross-section are as follows:

1) Create annotations for all references, headings, grids, elevations, dates, deposits, and lots within the cross-section (lot annotations should be created with the rectangular tool and only cover the actual lot number, not the whole lot layer or area).

2) If at least two elevation levels are marked on the cross-section, then create a ghosted elevation annotation which will be used to position and scale the cross-section. Using the rectangular tool, create an elevation annotation between the two furthest apart elevations present on the cross-section. Enter the elevation range in the inspector window and mark the annotation as a ghost.

3) Create a single cross-section annotation that covers the entire cross-section (including the title and all annotations on the cross-section). This cross-section annotation will be used to crop the cross-section from the notebook page so use the rectangle or polygon tool as appropriate.

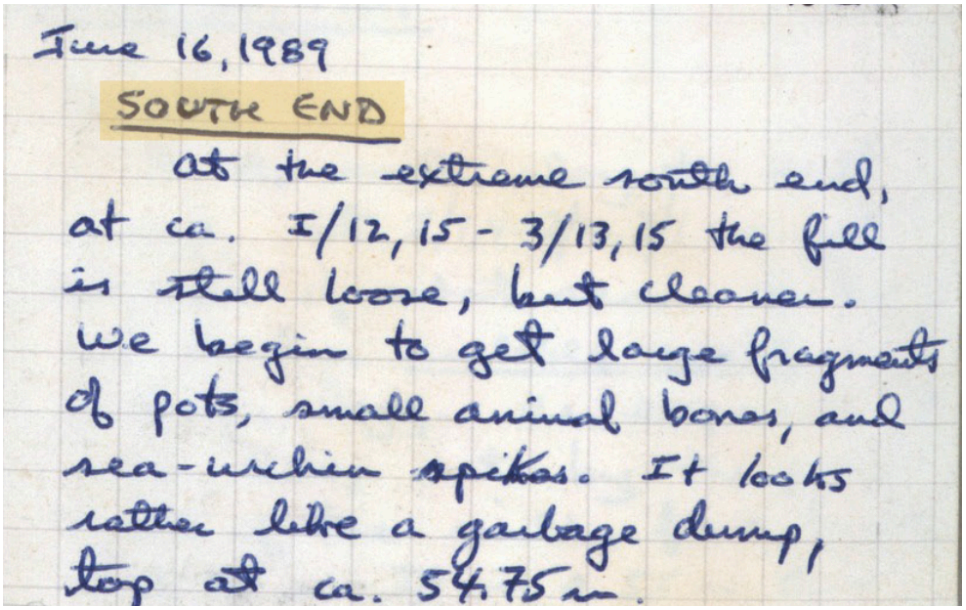
4) Enter the metadata for the cross-section annotation inside the inspector window. In the **page** field, enter the notebook page this cross-section is on (or page range if it covers both notebook pages, or zero if there are no notebook page numbers). In the **title** field, enter the title of the cross-section using full English sentences and proper punctuation. Set the **rotate** field value to how much the whole cross-section should be rotated in order to be right-side-up.

5) Select all annotations in the cross-section (including the cross-section annotation itself) and group them together as one large cross-section group.

Note: Sometimes plans and cross-sections will not have a title written on them. In these situations, either create a generic title from the local context or simply enter “Plan” or “Cross-Section” as the title.

Heading (^W)

Heading annotations are used primarily for page titles, bibliography references, and other important and emphasized (i.e. underlined, capitalized, etc.) keywords on a notebook page. Care should be taken not to overuse heading annotations (you should not be scanning narrative text in order to find keywords to annotate -- phrases such as "Layer 4" or "Wall 5" should not be annotated as headings unless they are part of a title).


June 16, 1989

SOUTH END

At the extreme south end, at ca. I/12, 15 - 3/13, 15 the fill is still loose, but cleaner. We begin to get large fragments of pots, small animal bones, and sea-urchin spikes. It looks rather like a garbage dump, top at ca. 54.75 m.

The goal is to capture the most relevant keywords on a page for use in keyword searching, not to annotate every occurrence of an interesting word. If you have more than 3 or 4 heading annotations on a page, then you are probably creating too many.

Since heading annotations are primarily used for keyword searching and indexing, there is no need to have multiple heading annotations on a page with the same metadata.

Headings should be entered as keywords or phrases and not as complete English sentences.

Exception: bibliography references should be entered exactly as they are written (with complete punctuation and qualifiers) so that they can later be converted into appropriate links.

Exception: an important exception to these rules is with plans and cross-sections. Almost all text on a plan or cross-section *should* be annotated as headings so that these pages stand out during keyword searches.

Index (^B)

An index annotation is like a heading annotation except it is only used on index pages in the notebooks. Index annotations are used to privilege certain notebook pages during keyword searches. **You should not use heading annotations on index pages in a notebook.**