Rhetorical Handbook

An Illustrated Manual for UX/UI Designers.

Beta

Inspired in the "Rhetorical Handbook.

An Illustrated Manual for Graphic Designers" by Hanno Ehses and Ellen Lupton.

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Bloomington, Indiana Fall 2014 "The impact caused by the collapse of the Modern Movement and its doctrines confirms remarkably well an old wisdom: There is nothing more practical than a good theory.' The high energy of Modernism, released over many decades and energizing generations of designers, is declining. The resulting disorientation, together with the maturing of design as a profession, has led to a renewed interest in theoretical issues."

Hanno Ehses

"For Ehses, design theory should not give fixed stylistic rules, but should build an open conceptual vocabulary for confronting communication problems. His approach is innovative because it focuses on meaning over form. Whereas other teaching stress manual skills, personal style, and theories of perception, Ehses centers on the culturally determined, linguistic aspect of graphic communication." *Ellen Lupton*

Excerpts from "Rhetoric and Design" by Hanno Ehses (1987)

2500 years ago the Greeks were already concerned with proficiency in communication. Having studied the practice of successful orators, and firmly believing that some of the skills involved in making a speech could be taught, they brought together a set of percepts to aid other people in acquiring those skills. They called this wholistic approach to communication *rhetoric*. Aristotle defined rhetoric as the "faculty of observing in any given case the available means of persuasion," and he pointed out that all the people have a share in rhetoric because they all attempt to persuade one another of various ideas and beliefs. To find the reasons behind successful efforts of communication is to discover the art behind persuasion.

For rhetoric, language is never simply a form of expression: it is a functional tool that is manipulated to achieve desired ends. A common prejudice and misunderstanding associates rhetoric with the bombastic and hollow, with fraud and seduction, with deceit and sheer ornamentation. The long history of this art, in contrast to popular assumptions, tells us that rhetoric has been concerned with imagination, with form-giving, and with the appropriate use of language to facilitate human affairs.

The prejudice against rhetoric is as old as Western philosophy; Plato condemned language as the mere outward form of an essential inner thought, while other thinkers held it to be a necessary instrument of social expression. The Renaissance humanists revitalized rhetoric after centuries of distrust by scholastic logicians, and applied it to painting, architecture, and music, as well as to oral and written discourse. The rhetorical tradition fell into decline, however, by the eighteenth century, because of the restricted identification of rhetoric with elocution (style, novel effects, ornamentation), and the increasing prestige of a formally and semantically strict language of science.

In the mid-1500s, the French scholar Peter Ramus divided the wholistic art of rhetoric into separate disciplines: rhetoric and logic. Discovery and arrangement of material he assigned to the province of logic; elocution and the other parts, however, were subsumed under rhetoric. Whereas logic was assigned to the intellect, rhetoric was assigned to the imagination. Logic was scientific and exact; rhetoric was peripheral and decorative.

[...]

The contemporary distinction in design between "information" and "persuasion" reflects historical discussions about plain and ornamental style, stemming from the ancient distinction between content and form, logic and style. Many designers believe that information can be presented without ever referring to modes of persuasion. Yet all communication, no matter how spare and simple, has meaningful stylistic qualities which exceed the stated "content" of a message. Consequently, the question that designers must face relates not to persuasion or the lack of it, but rather to the intentions behind it. In other words: designers cannot avoid discussing the moral issue; they must question the ends of design, to ensure that the work disseminated does not persuade its public for undesirable ends.

[...]

Since all human communication is, in one way or another, infiltrated rhetorically, design for visual/verbal communication cannot be exempt.

[...]

The effectiveness of a rhetorical design methodology depends on the use of symbols and patterns which are familiar and alive for a given audience. When an image is able to communicate a message without the aid of a lengthy verbal key, its meaning is nonetheless socially determined. Thus, meaning is not an innate quality of visual forms: it is a matter of relationships. A legible message is one that succeeds in connecting with the habits and expectations of a particular culture. Insofar as design has wit or emotional impact, it surprises those expectations.

Shaping the appearance of any visual object involves rhetoric. To propose a rhetorical paradigm for graphic design is to suggest a new attitude of thinking about design, the way we see it, and consequently, the way it should be taught: it implies a shift away from a formalistic, aesthetic/stylistic imperative towards a functional, aesthetic/ethical imperative. The former tends to offer perfect models only to be imitated and technically refined: imitation instead of invention. The latter accepts that all design has social, moral, and political dimensions, that there is no sphere of pure information, and accepts the challenge to make designs that are conceptually, visually, and functionally appropriate for particular clients and audiences in particular environments.

Applying Rhetoric to Interface Design

In the following pages, I reinterpret the relation between rhetorical principles and images that Ellen Lupton and Hanno Ehses proposed in the original "Rhetorical Handbook." In this case, the concept of "image" is substituted by "user interface," which encompasses visual, sound, and physical components. Therefore, I consider the user interface as a key element through which a designer can influence the experience for the user during the interaction with the system.

1. The three modes of appeal in classical rhetoric

The rhetorical "modes of appeal" describe the way a speaker's argument engages its audience: the speaker might accuse, flatter, offend, impress, anger, or amuse. A designer's "mode of appeal" is expressed through the choice of words, images, format, style, color, type, and materials (Ehses & Lupton, 1998).

Modes of appeal*	Their stylistic connotations*	Reinterpretation for UX		
Ethos (Ethical appeal) Aims to delight	Morally appropriate, beautiful, ornate, tasteful, likeable	UX centered on the designerly qualities of the user interface, which intend to identify with the user's personality		
		UX centered on elevating an ideal or positive image from the user through the ownership of or interaction with the system		
Pathos (Emotional appeal) Aims to move	Passionate, vehement, discordant	UX centered on gaining empathy from the user for the system through the interaction with it		
		UX centered on triggering emotions in the users through the ownership, but mostly the interaction with the system		
Logos (Rational appeal) Aims to inform	Factual, plain, logical	UX centered on the system's infrastruc- ture and providing a comprehensive functionality		

^{*} Original text from Ehses & Lupton (1988).

The ethical appeal addresses the moral and aesthetic values of an audience; it invokes trust and respect, asking one to identify with a product or idea. All design, unless it purposefully aims to offend, has an ethical dimension.*

Considerations for User Interface Design

The ethical appeal is built on attention to how the interface composition can reflect the moral and aesthetic values of the archetypical user.

The ethical appeal could follow the "design trend" if that decision will help the designer gain trust and respect from the user towards the system. Trends include "responsive design" and "flat design."

However, the designer may consider a design philosophy or approach that could meet an archetypical user's moral and aesthetic values. "Universal design" and "sustainable design" are two examples of design approach that can guide the design rationale behind the UX, and hence the user interface design process.

Nonetheless, the ethical appeal may consider bringing qualities from objects that the user knows, and identifies with. For instance, the familiar elements of a skeuomorphic interface design constitute part of an ethical appeal. Thus, the design should pay attention to the selection, presentation, and application of metaphors, metonymies and other rhetorical figures that are accorded to the archetypical user's moral and aesthetic values.

Title ## Subtitle

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This is a list:

- item 1

- item 2

- item 3

iA Writer is a distraction-less free environment designed by iA. Writing can be a difficult and painful process, and Writer attempts to "Keep your hands on the keyboard and your mind in the text." Writer and other similar tools provide an interface in which the user can focus on her writing. Through the combination of a "Full Screen" view and a "Focus Mode," Writter attempt to fulfill that need. When the user activates both options, Writer hides the menu and toolbar at the bottom of the screen, and blurs all the text except the sentence wherein the cursor is located. Also, Writer allows the user to format the current text through simple inline commands. However, the formatting results are only visible when the user exports the current text into another file format (e.g. Microsoft Word). That means, Writer doesn't want the user to get distracted by formatting matters. Writer's design characteristics demonstrate an ethical appeal to the value of the act of writing, rather than to the administration and formatting of an electronic document. Screenshot by the author.



When the Yahoo Weather app loads, it may show a picture of the city currently selected in the background. On a rainy day, the app adds animated rain and water drops on that picture. Also, the picture responds to the smartphone's accelerometer, which causes a parallax effect. Then, the smartphone's screen seems to represent a window through which the user is capable of observing the city and its weather. The temperature and other information also appear on the home screen. Yet, the background picture is the protagonist of the home screen. Those interface components related either with data or functionality are displayed discretely. The emphasis on image over precise data is an ethical appeal to the beauty of weather or a city. Moreover, the background picture, including its composition, visual treatment, and the additional animated elements are design decisions that contribute to the emotional appeal to the experience of that type of weather. Screenshot by the author.

^{*} Original text from Ehses & Lupton (1988).

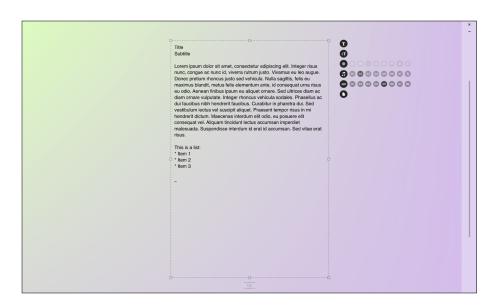
The emotional appeal attempts to provoke a passionate response (sensual, political, spiritual)*

Considerations for User Interface Design

The scope of the system, which should take into account the user's possible characteristics and needs, can help the designer analyze, select, modify, present, and apply signifiers within the user's culture that are associated to emotional reactions.

A user-centered design process might consider defining the characteristics of an archetypical user (i.e., a Persona). The archetypical user might help the designer make decisions regarding the ethical appeal. However, considering what could trigger emotions in the archetypical user might help the designer make decisions regarding the emotional appeal.

In an interface, emotion is also related to motion. Visual, sound and physical components might be transformed over time. That transformation might foster a pleasant user experience.



OmmWriter is also a distraction-free writing tool, which is designed by Herraiz & Co. The design is presented as "your own private writing room where you can close the door behind you to focus on your writing in peace." Like Writer by iA, OmmWriter makes use of the ethical appeal. Nevertheless, OmmWriter makes us of the emotional appeal to transmit the idea of a "zen room" destined to writing. Besides having soft images for the screen background, OmmWriter can display a pastel color gradient that softly changes over time. It also allows the user to select different background music and sounds effects that can be listened while typing. An emotional experience derives from the combination of those characteristics. Screenshot by the author.



The interface design of the home screen in the Yahoo Weather app intends to give the user an impression of how the city "feels like" due to the current weather. People living in New York City might be capable of recalling past nights having fog or being at 7° Celsius degrees. They could recall the sensations of being in a night with similar weather conditions. The home screen tries to make the user feel considered (ethical appeal) trhough a composition that may recall past experiences, which involve different sensations caused by the weather (emotional appeal). Screenshot by the author.

^{*} Original text from Ehses & Lupton (1988).

The rational appeal addresses an audience's respect for controlled, logical thinking. Beyond its stated content, "information" can have stylistic cues: hard edges, diagrammatic lines, authoritative language, numerical data.*

Considerations for User Interface Design

The rational appeal centers on the system's functionality. It entails providing an interface that tries to demonstrate that the user's functional needs are covered. Advanced users might benefit from such an appeal since they may prioritize the efficiency in completing a task. Although the ethical and emotional appeals are still relevant for the user experience, the rational appeal emphasizes an advanced user's urge to complete a task fast and efficiently.

The rational appeal also relates to the system's degree of usability and information design. Making the system easy to use might help to convey that the user's functional needs are covered during interaction with the system. Finding the appropriate means to present information (or data) in the interface follows a similar argument.

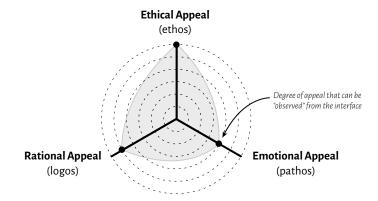
Sublime Text is a source code editor designed by Jon Skinner. The tagline for Sublime Text states, "You'll love the slick user interface, extraordinary features and amazing performance." The interface of Sublime Text focuses on displaying and manipulating the code. As it occurs with Writer and OmmWriter, Sublime Text's interface appeals to the value of writing (code) without distractions. However, the code editor demonstrates the use of the rational appeal through the series of keyboard shortcuts that allow the user to manipulate the code on the fly. Screenshot by the author.





Once the user leaves the home screen in the Yahoo Weather app, the interface focuses on showing numerical information. The interface evinces that the app can provide enough and reliable information about the weather in order to satisfy the user's needs, providing a rational appeal. Screenshot by the author.

^{*} Original text from Ehses & Lupton (1988).

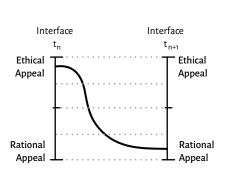


Given an interface, the designer can ponder the possible ways in which the three modes of appeal contribute in the interface design and user experience. Such an exercise might guide the design of a similar system or the redesign of the current interface.

Some questions to keep in mind at the moment of pondering the three modes of appeal for a given interface:

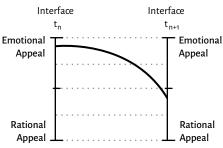
How does the interface try to make an empathetic connection with the user? • What are the characteristics from the interface components that help to create such a connection? • How well do these components communicate data and functionality? • To what extent can the system and interface fit or contradict the current discourse associated to that type of system? • What does it mean for a person to be the user of the system? • What is the system doing in order to trigger emotions or recall sensations in the user? • What could be the effects of those feelings and sensations?





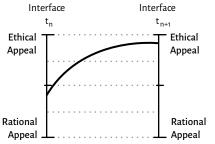














The designer can also ponder "the transitions" from one mode of appeal to another in order to note how both the interface and interaction could be affecting the user experience. Screenshots by the author.

2. Rhetorical operations

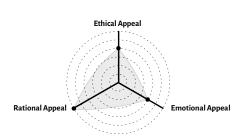
"Rhetorical operations" are a set of procedures that can be performed on a given structure. A speaker might begin with a familiar sentence pattern and alter the order of its elements for a special effect. Similarly a designer might take a familiar image and use it in a new way (Ehses & Lupton, 1998).

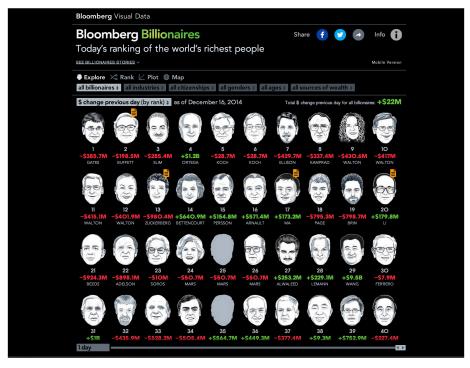
Operation*		Connection with UX			
Standard (an establishing norm that is altered for a new meaning)	XYZ	The interface is designed to support a certain type of user experience			
Adiecto (Addition)	XYZ(+K)	New elements are added to the interface in order to improve the user experience			
Detractio (Subtraction)	XY(-Z)	Certain elements in the interface are omitted or hidden in order to improve the user experience			
Transmutio (Inversion)	XZY	Certain elements in the interface are rearranged in order to improve the user experience			
Immutatio (Substitution)	XYZ'	Certain elements in the interface are substituted in order to improve the user experience			

Standard

Bloomberg Billionaires is a website that shows the current ranking of the richest people in the world. Through the options included in four modes of visualization, the user can inspect diverse aspects of those people. The first mode of visualization is "Explore," which allows the user to sort and browse the list of billionaires by rank, industry, citizenship, gender, age, and source of wealth.

The website responds to the user's selection through the animation of the content, including the faces of the billionaires. For instance, when the user selects any of the modes in "Explore," the faces move in order to reflect the corresponding results. The change between two modes of visualization is animated as well. Each of the faces and its movement become the "basic unit" in the user experience. They allow the user to comprehend the information displayed in the interface.





Screenshot by the author.

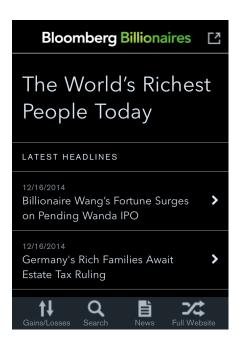
^{*} Original text from Ehses & Lupton (1988).

Addition

Hovering a face in the "Explore" mode highlights it. Additionally, a tooltip appears. This is a simple design decision that takes advantage of the medium. Highlighting a face adds visual information to the interface. Nevertheless, such an addition allows the user to center her attention and "send" the rest of the information to the "periphery." The tooltip reveals information that complements the one already shown.



Screenshots by the author.



Addition

The mobile version of Bloomberg Billionaires shows a menu with four options. Three of them are related to the mobile version, whereas the last one just redirects the user to the "full version" of the website. The menu represents an example of addition since it was not present in the full version of the website.

Subtraction, inversion

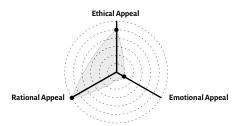
The home screen of the mobile version also shows a case of subtraction and inversion. In the mobile version, the website shows the "latest headlines" when it loads, whereas the full version hides those headlines and it focuses on the visualizations, starting with "Explore." Moreover, the label for the content is different in each version. The "Latest Headlines" of the mobile version correspond to the "See Billionaire Stories" in the full version.

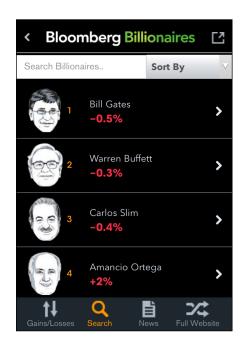


Subtraction, inversion

The first option from the menu (situated at the bottom of the screen) is labeled as "Gains/Losses." The content of this section comes from that shown in the full version when user selects "all the billionaires" and "\$ change previous day" in the "Explore" section.

However, the mobile version has two remarkable changes. First, it only shows the top 10 and bottom 10 of the list of billionaires. The groups are presented as the "Biggest Gains" and "Biggest Losses," respectively. Second, the visual arrangement of 10 columns is disregarded for the mobile version. Instead, the list is displayed in one column.





Inversion, subtraction

The initial content in the "Search" section of the mobile version corresponds to the default content displayed in the "Explore" section of the full version. That includes the complete list of 200 billionaires from the full version, which includes their faces, rank, names, and the numerical value being currently inspected. The information from the tooltip and the other modes of visualization are disregarded.

From the set of options to filter the list from the "Explore" section (e.g., citizenship), only the one related to the billionaires' fortune is available. This feature is labeled as "Sort by." The search version consists in showing only the billionaires whose name matches with the characters typed by the user.

3. Rhetorical Figures

Tropes

Rhetorical figures fall into two groups: "schemes" and "tropes." Tropes alter the normal **reference** of the elements. (Ehses & Lupton, 1988).

Description*

Implications for the UI/UX

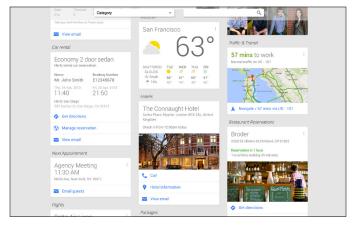
Metaphor is an implied comparison between two unlike objects that have some structural similarity.

A system can be conceptualized metaphorically. For instance, an object "from the real world" can serve as inspiration for designing a system. However, the interface doesn't have to replicate all the properties of the object to which the system makes reference. Being aware about the user's characteristics and needs, the context, and the technological possibilities give the opportunity to *twist* the original concept and provide features in the system that not only help to fulfill the system's functional purpose but also enrich the user experience. Having such an approach entails *creating computer imagination interactions* (Siegel & Stolterman, 2009).

^{*} Original text from Ehses & Lupton (1988).



FocusWriter is a distraction-free writing tool designed by Graeme Gott. FocusWriter allows the user to apply "themes" to the interface. One of them resembles a wood table with a paper sheet on it. Applying that theme links the system with a handwriting metaphor.



Cards is a metaphorical approach to interface design by Google. A card represents an placeholder that can be filled with information obtained from diverse providers. The cards are intended to be interface elements in different platforms and devices. Depending on these factors, the metaphor helps to find the appropriate form to display information.

Screenshots by the author.



The form and behavior of the compass designed for iOS 7 resembles a physical compass. However, the digital compass allows the user to fix a particular angle (i.e. the heading). It also shows the name of the current location, which updates in real time.



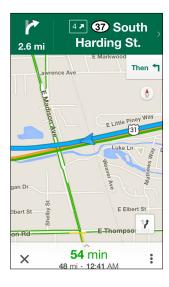
The reminders app in iOS has an interface that also looks like a card. The rounded corners, the texture in the background, and the letterpress effect applied to the text help to convey that concept.

Personification is a kind of metaphor which assigns human characteristics to inanimate objects.

Conceptualizing a system as a person might help to make the "distance" between the system and the user shorter. In cases wherein the system is not designed for collaborative work, the personification of the system helps to present it as a *sidekick*. As a result, the user could delegate a task to the system. Then, the success of that task becomes the responsibility of the system, not the user. However, along with the increment in the system's agency, the user's expectation for the system to act as a real person might increase.



Siri is a built-in system in iOS that helps the user look for certain information, make a decision, send a message, and other tasks. The interaction with Siri is through voice commands. Moreover, such an interaction ressembles a dialog between the user and Siri. Later, the user can customize Siri's voice gender and the "name" through which it should respond to the user's commands. gender. All these characteristics make Siri a companion rather than an information provider.



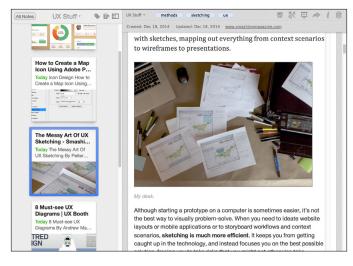
Google Maps speaks to the user in order to indicate the next step to take. The voice can be configured to support the user's language.

Description*

Implications for the UI/UX

Synecdoche uses a part of an object to represent the whole.

Synecdoches can be obtained from visual and sound information, which might help to manage space and time in a interface. Interactive interface elements can be shown partially as long as the affordances are preserved.



In the "Expanded Card View," Evernote shows parts of the content from each saved note in order to help the user browse all the saved notes. Each of these parts, a synecdoche themselves, are employed to compose a synecdoche of the saved notes.

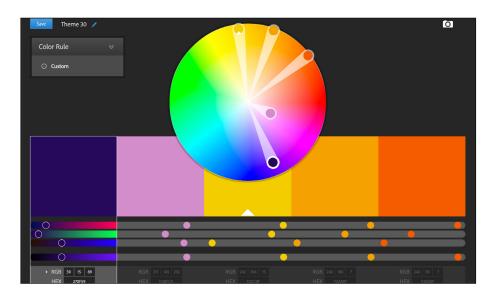


Over is an app designed for adding text to photographs. The main menu has a circular form. The user has to rotate the circle in order to access and select one of the eight options. However, only the half of the circle is shown, which entails a synecdoche of the complete menu.

^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

Metonymy represents one term with another which is close to it in time, space, or causation.

Metonymies are mostly related to the functionality of a system. In their static form, they help to convey the functions available in the interface. Dynamic metonymies, which involve animation, are helpful to represent the current state of the system.



Color by Adobe allows the user to create a color palette and save it for a later use in other design software. The system comes in the form of both a web and a mobile app. Once the user selects the "color rule," there is three ways through which the user can modify the colors of the palette. First, the user can move the position of handlers in the color wheel shown in the interface. Second, the user can adjust the sliders associated to each color swatch of the palette. Third, the user can type the values that correspond to a color in certain color space. Then, the position of a hadler in the color wheel establishes a spatial relation with a color. The current position of all the handlers establishes a causal relation with the color palette. The position of the sliders for a color swatch establishes a casual relation with the color currently shown. Each text box establishes a similar relation. Those relations correspond to metonymies found in the Adobe Color's interface.



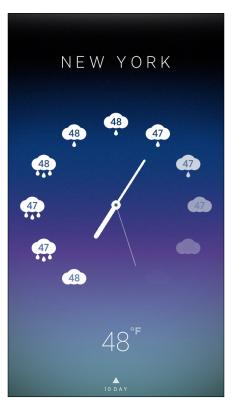
Instead of playing the video recording right away, the webpage of a TED Talk shows a picture from the talk along with information about it and some buttons, including the one for "play." Although the picture can be regarded as a synecdoche of the video, the whole composition is designed to represent the actual video of the talk. Such a composition entails a metonymy. Moreover, each of the buttons and their visual design work as metonymies themselves. *They represent actions*.











Oringe's Climate Clock shows information about the current weather, the weather of the last hour, and the weather forecast for the next nine hours. In each piece of information, the weather conditions are represented by an icon, which works as a visual metonymy. Later, all the pieces of information are arranged in a circular layout, substituting the numerals of the clock shown in the middle of the screen. Such a clock establishes a spatial relation between time and weather, entailing a metonymy.

* Original text from Ehses & Lupton (1988).

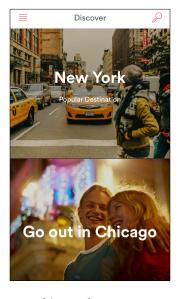
Screenshots by the author.

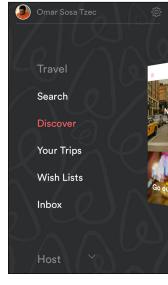
The circle shown while a video is being sent in WhatsApp indicates the progress through its circumference. It also works as a button that stops the process. Once the video is sucessfully sent, the circle's background color and inner symbol change. It becomes into a button to play the video. The circle and its states relate to the system's state, which entails a metonymy.

Antithesis contrasts two opposing objects or ideas.

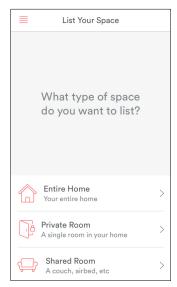
* Original text from Ehses & Lupton (1988).

The antithesis can be expressed in a system through the content, the interaction or both. The antithesis can occur at a high level (i.e., the entire interface) or in lower levels (i.e., a section of the interface). Contrasting content can be used to convey two viewpoints about the topic conveyed at certain level. Likewise, contrasting forms of interaction could help the user conceptually delimit the structure and functionality of the system.

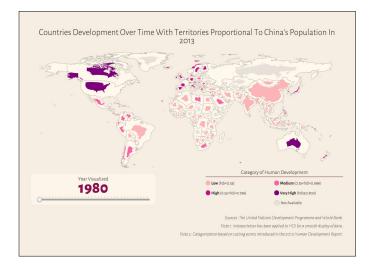








Most of the interface components in the Airbnb app have a dimensional behavior. The transition from one interface component to another resembles a horizontal or vertical move between content. However, accessing to the main menu adds perspective to the interface. The content in the screen "moves away" so the main menu can be visible. Then, both the menu and that content seem to be floating in three-dimensional space, which breaks the previous perception in the user. Although the ways to interact with the app don't change, adding perspective creates an antithesis, a conceptual division in the interface that helps the user distinguish between the spaces destined to the main menu and other content, respectively.



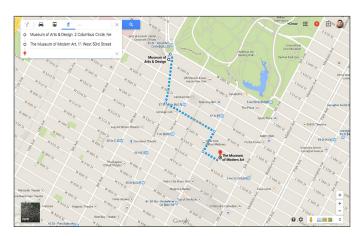
Index And Population Variations In Some Countries									
2013 HDI RANK	Country	POPULATION IN 1980	POPULATION IN 2013	HDI1980		HDI 2013	HD CLASSIFICATION 2013	Position in Classification	
	Norway						Very High		Most expensive worldwide
	Australia								
	Switzerland		8,081,482						
	USA								
	Canada								
	Chile								Highest Ranked in LA
	Argentina								
	Uruguay								Most peaceful LA country
	Russia		143,499,861						
	Mexico								
	Brazil								
	China								Most populated country / BRIC
	Maldivas						Medium		200/1,200 inhabited islands
	India	698,965,575	1,252,139,596			0.586	Medium	33 of 42	BRIC

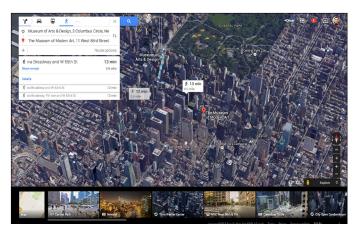
"Human Development Index: A Brief Introduction" is a single page website that provides basic information about the Human Development Index (HDI), which measures the progress in each country based on life expectancy, education and wealth. The website includes two forms of visualization. First, it presents an interactive visualization that shows the human development in each country over time. At the same time, it shows the population growth in relation to China's population in 2013. Second, the website presents a table that focuses on comparing data between the most developed country with some countries in the world, including those with emerging economies. Whereas the first visualization is geographical and shows a global view of human development over time based on the most populated country, the second visualization is textual and only considers one year and some selected countries. Such a contrast makes the visualizations work as an antithesis in the website's content.

Screenshots by the author.

Amplification discusses in detail the parts of an object or argument.

Considering the ways to amplify the interface or part of it may help to enrich the user experience. However, such a consideration must avoid overwhelming the user. The redundancy and level of complexity will be subjected to the system's functionality.

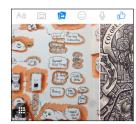




Google Maps' interface is loaded with visual information. Unlike a physical map, Google Maps allows the user explore many places virtually, get directions and make a decision based on a mode of transportation, and learn about landmarks from other people's reviews. The interface components are intended to support all those tasks, hence they present information through diverse forms. Flat maps, three-dimensional maps, street views, users' photographs, labels, location pins, icons, lines, and shapes are combined with direct manipulation events, including click and drag. Altogether, they represent an amplification in the interface through which Google Maps intends to enrich the user experience.



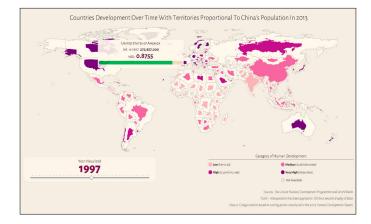






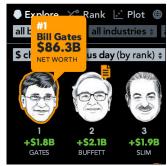


The Facebook Messanger app allows users communicate through several forms. Displaying the options in the interface for those forms entail parallelism, a type of scheme. However, each option has different interface components and involves different interaction flows. The amplification derives from the details (in terms of components, content and interaction) involved for each option.



Hovering over a country displays a tooltip which shows textual information that is visually displayed in the map. It also shows a kind of progress bar that marks the development for that country in that year. Therefore, the information in the tooltip amplifies a country in the map.





Hovering over the face of a billionaire highlights it. It also shows a tooltip wherein the billionaire's rank and full name appear along with the net worth. The additional information amplifies the reason for which the billionaire has that position.

^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

Schemes

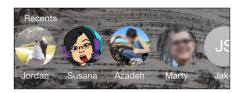
Schemes are rhetorical figures that alter the normal order of the elements in an expression (Ehses & Lupton, 1988).

Description*

Implications for the UI/UX

Ellipses deliberately omits elements from a statement.

"Letters used in words are letters not wasted" instead of "Letters that are used in words are letters that are not wasted." Elements in the interface can be hidden as long as the system's functionality is communicated properly. Moreover, they could be omitted completely if that functionality is not altered or the user experience is not diminished. Conveying the functionality in an appropriate manner or preserving the degree of user experience depends on the effectiveness of the interface's tropes.



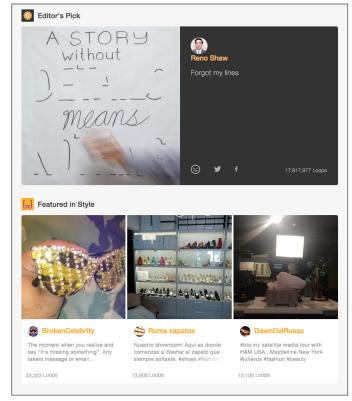




The multitasking screen in iOS shows the avatar and name from those people in the contact list that are labeled as "favorites" or that have been contacted recently. Tapping on avatars and names of people shows the available options to communicate with that person. Repeating such an action hides those options. The avatar, name and options to communicate constitute an interactive unit wherein the latter doesn't need to be visible all the time.



Flickr's interface employs a type of container in order to show the set of photographs recently taken by people that a user follows. Thumbnails of each photograph in the set are arranged in a column. Hovering over each thumbnails shows a bigger picture in the container's background. Through three little icons (which work as metonymies), a photograph in that set can be labeled as "favorite," commented or shared. The thumbnails and little icons are interactive, but no words give a hint of their functionality. That omission represents a case of ellipsis.



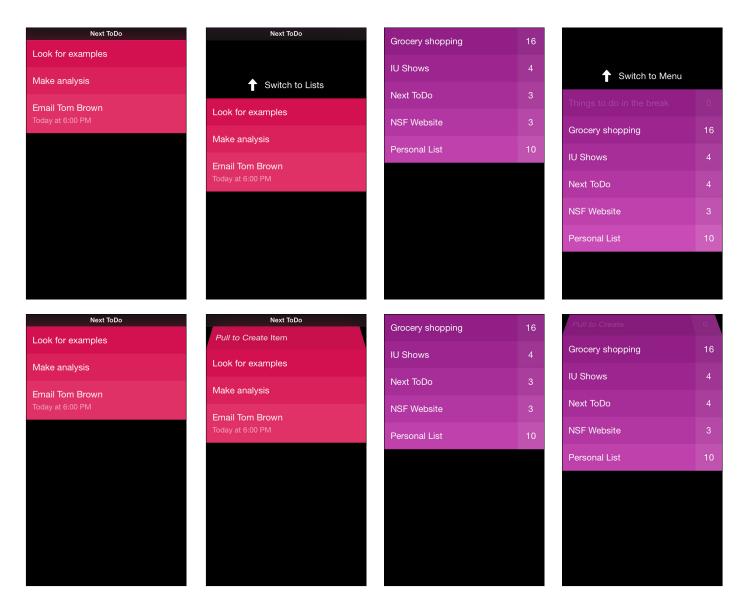
The videos from Vine lack of a "play" button. The videos shown on the home page start playing when the user hovers over them. In turn, the videos in each category start playing when they get closer to the center of the screen. Therefore, the lack of that button is an ellipsis in the interface that doesn't complicate the interaction or diminish the user experience.

* Original text from Ehses & Lupton (1988). Screenshots by the author.

Alliteration repeats the initial parts of elements in a sequence.

"The loose use of language is lamentable."

Alliterations can be expressed through the interface's content, forms of interaction or both. They might help to convey consistency in the system. Forms of alliteration that are simple, well defined or previously learned by the user could support the aspects of learnability, efficiency, and memorability of the system.



Clear is a list-making app designed by Realmac. The vertical navigation of the app allows the user to move between the main menu, the set of lists and the items in each of these lists. Moving downward requires the user make a short vertical swipe from the bottom of the screen. However, moving upward requires a long vertical swipe from the top of the screen. Making a short swipe in that direction creates a new list or item according to the current level in the navigation. The long and short vertical swipes are involved with two cases of alliteration in the interface. Moving upward involves a long vertical swipe every time, which moves the current down the screen. Creating a new item involves a short swipe every time, which "pulls" the new item's container from a plane perpendicular to the screen, and also moves down the current items.

^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

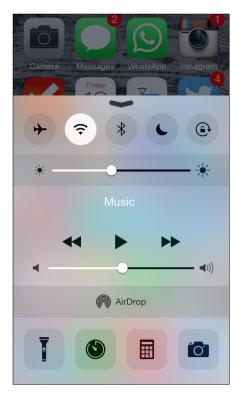
Polyptoton involves the repetition of elements from the same root.

"A word can become useless by overuse."

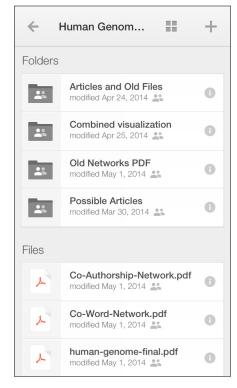
A polyptoton in an interface can be described in terms of form, function or both. First, a basic structure or form can be noticed in the interface components on the current screen. Second, the components have the same or a very similar functionality. Third, the basic structure (or form) and same (or similar) functionality can be noticed in interface components that belong to different (conceptual) sections of the interface. Polyptotons can also help with usability aspects.



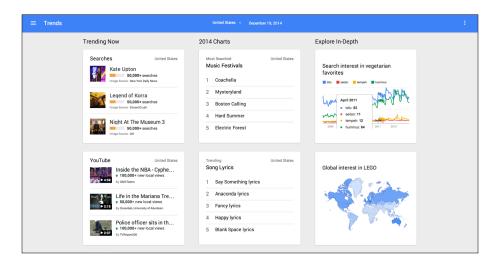
In the interface of the "unlock screen", the circle works as the basic shape for the buttons and the indicators of number of digits entered by the user. The repetition of the circle entails a polyptoton at a formal level.



The interface of the "control center" shows three rows of buttons and three sliders (when music is being played). However, the shape of the buttons changes for each row and only two of the sliders look alike. In this case, the polyptoton occurs at a functional level.



One of the view modes in the Google Drive app displays the files and folders as a series of strips. In all of them, the structure and functionality are the same. This is polyptoton that works at both formal and functional levels.



Google's interface component known as a "card" works as placeholder for diverse information, either static or interactive. Further, a card can vary in dimensions. Then, apps from Google employ cards to organize information in the interface and provide the means for the user to take action. Together, the set of cards shown in the screen entails a polyptoton. However, that polyptoton not only focuses on the cards' appearance, but also in the fact that cards can provide interactive content.

^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

Climax and **anti-climax** arrange elements in order of intensity.

"Letters are the particles of language, which is the vehicle of knowledge, which is the opiate of the masses." Climax entails an increment in the number of components available in the interface. Conversely, anti-climax entails a decrement in that number. Both of them derive from the interaction with the system. Moreover, they can occur at the level of the complete interface or a section of it. Through an easy and nonlinear addition or subtraction of components, an experienced user might increment the efficiency in a workflow.











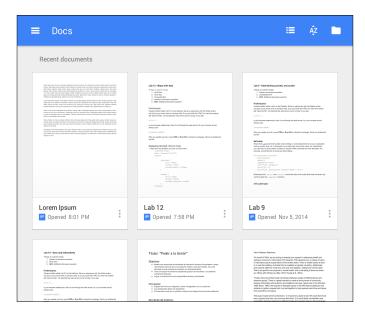
Photoshop has trhee screen modes, namely "standard screen mode," "full screen mode with menu bar" and "full screen mode." Going from the first to the third screen mode is an example of anti-climax. On the other hand, the user can activate or deactivate extra features in the window of the current opened file. The "extras" include "grid," "smart guides," "3D lights," among others. The progressive activation or deactivation of the "extras" represents respectively a climax or anti-climax for that window.

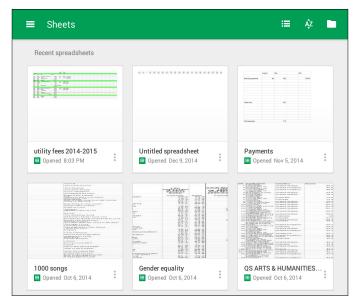
^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

Parallelism involves a similarity of structure in a series of related elements.

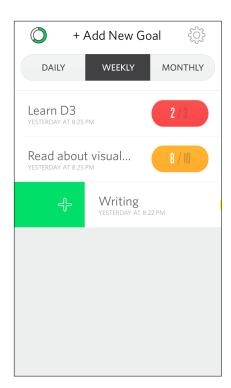
"She tried to find word that are clear, precise, and appropriate."

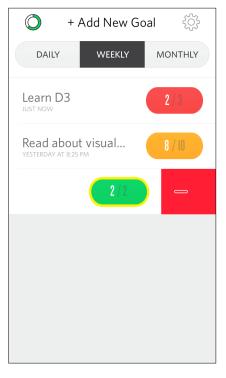
Parallelism can be obtained through the interface component's composition, the forms of interaction or a combination of both. The similarity in the composition is obtained through the consistency of the basic shapes, visual arrangement and style. Consistency in interaction usually works well with parallelism at the compositional level. However, conceptually related forms of interaction might be required in order to support the parallelism of a multifunctional component.





Google Docs, Google Sheets and Google Slides are three web portals having a similar form and functionality. At the level of Google's "Home & Office" apps, they entail parallelism. In general, they represent a variation of "creating and working with 'documents'." The interface of each portals supports the parallelism: they are similar. The distinction is obtained partially through the synecdoches employed in the "cards" corresponding to the "documents."





Parallelism can occur within an interface component. Full is a goal tracking app designed by Lemonly. For each goal in the list, the user can make a swipe to the right in order to add to the goal count. Conversely, the user can make a swipe to left in order to subtract from the goal count. In both cases the direction is horizontal, entailing a parallelism in the interaction.

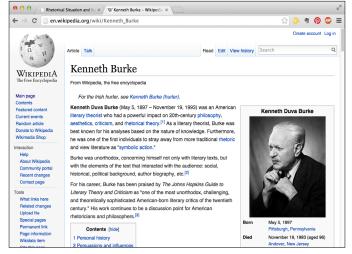
The strip containing information about the goal moves along with the user's finger direction. The empty space in the background is colored green or red depending whether the user made a swipe to the right or left. Moreover, a plus or minus sign appears depending of the swipe's direction. Altogether, those charactetistics entail an **antithesis** in the interaction. Antithesis might entail parallelism.

^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

Anaphora involves the repetition of an element or series of elements at the beginning of a sequence.

"Words, yes words, do ignite the imagination." Anaphoras are achieved through the repetition of interface components, including the ways to interact with them. Such components are placed at the "beginning" of the interface or sections of it. Anaphoras entail consistency in the interface. Through the repetition of components, anaphoras support the system's learnability, memorability and efficiency.





Many web browsers designed for computers allow the user to "open" multiple tabs in order to load diverse web content in the same window. Along with each tab a toolbar might appear, which presents the same elements for all the tabs (e.g., navigation buttons). Such a repetition can be regarded as an anaphora for the browser's interface. Making a similar observation for all the windows in a operative system points out the existence of anaphoras as well, which help the user identify the different types of windows in the operative system.

Description*

Implications for the UI/UX

Epistrophe is the opposite of anaphora.

In some occasions, the fixed interface component should presented at the "end" of the interface in order to let the user inspect the rest of content first.





The iOS interface guidelines indicate the use of a "tab bar" in order to provide the controls that help the user navigate an app. Such a bar has a fixed position at the bottom of the screen. The Facebook app, among many others, makes use of the tab bar as part of the interface. In such a case, the tab bar represents an anaphora.

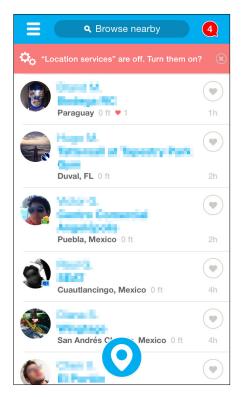
In some occasions, iOS apps have interfaces with fixed components at the top and bottom of the screen. Then, such interfaces entail an **symploce**, the combination of anaphora and epistrophe.

^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

Parenthesis inserts an element which is independent of the grammar of the whole statement.

"The 'Scarlet Letter' (in Hawthorne's novel) was embroidered in a typeface which has never been identified."

A parenthesis derives from components that are unusual in an interface's composition. As a result, they might modify the interaction flow regarding the original composition. However, a parenthesis must convey its transitory function in order to underline how it affects the user experience.



A parenthesis derives from the interface component that asks the user to turn the location services on. It is an extra component in the interface's composition. Moreover, it "interrupts" the usual interaction flow in that Foursquare's screen.

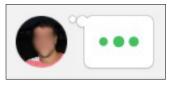


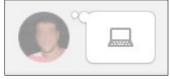


The predictive keyboard in iOS shows three options for the possible word being typed by the user. Detecting "Ha" in the conversation makes the keyboard replace the words with emoticons along with the acronym for "laughing out loud." In terms of the common predictive content (i.e., words), the emoticons entail a visual parenthesis. A parenthesis derived from interaction, nonetheless. Such a parenthesis doesn't attempt to "interrupt" the interaction flow. On the contrary, it attempts to make the experience more engaging for the people in the conversation



One way to access a tap in iOS is through tapping on the app's icon. In some occasions, the icons have a red badge indicating the number of notifications from the app that haven't been attended by the user. The badge is an extra visual element that doesn't contribute on accessing the app. Nevertheless, it points out an issue that the user may pay attention once inside of the app.





In the Google Hangouts app for iOS, a thought bubble with three green dots appears when the person in the other side of the conversation is typing. It also indicates whether that person is texting through a computer. Both the dots and computer can be regarded as metonymies. However, the bubble as a whole might be considered as a parenthesis in the interface's composition due to its intermitent appearence in the interface.

^{*} Original text from Ehses & Lupton (1988). Screenshots by the author.

Apposition is a qualifying term inserted into a larger statement.

"Letters, the particles of language, can be quite entertaining when they are combined into words."

An apposition in an interface could be created by adding visual or sound information in an interface component or as part of the interface in order to qualify the functional aspect or purpose of one or a group of components. The additional information is considered on the basis of enriching the user experience.

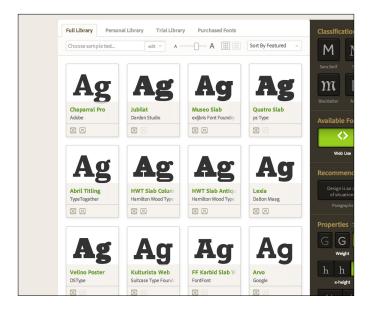








Weather+ can show either a color or a picture on the background. As it occurs with Yahoo weather, that app uses the background in order to convey how the current weather might look like or feel. That approach entails an apposition for the current weather displayed in the interface.



In the Typekit's interface, the buttons in the section "classifications" show a visual apposition in order to help the user select a font. Each button contains a letter "M," which gives a hint about the form of the typefaces belonging to a certain classification. The buttons in the section "properties" make use of appositions for a similar purpose.

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This handbook represents an exploratory study between rhetoric and user experience, considering the latter from a designerly perspective. It represents an attempt to understand how rhetoric could be applied as a theory for the design of systems and for user experience.

Feedback and critique on this word is appreciated. Please, send your comments to omarsosa[at]indiana.edu. Thank you in advance,

Omar http://tzec.com