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DISCUSSIONS

The Undergraduate Research Journal of CWRU
VOLUME XII, ISSUE III



Letter from the Editor

Dear Reader,

Thank you for deciding to read this issue of **Discussions: The Undergraduate Research Journal of CWRU**. I am pleased to present you with our summer issue, and exceptionally proud of our staff's dedication to bringing you the best of undergraduate research. Discussions strives to bring quality research from around the country and even from around the world to our audiences.

In this newest edition, two student researchers present their findings on the effect of affective personality disorders on second-language acquisition and the influence of western art on the works of Japanese artist Kawanabe Kyosai. We here at Discussions hope you enjoy the articles within this issue and come away having learned something new and engaging.

An encouragement of undergraduate research is imperative to furthering interest in the arts and sciences so that we may build on the discoveries of today, tomorrow. Discussions seeks to participate in the goal by providing an outlet for students to publish and share their research. We are deeply grateful to the Support of Undergraduate Research and Creative Endeavors (SOURCE) office at Case Western for their ongoing guidance and support in our endeavors.

Although **Discussions** is based at Case Western, we accept submissions from any other undergraduate institution. In fact, in the past we have had submissions from every inhabited continent.

If you share **Discussions'** passion for celebrating excellent undergraduate research, consider submitting to the journal. We accept undergraduate research in all disciplines, and welcome submissions at any time. If you, or someone you know, would like to submit to **Discussions**, we encourage you to visit our website at www.case.edu/discussions for detailed instructions. If you are interested in joining participating further with the journal or have any other questions, you can email us at Discussions.Journal@gmail.com to learn more. I would also ask our readers to contribute to our growth by finding us on Facebook to hear about submission deadlines and the release of new issues.

As always, I would like to thank all of those who contributed to this issue of **Discussions**, including all our submitters, authors, the Editorial Board, and staff members. I would also like to thank the University Mediaboard for their unwavering support for our publication.

Finally, I thank you, our reader, for reading and joining our celebration of undergraduate research.

Sincerely,



Monica Windholtz

Editor-In-Chief

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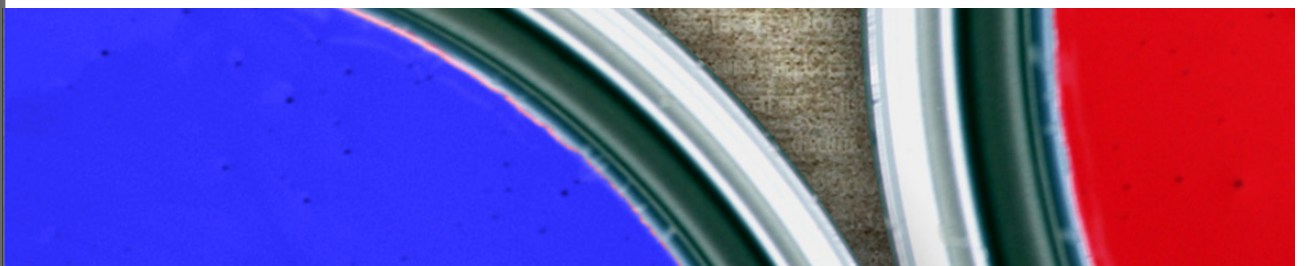
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Flight of the Eagle: Kawanabe Kyosai and His Influences



Jaques Gillis - City University of New York

BIOGRAPHY

Jaques Gillis is a third-year undergraduate at City University of New York studying art history. He has a special interest in the arts, languages, and philosophy of East and South Asia.

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Introduction

Kawanabe Kyosai (1831 – 1889) was famed during his lifetime and afterwards for his artistic and intellectual independence as well as for the fertility and liveliness of his imagination. English art historian Timothy Clark has claimed that though Kyosai's interest in Western art is well documented, it was little more than curiosity and did not significantly influence his finished art. *Eagle Attacking a Monkey* (1885) (Figure 1, Appendix I) incorporates elements from a group of European paintings that includes Titian's *Tityus* (1549) (Figure 6) and Jacob Jordaen's *Prometheus Bound* (1640) (Figure 10), showing that Kyosai considered these Western works to be suitable as sources of inspiration. Kyosai's possible indirect exposure to Western art through Western influence on other Japanese artists in the Tokugawa (1603 – 1867) and the Meiji period (1868 – 1912) and Kyosai's direct exposure to the West through relationships with Western artists had influences on his work.

“...Kyosai considered these Western works suitable sources of inspiration.”

Historical Background

Japan's isolation began in the seventeenth century, when Shogun Tokugawa Iemitsu (1604-1651) expelled most foreign merchants, diplomats, and missionaries, and continued for two centuries (Jansen, 2000). Japan had by this time developed a rich painting tradition with many distinct styles, including styles marked by Chinese influence (*kara-e*, or “Chinese style”) and those marked by early Japanese innovations (*yamato-e*, or “Japanese style”). The Kano school, in which Kyosai, like most Tokugawa artists, trained (Mason, 2003), had already become prominent during this time. This school, and the competing

Rinpa school, preserved established themes and styles, such as Chinese bird-and-flower painting and the Japanese decorative blue-and-gold style (Mason, 2003). Fresh influence from China was limited to Chinese refugees from the newly founded Qing dynasty (1644-1912), who brought *bujinga*, a landscape style favored by the literati (Fenollosa, 1912).

Nevertheless, throughout the period from Iemitsu until the arrival of Commodore Matthew Perry with a squadron of warships in the nineteenth century, a small number of Dutch merchants were allowed to trade in Japan, and some Japanese scholars dedicated themselves to the study of the West through Dutch imports (*rangakusha*, or “Dutch scholars”) (Beasley, 1963). Some Japanese artists were imitating Dutch art by the late eighteenth century. One of these artists, Shiba Kokan (1738 – 1818), pointed to two differences between traditional Japanese painting of the time and Western painting—one in their treatment of surface detail and the other in the method of modeling. “Take, for example, the manner in which the Japanese draw hair and beards: every single strand of hair is drawn individually. The Western technique of drawing hair, however, is to suggest the hair in just a few strokes so that the resulting appearance is one of real hair, not a mere mass of lines” (de Barry, ed, 2005, p. 385). By employing shading, Western artists can represent convex and concave surfaces, sun and shade, distance, depth, and shallowness (Ibid, p. 386). There was, in addition, a difference in the way Japanese artists treated space, which endured in traditional Japanese painting. This is the flattening or the ambiguity of space that was to have such an influence on James Abbot McNeill Whistler (1834 – 1903) and the Impressionists (Sandberg, 1964).

By drawing this distinction between these features of Japanese and Western art, we can see the early influence of Dutch art on some Japanese artists, like Shiba Kokan (Mason, 1993). His painting *The Barrel-maker*

(Figure 3) shows a much greater concern for shadow and depth than for surface detail or pattern, breaking with Japanese tradition and embracing Dutch techniques. Other early Japanese artists working in the Western style included Hiraga Gennai (De Barry, ed, 2005) and Watanabe Kazan (Mason, 1993).

There had been an awareness of and interest in European art, especially Dutch art, in Japan for centuries when Kyosai painted *Eagle Attacking a Monkey*. However, *Eagle Attacking a Monkey* treats a recurring subject in Kano School art, and the technique is consistent with earlier Kano School art. So aside from a superficial similarity in subject between the *Eagle Attacking a Monkey* and the European paintings of eagles attacking Tityus and Prometheus, there may not appear to be a link between this Japanese painting and the European paintings.

There are two links: one in the posture of the eagles, and the other in the composition of the pieces. The eagles in the Kyosai painting, in Titian's *Tityus* (Figure 6), in Cornelius Cort's *Prometheus Chained* (Figure 7), in Rubens's *Prometheus Bound*, and in Jordaens's *Prometheus Bound* (Figure 10) all tear at their victims' flesh while dramatically turning their heads to the side. An eagle eats by tearing flesh from the prey, which requires the eagle to maximize force by pulling directly away from its talons. It grasps the prey with its talons, takes a piece of meat very close to the talons, and yanks its head back. Figures 7 and 8 illustrate how this results in the eagle looking forward as it eats. The posture of the eagles is a significant link because it combines two motions, a dramatic turning of the head and the tearing of flesh, that are rarely observed together in nature.

In the Western paintings, the surprising posture of the eagle seems to have its origin in Michelangelo's *Tityus*. Jordaens, who had painted the eagle in Rubens's *Prometheus Bound*, simply repeated it in his own *Prometheus Bound*, and art historian

Julius Held argues that many features of Rubens's *Prometheus Bound* were adopted from Cornelius Cort's *Tityus Chained*, itself inspired by a painting of the same subject by Titian (Held, 1963). The eagles' necks have the peculiar twist in all of these paintings. For Titian, the choice to turn the neck may be partly explained by his heightened interest in mannerism at the time he painted it (1549) ("Titian," n.d.). Comparing the Titian and Cort to a previous depiction of Tityus being eaten by an eagle by Michelangelo (Figure 8), in which the eagle's neck is straight, it is reasonable to suspect that the line of transmission of the peculiar eagle from Titian to Cort to Rubens is a solitary thread in Western art.

For Rubens, exaggerating the turn of the eagle's neck emphasized the dramatic composition. The primary element of this dramatic composition is the strong diagonal formed by Prometheus's body. Rubens emphasizes the diagonal with the eagle's outstretched wings, which are parallel to Prometheus's body. The eagle was painted by Rubens's frequent collaborator Frans Snyders, but Rubens's collaborators usually worked within a composition laid out by Rubens ("Titian," n.d.). This choice requires him to make the eagle's torso (shorter than the wingspan and mostly shaded out) perpendicular to the diagonal, which means that if the eagle were to eat in the usual posture, its head, the center of the action, would be perpendicular to the diagonal. Thus Rubens, who had studied and absorbed the dramatic elements of Tintoretto's and Caravaggio's compositions, as seen in his planning of *The Raising of the Cross* (Harris 2005; Belkin 1998), was guided by compositional concerns to turn the eagle's head into the diagonal, greatly enhancing the painting's dramatic power.

Kyosai's painting does not give him similar reasons to turn the eagle's head in violation of nature. His monkey is, like Rubens's Prometheus, on a diagonal, but the turn of the eagle's head does not emphasize that diagonal. Arguably the composition would have been

more dramatic if Kyosai had given the eagle's head a straight posture. A comparison of Kyosai's *Eagle Attacking a Monkey* with the older Kano-school *Eagle Catching a Monkey* shows how Kyosai may have assimilated some elements of the *Tityus-Prometheus* paintings. In *Eagle Catching a Monkey*, the eagle and the monkey are shown in profile, without much depth. The painting shows some of the traditional Japanese concern with delineation of surface elements and decoration, as the feathers of the eagle's wings seem to be etched lines in solid masses (Figure 14). Kyosai's *Eagle Attacking a Monkey* is different in all of these respects. The monkey and the eagle are both on diagonals, and they are both foreshortened, giving the painting depth, another link to the *Tityus-Prometheus* paintings. Also, there is little attention to the surface of the animals, the eagle in particular. The feathers on the eagle's wings are not patterns on the surface but rather splay independently to form a loose and light fringe to the wings (Figure 1). In all of these respects, the Kyosai painting is like *Prometheus Bound*, which achieves depth by radical foreshortening of the diagonal figures and in which the eagle's spread feathers emphasize the action of the wings.

It seems possible that Kyosai, without having the overriding concern with composition that Rubens had, adopted the peculiar posture of the eagle along with the foreshortening and depth. And it is not implausible that Kyosai would have adopted novelties from another artist. Despite Kyosai's emphasis on the importance of nature as a teacher, he also considered it to be important to study the techniques of other artists by imitating them (Conder, 1911), and this probably included the assimilation of content as well as technique. Conder relates that Kyosai's first teacher admitted that Kyosai could not learn to show samurai fighting in all the configurations he needed until he saw a Chinese painting "representing over a hundred fighting warriors" (Conder, 1911). We may take from this story the lesson that it is beneficial

to learn how the body moves from older works of art. Conder also describes seeing Kyosai create paintings inspired by older masterworks that they had seen together earlier (Conder, 1911). In addition, it is certain that Kyosai saw Western art as possessing greater authority with respect to anatomy and spatial representation than Japanese art possessed. Conder wrote, "He regarded with profound respect the scientific knowledge of anatomical form, perspective, and sciography, revealed to him in foreign works, and the more realistic developments of painting as unfolded in the West" (Conder, 1911).

"By the late nineteenth century, when Kyosai was active, Japanese interest in the art of the West had greatly expanded."

While there is an ensemble of features shared between the Kyosai painting and the *Tityus-Prometheus* paintings and the possibility that these features were imitated, it might seem implausible in the days before photographic reproductions of most paintings were readily available that Kyosai would have seen and studied any of the *Tityus-Prometheus* paintings. By the late nineteenth century, when Kyosai was active, Japanese interest in the art of the West had greatly expanded. Even before Japan agreed to open trade with the West in 1858 many Japanese scholars began aggressively importing Western books and technology after China's defeat by the British in the First Opium War (1842) in an effort to defend Japan from the technical superiority of the West (Jansen, 2002). One Japanese scholar of the time wrote that "foreign learning is rational and Chinese is not" and that this was the cause of China's defeat (Beasley, 1963, p. 48). After the downfall of the Shogunate, the new imperial government prioritized reform, and among the Westerners who took up residence in Japan were educators with appointments at Tokyo University, including

the Italian scholar Antonio Fontanesi, who brought photographs and copies of famous European works of art (Checkland, 2003) and American scholar Ernest Fenollosa, who knew Kyosai (Sato, 2011). In this time, Japanese artists produced many works emulating trends in contemporary Western painting, such as Realism and Impressionism (Figures 4 and 5).

“These relationships were characterized by artistic curiosity”

At the same time, Western awareness of and interest in Rubens’s *Prometheus Bound* increased. *Prometheus Bound* was publically exhibited in 1850, 1857, and 1867 (Held, 1964). During the 1867 exhibition, it received very favorable mentions in two French reviews, one by Charles Blanc (1857) and the other by W. Burger (1867). Thus, many young European artists in training in the mid-nineteenth century were likely to have seen the painting in one of these exhibits and possibly even to have sketched it. The painting was, in fact, copied in a drawing by Sir George Scharf in 1856 (Held, 1963). In addition to publishing his drawings in books, Scharf became director of the new National Portrait Gallery at South Kensington in 1857 (“Sir George Scharf, Timeline,” 2013) and lectured on portraits at South Kensington in 1866 and 1868 (Lee, 1897), years in which Josiah Conder, who would soon have great influence in Japan, was studying there (Checkland, 2003).

Like many Japanese artists at the time, Kyosai had relationships with many Western artists, including Conder (Sato 2011). Conder became his student, and Kyosai spent a great deal of time working side by side with him (Conder, 1911). Conder had trained at the Royal College of Art (then generally known as the South Kensington Art Schools) and also at the Slade School of Fine Art at University College London (Checkland, 2003). At the latter, Conder had

access to the collection of works for study at Slade, which was assembled by John Ruskin and would have included at least one Rubens drawing (“Study of a Nude Man Tormented by Demons”) (Parker, 1938).

“...Kyosai sat still for a moment but then, unable to bear being left out, took up a brush and began painting a portrait of the portrait-painter.”

Among the other Western artists who knew Kyosai personally were Emile Guimet (French), Felix Regamey (French), Ernest Fenollosa (American), Mortimer Menpes (Australian-born), and Francis Brinkley (Irish). These relationships were characterized by artistic curiosity. Emile Guimet recounts in *Promenades Japonaise* that when he and his artist friend Felix Regamey visited Kyosai and Regamey asked him to sit for a portrait, Kyosai sat still for a moment but then, unable to bear being left out, took up a brush and began painting a portrait of the portrait-painter (Guimet, 1880). Ernest Fenollosa, who also taught in Tokyo, had studied for a year at the Boston Museum of Fine Arts after taking his bachelor’s degree in philosophy at Harvard (Brooks, 1962). Mortimer Menpes, like Conder, studied at the Royal College of Art, and went on to work with Whistler (Checkland, 2003) and to publish a book on Rembrandt (Menpes, 1905). Any of these scholars would have been knowledgeable about the important artists of Europe.

While it is uncertain what these Western artists might have shared with Kyosai, it is certain that Kyosai was familiar with and studied some Western works. From his academy, we have drawings by Kyosai copied from foreign sources. Among these are “Examples of Heads and Skulls Copied from Foreign Drawings” (Collection of the Kawanabe Kyosai Memorial Art Museum) and a drawing based

“...it illustrates that the extent and depth of the cultural exchange between Japan and the West merits greater appreciation and further exploration.”

on Laocoon struggling with serpents (Figure 16) (Jordan, 2003). We also know that he and other Japanese artists used photographs and drawings from the West along with contemporary accounts to represent it in their artwork. Kyosai illustrated Kanagaki Robun's novel *Seiyo Dochu Hizakurige*, “By Shanks' Mare through the West”, (Clark, 1993), published serially between 1870 and 1876, which was a chauvinistic parody of the West but nevertheless required some research (Keene, 1984). Kyosai's depiction of the British Museum shows familiarity with its appearance, perhaps from drawings of the kind Scharf published (see for example Figure 20) or perhaps from photographs. Kyosai also worked with the great dramatist Kawatake Mokuami (1816 - 1893), whose innovations included two styles of Kabuki (*katsureki* and *zangirimono* plays) that relied heavily on research for accurate depiction (Keene, 1984). Figure 19 shows a sketch of the Paris Opera done by Mokuami, for which Mokuami said he had a photograph (Clark, 1993).

There were plenty of resources available for these artists to use for their research. In 1959, the bookseller Maruya (later known as Maruzen) had a 53-page catalog of foreign books, most in English but about 125 in German and 50 in French, (Checkland, 2003). When Regamey visited the Tokyo Fine Art School in 1899, he recorded seeing a copy of a Bernardino Luini painting and copies of two Giovanni Bellini paintings (Regamey, 1899). As noted above, Fontanesi also brought reproductions of famous Western works with him to the University of Tokyo (Checkland, 2003).

When Kyosai painted *Eagle Attacking a Monkey* in 1885, there were a number of ways he could have been exposed to one of the *Tityus-Prometheus* paintings. There had been a particular awareness of Dutch art for more than a century, and some Japanese artists had adopted Dutch artists' methods. There was also a new interest in Western arts and sciences as part of Japan's drive to reform, and

it is quite possible that new reproductions of works taking elements of *Prometheus Bound* were circulating in Japan. Kyosai had close relationships with Western artists, any of whom might have had reproductions of *Prometheus Bound*. Finally, Kyosai collaborated with other artists in Japan who might have had or seen copies of *Prometheus Bound*.

It is important to note that Kyosai need not have owned a reproduction of one of the *Tityus-Prometheus* paintings or even to have studied it very deeply to have assimilated these elements. Kyosai believed visual memory was critical for the artist. In Conder's description of Kyosai creating paintings inspired by older works, he notes Kyosai's memory for detail, saying the paintings were “remarkable for showing his wonderfully retentive memory for the minutest detail observed in the work of an old master....I never remember him referring to his notes or sketches while reproducing them” (Checkland, 2003).

A link between *Eagle Attacking a Monkey* and the *Tityus-Prometheus* paintings thus becomes plausible. *Eagle Attacking a Monkey* adopting elements from one of the *Tityus-Prometheus* paintings shows that Western influence on Japanese art extended to Kyosai, who has been seen as an artist with purely domestic influences. More broadly, it illustrates that the extent and depth of the cultural exchange between Japan and the West in the 19th and 20th centuries merits greater appreciation and further exploration.

Appendix



Figure 1. Kawanabe Kyosai (1831-1889). Eagle Attacking a Monkey (1885). Ink and color on paper, hanging scroll, 111 1/2 x 43 1/2 in. (166.5 x 83.8 cm). Metropolitan Museum of Art. Charles Stewart Smith Collection, Gift of Mrs. Charles Stewart Smith, Charles Stewart Might Jr., and Howard Caswell Smith, 1914.



Figure 2. Peter Paul Rubens (1577-1640). Prometheus Bound (1611-1612). Oil on canvas, 95.9 x 82.5 in. (243.5 x 209.5 cm). Philadelphia Museum of Art. Purchase, the W. P. Wilstach Fund, 1950.



Figure 3. Shiba Kokan. The Barrel-maker (c. 1789). Oil on silk, hanging scroll. 18 ¾ X 23 5/8 in. (47.6 cm X 60 cm). Private collection, Yokohama.



Figure 4. Asai Chu. Harvest (1890). Oil on canvas. 27 ¼ X 37 7/8 in. (69 cm X 98.5 cm). Tokyo National University of Fine Arts and Music.



Figure 5. Kuroda Seiki. By the Lake (1897). Oil on canvas. 68 cm X 83 cm. Tokyo National Research Institute of Cultural Properties



Figure 6. Titian. Tityus. 1549. Oil. (215X217 cm). Museo del Prado.



Figure 7. Cornelis Cort. Prometheus Chained. 1566. Engraving.



Figure 9. Michelangelo. The Punishment of Tityus. Chalk. (33 X 19 cm). Royal Collection, Windsor Castle.



Figure 10. Frans Snyders. Sketch of Eagle for Prometheus Bound. 1610. Pen and Brown Ink. (2.80 X 2.02 cm). The British Museum.



Figure 11. Jacob Jordaens. Prometheus Bound. c. 1640. Oil. (245 X 178 cm). Wallraf-Richartz Museum.



Figure 12. Golden eagle (*Aquila chrysaetos*) feeding on a red fox in the Cairngorms National Park. Copyright Peter Cairns. <http://northshots.photoshelter.com/image/I0000NYTH4.xDMP4>



Figure 13. Bald eagle eating prey. Copyright Fred Lang, 2009. <http://www.pbase.com/image/117416191>



Figure 14. Eagle Catching Monkey. Ink painting, hanging scroll. 17th century. Kano school. Sotheby's London. Japanese Works of Art, Prints and Paintings. London, 19 June 2001. Lot 233.



Figure 15. Nobukazu. Eagle and monkeys. Early nineteenth century. Wood. 5 cm. from *Expressions of Style: Netsuke as Art*, no. 182. reproduced at: <http://www.scholten-japanese-art.com/nstyle34.htm>

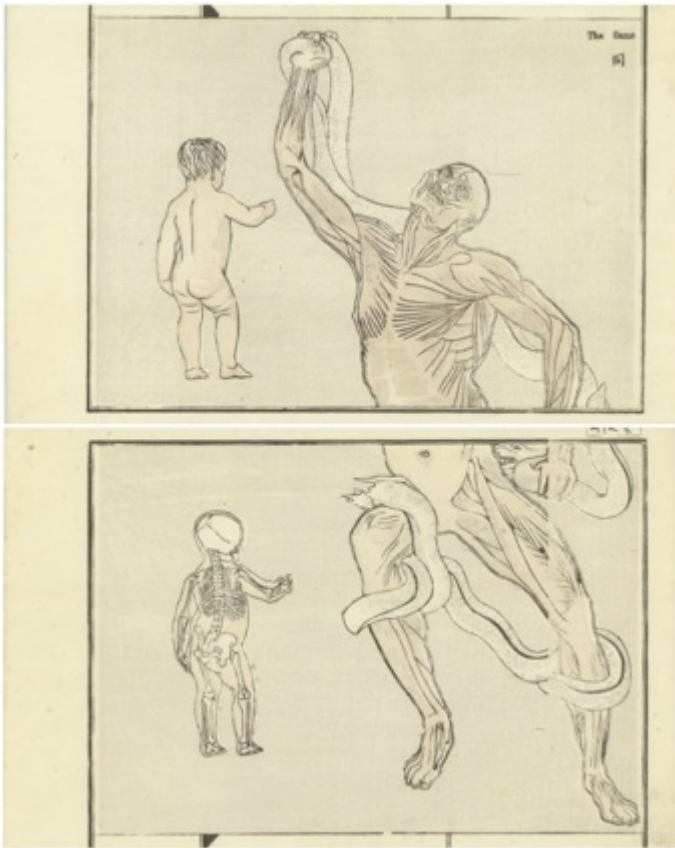


Figure 16. Kawanabe Kyosai. Sketch of Laocoon and His Sons. from *Kyosai Gadan*, Volume 1, Tokyo: Iwamoto Shun, 1887. Reproduced at <http://www.myjapanesehanga.com/home/artists/kawanabe-kyosai-1831-1889-/gyosai-gadan-laocoon-and-his-sons>



Figure 17. Laocoon and His Sons (c. 1st century BC), copy of the 3rd century B.C. original. Found in the Baths of Trajan, 1506. Vatican Museum, Museo Pio Clementino, Octagon, Laocoon Hall. Photograph by Marie-Lan Nguyen, 2009.

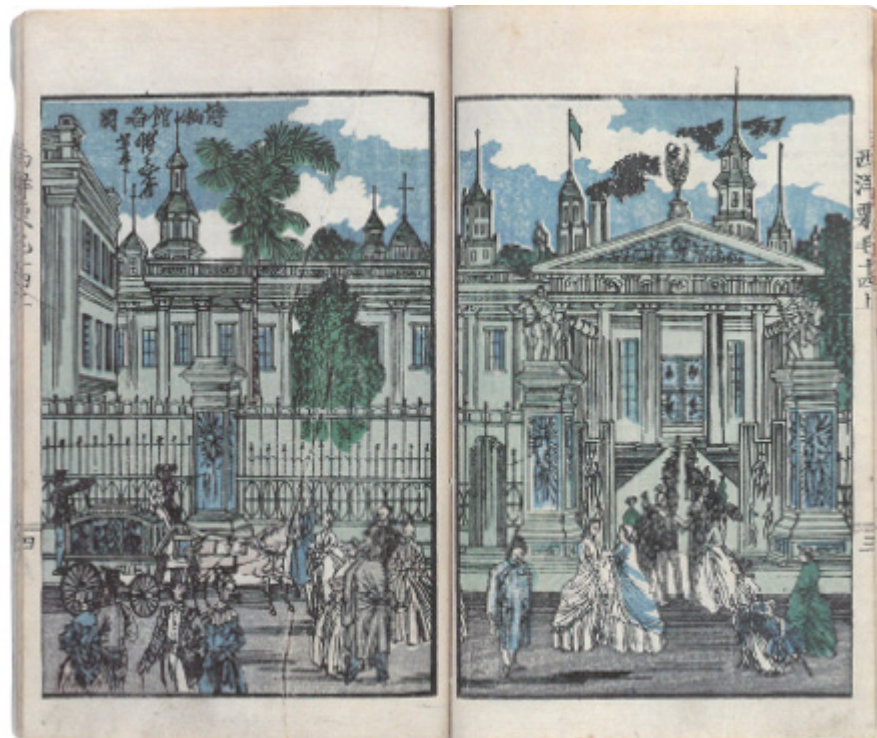


Figure 18. Utagawa Yoshiiku, Utagawa Hirshige III, and Kawanabe Kyosai. “The British Museum.” *Shank’s Mare Round the West*. (by Kanagaki Robun). Kawanabe Kyosai Memorial Museum.



Figure 19. Kawatake Mokuami, “In Front of the Paris Opera,” *The Strange Tale of the Castaways: A Western Kabuki*. 1879. Kawanabe Kyosai Memorial Museum.



Figure 20. George Scharf, “Drawings of Westminster,” Great George Street, Top floor, Front room. 24 September 1868. British Museum

References

- Baedeker, K. (1877). *Northern Germany. Handbook for Travellers*, sixth edition. London: Dulau & Co.
- de Barry, W. T., ed. (2005). "Discussing Western Painting;" *Sources of Japanese Tradition*, Vol. 2. New York: Columbia University Press.
- Beasley, W. G. (1963). *The Modern History of Japan*. New York: Frederick A. Praeger.
- Belkin, K.L. (1998). *Rubens*. London: Phaidon Press.
- Blanc, C. (1857). *Les Tresors de l'Art a Manchester*. Paris: Pagnerre.
- Brooks, V. W. (1962). *Fenollosa and His Circle*. New York: E. P. Dutton & Co., Inc.
- Burger, W. (1857). *Tresors d'Art Exposes a Manchester en 1857*. Paris: J. Renouard.
- Carpenter, J. (2013). *Birds in the Art of Japan*. New York: Metropolitan Museum of Art.
- Checkland, O. (2003). *Japan and Britain after 1859*. New York: RoutledgeCurzon.
- Clark, T. (1993). *Demon of Painting: The Art of Kawanabe Kyosai*. London: British Museum Press.
- Conder, J. (1911). *Paintings and studies by Kawanabe Kyosai, an illustrated and descriptive catalogue of a collection of paintings, studies, and sketches*. Tokyo: Japan Times.
- Dempsey, C. (1967). *Euanthes Redivivus: Rubens's Prometheus Bound*. *Journal of the Warburg and Courtauld Institutes*. 30, 420-425.
- Doshin, S. (2011). *Modern Japanese Art and the Meiji State: The Politics of Beauty*. Los Angeles: Getty Publications.
- Fenollosa, E. (1912). *Epochs of Chinese and Japanese Art*, V. 1 and V. 2. New York: Frederick A. Stokes Company.
- Fiske, K. (1952). *Rubens' Prometheus*. *Burlington Magazine*. 588:XCIV.
- Guimet, E. (1880). *Promenades Japonaises*. Paris: G. Charpentier.
- Harris, A. S. (2005). *Seventeenth-Century Art & Architecture*. New Jersey: Pearson Education Inc.
- Held, J. S. (1963). "Prometheus Bound," *Philadelphia Museum of Art Bulletin*. 59:279, Philadelphia: Education in the Museum.
- Jansen, M. B. (2000). *The Making of Modern Japan*. Cambridge: The Belknap Press of Harvard University Press.
- Jordan, B.G. (2003). "Kawanabe Kyosai's Theory and Pedagogy." *Copying the Master and Stealing His Secrets: Talent and Training in Japanese Painting*. Hawaii: University of Hawaii Press.
- Lee, S., (Eds.). (1897). "Scharf, Sir George." *Dictionary of National Biography*, London: Smith, Elder, & Co.
- Mason, P. (1993). *History of Japanese Art*. New York: Harry N. Abrams.
- Meech-Pekarik, J., (Eds.). (1975). *Momoyama: Japanese Art in the Age of Grandeur, an Exhibition at the Metropolitan Museum of Art*. New York: Metropolitan Museum of Art.
- Menpes, M. (1905). *Rembrandt*. London: Adam and Charles Black.
- Michel, P. (2005). *Rubens et les collectionneurs francais aux 18th siècle: contribution a l'histoire d'une reception*, Belgium: Brepols.
- "Sir George Scharf – Timeline," *National Portrait Gallery*. (2013). London: National Portrait Gallery.
- Parker, K. T. (1938). *Catalogue of the Collection of Drawings in the Ashmolean Museum, I, Netherlandish, German, French and Spanish Schools*. 205. Oxford: Clarendon Press.
- Rubens, P. P. (1955). "Letter to Sir Dudley Carleton," April 28, 1618, Antwerp. *The Letters of Peter Paul Rubens*, Ruth Saunders Magurn, Evanston: Northwestern University Press.
- Sandberg, J. (1964). "'Japonisme' and Whistler," *The Burlington Magazine*. 106:740.
- "Titian." *The National Gallery* (n.d.).



Social Temperment as a Variable in the Second-Language Acquisition of Russian Vocabulary

Patrick Goodridge - University of Pennsylvania

BIOGRAPHY

Patrick "Pat" Goodridge is a linguist, language teacher, and writer based in Philadelphia, PA. He will earn his BA in Linguistics from the University of Pennsylvania this May and hopes to enter an MA program in Russian, East European, and Eurasian Studies thereafter. He also works as a linguistic adviser for 3ears.com, a new Russian language learning site. You can reach him at pgoodr@sas.upenn.edu or find links to his other on LinkedIn.

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Introduction

Personality is identified as a significant variable in the acquisition of secondary languages (L2) (Adamopoulos, 2004; Busch, 1982; Dewaele, 2012; Skehan, 1991; Wakamoto, 2000). Studies have attempted not only to connect L2 acquisition with general personality, but also to relate L2 acquisition to specific dimensions of personality, including creativity, emotional intelligence, motivation, foreign language anxiety, and perfectionism (Dewaele, 2012; Dewaele, 2002; Moody, 1988; Skehan, 1991). Within the domain of personality and L2 learning, extraversion-introversion is particularly interesting. This well known personality binary refers to a difference in temperamental disposition toward social interaction; “extraverts” are those individuals energized by social activities in stimulating environments, while “introverts” are those more quickly drained by such interaction, generally preferring solitary activities such as reading and writing (Boroujeni, Roohani, & Hasanimanesh, 2015). The difference between the two has been linked to cortical arousal (Eysenck & Eysenck, 1995), and differences in learning style (Elksnin, 2005; Kayaoğlu, 2013), memory (Cox-Fuenzalida, Angie, Holloway, Sohl, 2006; Eysenck, 1979; Zeidner, & Matthews, 2000), and academic achievement (Duckworth & Allred, 2012; Chamorro-Premuzic & Furnham, 2005) have been observed between individuals in the two groups.

In terms of this extraversion-introversion binary and L2 acquisition, research has thus far established a positive correlation between extraversion and oral L2 proficiency (van Daele, Housen, Pierrard, & Debruyne, 2006), with the exception of pronunciation accuracy (Busch, 1982; Robinson, Gabriel, & Katchan, 1994; Rossier, 1975). In L2 writing tasks, on the other hand, it is introverts who showed consistently superior performance (Boroujeni, Roohani, & Hasanimanesh, 2015). There is additional evidence that introverts perform better on L2

“Within the domain of personality and L2 learning, extraversion-introversion is of particular interest.”

grammar and reading comprehension tasks (Boroujeni, Roohani, & Hasanimanesh, 2015; Gu, 2003; Razmjoo & Shaban, 2008), as well as general verbal tasks (Chamorro-Premuzic, & Furnham, 2005). Rossier (1975) showed that introverts perform better in L2 spelling tasks. Despite the abundance of studies relating introversion-extraversion to general L2 learning, few works focus on vocabulary learning, with the exception of a study by Sarani, Abousaeedi & Ahmadian (2011), which showed that extraverts use a greater range of vocabulary learning strategies. Therefore, the goal of this study was to explore further the relationship between extraversion-introversion and L2 vocabulary learning. The importance of examining vocabulary lies in its documented importance to the L2 learning process. Likewise, introversion-extraversion is worthy of study for its documented significance as a variable in learning, behavior, temperament, and other areas (Sanchez-Marin, Rejano-Infante, & Rodríguez-Troyano, 2001). Discovery of a relationship between these temperamental varieties and L2 vocab acquisition has the potential to advance an understanding of personality’s role in the L2 learning process.

Background

One of the main goals of the field of second-language acquisition is to understand how individuals learn L2 foreign languages. Gardner and Lambert (1959) were the first to test variables in L2 learning, showing motivation to be related to increased acquisition for L2 French learners in Montreal. Rubin and Stern (1975) examined the variables of L2 learning with their so-called “good language learner” studies, which examined the strategies and traits of the most successful language students. They found a number of traits

associated with effective L2 acquisition, including self-confidence, assertiveness, and focus. This was to mark the advent of “individual variation”, a concept that has emerged in recent decades to describe how L2 students are different from one another and, as a result, how they learn languages differently. The variables thought to determine one’s ability to learn languages are dubbed “individual differences” (Skehan, 1991). These include traditional independent variables like age, intelligence, and gender, but also more abstract “affective factors” in learning, those related to emotion, such as motivation and attitude (Gardner, Tremblay & Castillo, 1997), anxiety (MacIntyre & Gardner, 1994), and personality itself (Dulay, Burt & Krashen, 1982). Until the beginning of the 21st century, researchers did not directly experiment on extraversion-introversion in SLA contexts; instead, they used previous psychological and educational studies on extraversion-introversion to construct theories about how the types may learn L2 languages. An example of this is a study by Ehrman (2008), which claimed that the best language learners have introverted personalities, basing on the finding of Robinson, Gabriel and Katchan (1994) that intuitive, logical, precise learning styles foster better L2 learning. In this study, similar measures are taken in synthesizing prior research from related areas in the explanation of personality and L2 learning, in addition to using more recent SLA studies that address extraversion-introversion directly.

Of the studies that have directly assessed extraversion-introversion and L2 acquisition, an overwhelming majority have focused on oral proficiency and other aspects of foreign language “output” (Wakamoto, 2000). Few studies assess input. The significance of this absence of such studies is the demonstrated importance of input to L2 acquisition (Krashen, 1989). Input refers to activities like listening to the L2 language, reading it, or studying its grammar, all of which involve cognitive input in the foreign language. According to Krashen

(1989), vocabulary is “language that learners encounter and whose meaning they try to comprehend.” Krashen goes on to say that vocabulary “involves analyzing words and their parts” (Krashen, 1989, p.g. 1). Based on this description of language, there is reason to hold that introverts likely acquire L2 vocabulary more effectively than extraverts. Firstly, introverts prefer to use analytical strategies (Adamopoulos, 2004; Kayaoğlu, 2013), which involve focusing on form, grammatical accuracy, and the discrete parts of words and sentences. These strategies are likely more effective than the extravert learning strategies that engage oral communication and “larger chunks of language”, since studies show that oral production does little to actually facilitate vocab learning (Busch, 1982; Carrell, Prince, & Astika, 1996). This would seem to give introverts an advantage in terms of both learning vocabulary acquisition through written vocab lists as well as an advantage on tests of those words, supported by evidence that introverts both prefer and perform better on written tests than do extraverts (Chamorro-Premuzic & Furnham, 2005). Introverted preference for learning languages alone (Wakamoto, 2000) helps to explain their superior performance on written, solitary tests. This also applies to L1 vocabulary, which introverts are shown to acquire more effectively (Chamorro-Premuzic & Furnham, 2005). Introverts are also shown to have better L2 reading comprehension skills than extraverts (Boroujeni, Roohani, & Hasanimanesh, 2015), a significant advantage given the importance of reading to second-language vocabulary acquisition (Krashen, 1989). Specifically, introverts’ reading abilities likely boost their “incidental vocabulary acquisition”, passive vocabulary acquisition that occurs during reading (Huckin & Coady, 1999). Superior introverted reading skills therefore suggest better vocabulary acquisition abilities in both L1 and L2 acquisition.

Other research suggests that introverts may possess academic and intellectual skills that

could translate into success in L2 learning. For example, studies have also shown introverts to be better academic performers, with extraverts being more likely to fail college and high school (Akomolafe, 2013; Sanchez-Marin, M., Rejano-Infante, E., & Rodríguez-Troyano, 2001). Ellis (1994) claimed that introverts learn L2s better because they possess a more developed cognitive academic ability, while Zeidner & Matthews (2000) suggested that introverts may have higher IQs than extraverts. It's possible that these academic and intellectual primacies can, at least in the area of the humanities, be explained by their better verbal memory storage (Cox-Fuenzalisa, Angie, Holloway, Sohl, 2006) and their better performance in general verbal tasks (Chamorro-Premuzic & Furnham, 2005). Introverts also have overall deeper processing of stimuli in their central nervous systems, which could facilitate better learning and memory (Laney, 2002). These findings provide an abundance of reasoning to explain why introverts are likely to have superior L2 vocabulary acquisition when compared to extraverts. This informs the expectation that introverts will perform better on the vocabulary experiment described in the next section.

Study

Objectives

The primary objectives of the experiment were to establish the personality profiles of the participants, give them an opportunity to attempt to acquire ten vocabulary words, and then test them on their knowledge of those vocabulary words. This was in an effort to study the connection between each participant's personality profile and his or her performance on a short vocabulary test at two different periods of time. For this test, level of performance was equated with level of acquisition. The study not only assesses the performance of the two groups as compared with one another, but also searches for an overall correlation that can relate level of

“Introverts also have overall deeper processing of stimuli in their central nervous systems, which could facilitate better learning and memory (Laney, 2002).”

Extraversion to vocabulary acquisition. This correlation is key in that it allows analysis of the relationship between performance and Extraversion directly rather than according to the two groups of the binary. The study can therefore account for degrees of Extraversion within the two groups, rather than simple absolutes of introversion or extraversion.

Subjects

The experiment involved 12 college-age students, who were tested for introversion-extraversion and then subsequently given a Russian vocabulary test. All of the participants are native English speakers and none are bilingual in any other language. All have studied L2 languages in the past, but none have studied any Slavic languages or other languages closely related to Russia. The results of the personality self-assessment yielded 5 extraverts and 7 introverts. The average Extraversion score of the entire group was 43.08 on a scale of 0-100, in which higher scores correspond to higher levels of extraversion and lower scores to higher levels of introversion. The average Extraversion score for the extraverted group was 67.40, while the average for the introverted group was 24.67. These averages indicate that the extravert group was far less extraverted on average than the introvert group was introverted.

Methods

John's (2007) Big Five Inventory (BFI), offered through the University of California, Berkeley's Personality Lab, was used to measure Extraversion as one of the Big Five Personality traits, which are

Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. The participants answered all the questions on the test, which yielded results for all five traits, but Extraversion was the only result reported for the experiment. The self-assessment test was distributed to participants electronically by an email message that included a link to the test. The participants then reported their results by screenshot. The screenshot was meant to confirm the scores. The exception to this remote reporting was the proctoring of two students as they completed the test. This allowed direct observation of those two participants and the immediate recording of the scores.

The test consisted of 46 items that asked students to rate how they view themselves (“I see myself as someone who...”) on a scale of 1-5, from “Strongly Disagree” to “Strongly Agree”. Some of the items that factored into the Extraversion results were “...Is talkative”, “...Tends to be quiet”, and “...Is sometimes shy, inhibited”, among others.

The results of the items were then calculated and factored into the measure of Extraversion according to a 100-point scale, with the upper range (51-100) indicating extraversion in the participant and the lower range (0-50) indicating introversion. The results were shown to the participant directly after submitting his or her answers. This scale was very important to the study, as it allowed specification of the degree of Extraversion for each participant and linked it to their performance, rather than only placing the individuals into two discrete groups. Sakano (1990) showed that a degree of introverted and extraverted tendencies may be present in all individuals. This resulted in a wide array of scores even within each of the two groups, making the correlation important as an additional area of analysis beyond the differences in the discrete groups of the binary. Participants were still grouped into categories of Introverts and extraverts during analysis. This was in an effort to look at the

makeup of the results according to the binary.

Following the personality test, the participants were then sent a link to a Russian vocabulary test (Goodridge, 2016). The test was created with and hosted on Qzzr.com, a site that allows users to create custom academic quizzes. The site also has a feature that allowed the tracking of the completion and scores of each user. On the front page of the quiz, participants were given a short message describing the experiment to them. The message informed them that they would have 10 minutes to study the words and then 10 subsequent minutes to take the 10-question multiple-choice exam. The list of Russian words consisted of 10 basic vocabulary items (see Appendix 1 for full list):

Рука - Hand

Деньги - Money

Голова - Head

The Russian test itself consisted of three types of questions (see Appendix 2 for all question types):

1. Given English word, choose correct Russian equivalent (4 count)

Ex. 1: eye

- a. глаз
- b. глас
- c. глос
- d. год

As the example of the first question variant shows, it was not just Russian-English association that was tested, but also spelling. The questions tested attention to form, asking participants to choose not merely the correct Russian word based on a vague memory of its appearance, but instead demanded they choose the option with the correct spelling. This was done by choosing alternative word

choices similar to the correct word. For example, “глас” and “глюс” resemble the correct answer choice, глаз, and “год”, the fourth choice, begins with the same Cyrillic letter as the correct choice. The inclusion of these similar varieties of spelling options helped to test which of the participants had accurately acquired the word in its specific form, rather than who of them had simply the general form and appearance of the word based on the English definition paired with it on the list.

A week after the initial test, the participants were given the same test again, though this version did not include the list of words to be reviewed. This stage was meant to test the long-term retention of the words by the participants. The participants were aware from the onset of the experiment that they would be taking part in multiple stages and that the stages would both occur within the same month-long window. However, they were not aware that they would be given a retention test as the second stage, that the test would be given after only a week, or that they would be tested on the same words. This helped to prevent the students from reviewing the words between the tests and, as a result,

maintained the fairness and integrity of the testing.

Similar to the personality test, scores on the Russian test were reported by screenshot. The scores were calculated and recorded according to percentage of the 10 questions answered correctly. Using the administrative options on Qzqr, participant scores and attempts were confirmed.

Results

Immediate stage results

The results of the immediate stage of testing showed that the group of extraverts achieved significantly higher scores than those in the introvert group. The average score for the group of 5 extraverts was 88.00%, while the average for those in the introvert group was 78.33%. This is the average of 6 of the 7 introverts who took the test, since one outlier was discovered whose score was 2.31 standard deviations below the mean.

Figure 1 displays the results for the first stage of the experiment, with vocabulary being plotted against Extraversion:

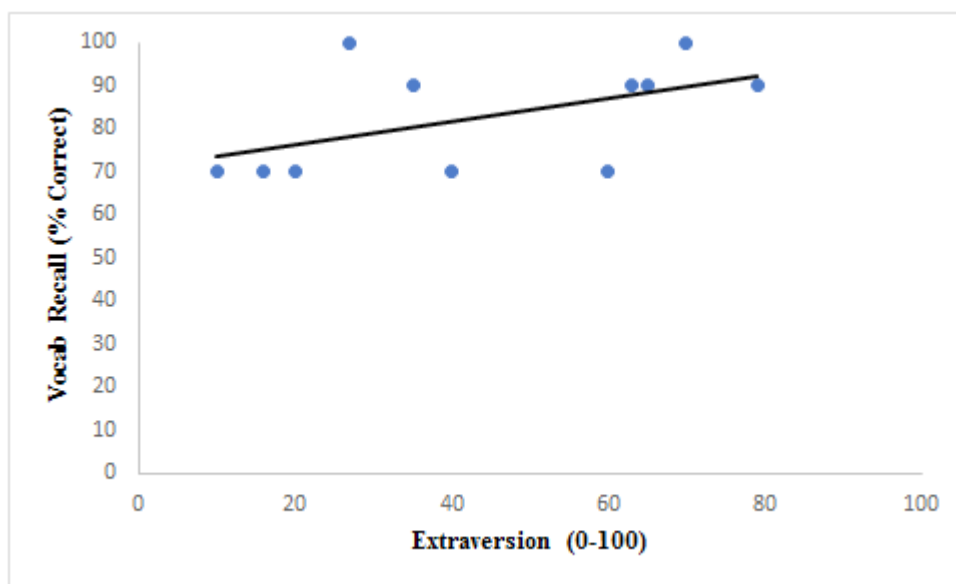


Fig. 1: Extraversion and vocabulary recall scores (Immediate stage)

Table 1. Extravert Russian test results, Immediate Stage

Participant	Extraversion(0-100)	% Correct
1	79	90
2	70	100
3	65	90
4	63	90
5	60	70
Average	67.4	88%

Table 2. Introvert Russian test results, Immediate Stage

Participant #	Extraversion(0-100)	% Correct
6	10	70
7	16	70
8	20	70
9	27	100
10	35	90
11	40	70
Average	24.67	78.33%

Table 3. Extravert Russian test results, Delayed-retentive Stage

Participant #	Extraversion(0-100)	% Correct	Score Decrease(%)
1	79	50	-40
2	70	80	-20
3	65	60	-30
4	63	20	-70
5	60	70	0
Average	67.4	56	-32

Table 4. Introvert Russian test results, Delayed-retentive Stage

Participant #	Extraversion(0-100)	% Correct	Score decrease(%)
6	40	20	-50
7	35	80	-10
8	27	40	-60
9	20	30	-40
10	16	40	-30
11	10	50	-20
Average	24.67	43.33	-35

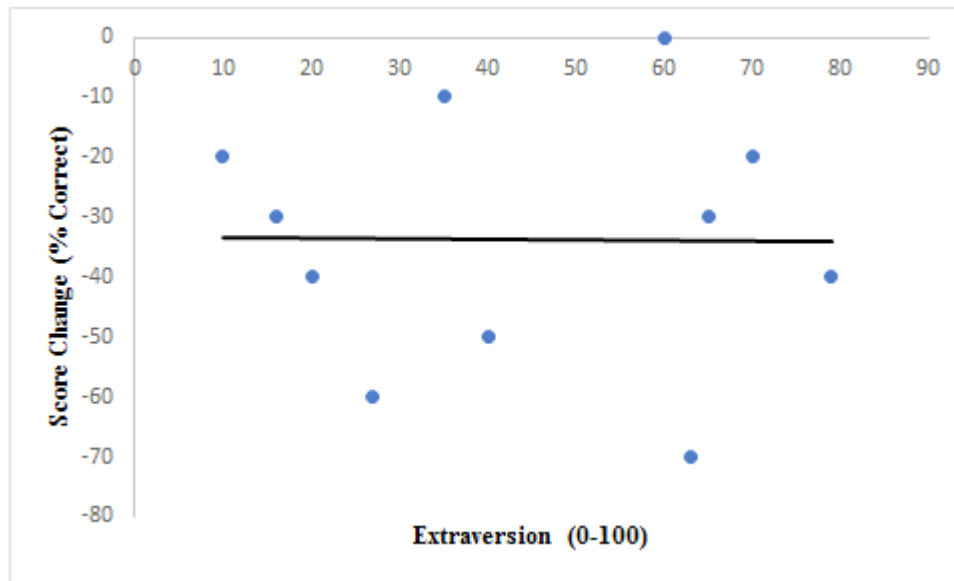


Fig. 2: extraversion and vocabulary recall score decrease (Delayed-retentive stage)

The Pearson correlation for this data was calculated to be $r = .588$, indicating a moderately positive correlation between Extraversion and vocabulary recall on the test. The moderately positive correlation is clearly indicated in Figure 1. This correlation corresponds to a p value of $.044$, slightly below the significance threshold of $.05$. This indicates a statistically significant relationship between vocabulary recall scores and Extraversion.

Delayed-retentive stage results.

Unlike the first stage, the second stage yielded no significant correlation. In this stage, retention was plotted against Extraversion. Retention was based on how much each participant's score decreased from the first stage, with the decreases closer to 0 indicating greater retention. The correlation for this stage was found to be $r = -.129$, with a p -value of 0.353 . The negative correlation between score decrease and Extraversion indicates a weak negative relationship between Extraversion and score decrease, alternatively considered as a weak positive relationship between Extraversion and retention. However, p is greater than $.05$, indicating an insignificant relationship between the variables. This

lack of meaningful relationship can also be observed in the nearly identical average score decreases between the groups: -32% for extraverts and -35% for introverts.

Discussion

The results of the initial test contradict the hypothesis that the introverts would perform better on both the short-term acquisition test and the retention test in particular, given their superior verbal memory consolidation and storage (Cox-Fuenzalisa, Angie, Holloway, Sohl, 2006). Instead, the reverse was shown: a correlation between the trait of Extraversion and vocabulary acquisition. While this was not the expected result, there are a number of empirical explanations for the findings that extraverts acquire L2 vocabulary more effectively in the short-term. There is evidence that extraverts possess superior short-term verbal memory retrieval (Cox-Fuenzalisa, Angie, Holloway, Sohl, 2006). Additionally, research shows that extraverts perform better on shorter tests, as well on multiple-choice ones (Entwistle & Entwistle, 1970).

“The results of the initial test contradict the hypothesis that the introverts would perform better on both the short-term acquisition test and the retention test in particular, given their superior verbal memory consolidation and storage.”

Another major factor to consider is the effect of cortical arousal and, possibly, language anxiety on the participants. Eysenck, & Eysenck (1985) showed that extraverts and introverts demonstrate different baseline levels of cortical arousal. extraverts were shown to have lower baseline levels of arousal and, therefore, a higher threshold of arousal than introverts, who have a naturally higher baseline of arousal and a lower threshold. This finding has a number of implications. Lower baseline arousal in the extraverts means that extraverts will deal better with the stress of a timed exam. A study by Revelle, Amaral & Turriff (1976) gave timed tests to individuals who were not expecting to be tested, and illustrated that this drastically harmed introvert performance on a GRE vocabulary test while actually improving extravert performance slightly. The researchers concluded that introverts are likely more susceptible to stress than extraverts. Similarly, heightened cortical arousal, as that experienced by introverts, has been correlated with higher likelihood and intensity of anxiety (Eysenck, 1979). Eysenck, & Eysenck (1985) found that anxiety reduces processing effectiveness in the brain, impairing performance. The same applies to “language anxiety”. MacIntyre & Gardner (1994) define language anxiety as “the feeling of tension and apprehension specifically associated with second-language contexts, including speaking, listening, and learning” (p.g. 284). While language anxiety is usually associated with oral performance in an L2,

it can apply to all L2 learning and testing, making it possible that it could have harmed introvert performance on the written test. Furthermore, there is a large body of research on L2 learner motivation, some of which suggests that increased introvert anxiety has a negative on introvert motivation to perform on tests; Macintyre & Charos (1996) discussed the dynamic effect of anxiety on motivation: “...high levels of motivation abate anxiety, and high levels of anxiety are likely to inhibit motivation” (p.g. 18). According to DeYoung (2011), extraverts are more motivated due to being more sensitive to rewards, which means they may have been more extrinsically motivated than the introverts to perform on the Russian test. This superior extraverted motivation would have acted to both abate any anxiety the extraverts would have had, as well as helped them to learn better and perform better on the test, as Dörnyei (1998) established a positive correlation between motivation and L2 learning. Furthermore, Macintyre & Charos (1996) have shown that introverts exhibit lower self-esteem in L2 learning, which could have impacted L2 learning, as Dörnyei (1998) showed a relationship between lower self-esteem and lower levels of L2 acquisition. For the second stage of the study, no correlation was discovered between Extraversion and retention. In other words, extraverts acquired more vocabulary than introverts, but introverts retained what they learned just as well as extraverts did. This shows that extraverts may not have acquired their vocabulary items better than introverts, but instead only acquired a greater number of items.

Conclusion

Despite the results of the experiment favoring extraverted capacity to acquire L2 vocabulary, it would be premature to posit that extraverts are superior learners of L2 vocabulary. It is possible that the conditions of the test favored extraverted temperament and learning preferences. Likewise, those conditions may have worked against introverted

“Additionally, research shows that extraverts perform better on shorter tests, as well on multiple-choice ones.”

preferences for long, writing-based testing. The experimental results therefore confirm that extravert preferences in short-term L1 tests extend to L2 learning, and that extraverts likely possess both superior short-term encoding and short-term retrieval. The study also offers an example of the effect of cortical arousal on L2 learning and how that effect varies between individuals of different temperaments. The results of the second stage show that introverts retain the vocabulary they learned from the first stage equally as well as extraverts do, which leaves open the question of which temperament is more conducive to retention. Furthermore, the test did not examine quality of acquisition, such as pronunciation, ability to recognize the words in context, or a number of other indicators of acquisition. The finding that Extraversion is correlated with increased short-term vocabulary indicates that certain learning and testing styles are more conducive to learning for extraverts than for introverts. This study thus indicates a significant correlation between short-term L2 lexical learning and extraversion. Possible future studies could assess longer-term vocabulary retention or longer-term vocabulary acquisition, such as learning over the course of a semester. Further research is also needed to examine the effect of cortical arousal on all areas of L2 acquisition. This study opens future pathways for research on the relationship between L2 learning and personality.

Appendix 1

Рука - Hand
 Деньги - Money
 Голова - Head
 Женщина - Woman
 Человек - Man, person, human
 Жизнь - Life
 Работа - To work
 Время - Time
 Глаз - Eye
 Год - Year

Appendix 2

1. Given English word, choose correct Russian equivalent (4 count)

Ex. 1: eye

- e. глаз
- f. глас
- g. глос
- h. год

2. Given Russian word, choose correct English equivalent (4 count)

Ex. 2: голова

- a. year
- b. woman
- c. head
- d. money

3. Choose image that best represents given Russian word (2 count)

Ex. 3: pyka

- a. (Image of money)
- b. (Image of a cat)
- c. (Image of a hand)
- d. (Image of an eye)

Works Cited

- Adamopoulos, R. (2004). Personality and second language acquisition. *ENGL 539: Second Language Acquisition*, 1-10.
- Boroujeni, A. A., Roohani, A., & Hasanimanesh, A. (2015). The Impact of extraversion and Introversion Personality Types on EFL Learners' Writing Ability. *Theory and Practice in Language Studies*, 5(1), 212. doi:10.17507/tpls.0501.29
- Busch, D. (1982). Introversion-Extraversion And The EFL Proficiency Of Japanese Students. *Language Learning*, 32(1), 109-132. doi:10.1111/j.1467-1770.1982.tb00521.x
- Carrell, P. L., Prince, M. S., & Astika, G. G. (1996). Personality type and language learning in an EFL context. *Language Learning*, 46, 75-99.
- Chamorro-Premuzic, T., & Furnham, A. (2005). *Personality and Intellectual Competence*. Mahwah, NJ: L. Erlbaum Associates.
- Dewaele, J.-M. (2002). Individual differences in L2 fluency: The effect of neurobiological correlates. In V. J. Cook (Ed.), *Portraits of the L2 user* (pp. 219-50). Clevedon, England: Multilingual Matters.
- Dewaele, J.-M. (2012). Personality in Second Language Acquisition. *The Encyclopedia of Applied Linguistics*. doi:10.1002/9781405198431.wbeal0904
- DeYoung, C. G. (2011). Intelligence and Personality. In R. J. Sternberg & S. B. Kaufman (Eds.), *The Cambridge handbook of intelligence* (pp. 711-737). New York, NY: Cambridge University Press.
- Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, 31(3), 117-135. doi:10.1017/S026144480001315.x
- Duckworth, A., & Allred, K. (2012). Temperament in the classroom. In M. Zentner & R. L. Shiner (Eds.), *Handbook of temperament* (pp. 630-643). New York, NY: Guilford Press.
- Dulay, H. C., Burt, M. K., & Krashen, S. D. (1982). *Language Two*. New York: Oxford University Press.
- Ehrman, M. (2008). Personality and the good language learner. In C. Griffiths (Ed.), *Lessons from the good language learner* (pp. 61-72). Cambridge, England: Cambridge University Press.
- Elksnin, L. K. (2005). Temperament in the classroom: Understanding individual differences. *Psychology in the Schools*, 42(2), 223-224. doi:10.1002/pits.20060
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: UK: Oxford University Press.
- Entwistle, N. J., & Entwistle, D. (1970). The Relationships Between Personality, Study Methods And Academic Performance. *British Journal of Educational Psychology*, 40(2), 132-143. doi:10.1111/j.2044-8279.1970.tb02113.x
- Eysenck, M. W. (1979). Anxiety, learning, and memory: A reconceptualization. *Journal of Research in Personality*, 13(4), 363-385. DOI: 10.1016/0092-6566(79)90001-1
- Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach*. New York, NY: Plenum Press.

- Furnham, A., Moutafi, J. and Chamorro-Premuzic, T. (2005). Personality and Intelligence: Gender, the Big Five, Self-Estimated and Psychometric Intelligence. *International Journal of Selection and Assessment*, 13, 11-24. doi:10.1111/j.0965-075X.2005.00296.x
- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology/Revue canadienne de psychologie*, 13(4), 266-272. doi:10.1037/h0083787
- Gardner, R. C. Tremblay, P. F. & Castillo, E. S. (1997). A study of the role of aptitude, attitude and motivation in second language acquisition: revisited. In E. S. Castillo (ed.), *Alay sa Wilka: Essays in honor of Fe T. Otones on her 67th birthday*, 101-110.
- Goodridge, P. (2016). *Russian Quiz*. Retrieved from <https://www.qzzr.com/c/quiz/272044/russian-quiz>
- Gu, P. Y. (2003). Vocabulary learning in a second language: Person, task, context and strategies. *TESL-EJ*, 7(2), 7-26.
- Huckin, T. & Coady, J. (1999). Incidental vocabulary acquisition: A Review, *Studies in Second Language Acquisition*, 21(2), 181-193.
- John, O. (2007). *Big Five Inventory*. Retrieved from <https://www.ocf.berkeley.edu/~johnlab/bfi.htm>
- Kayaoglu, M. N. (2013). Impact of extraversion and Introversion on Language-Learning Behaviors. *Social Behavior and Personality: An International Journal*, 41(5), 819-825 doi:10.2224/sbp.2013.41.5.819
- Krashen, S. (1989). We Acquire Vocabulary and Spelling by Reading: Additional Evidence for the Input Hypothesis. *The Modern Language Journal*, 73(4), 440-464. doi:10.2307/326879
- Laney, M. O. (2002). *The Introvert Advantage: How to Thrive in an extravert World*. New York: Workman Pub.
- Lieberman, M. D., & Rosenthal, R. (2001). Why introverts can't always tell who likes them: Multitasking and nonverbal decoding. *Journal of Personality and Social Psychology*, 80, 294-310.
- Macintyre, P. D., & Charos, C. (1996). Personality, Attitudes, and Affect as Predictors of Second Language Communication. *Journal of Language and Social Psychology*, 15(1), 3-26. doi:10.1177/0261927x960151001
- MacIntyre, P. D., & Gardner, R. C. (1994). The subtle effects of language anxiety on cognitive processing in the second language. *Language Learning*, 44, 283-305.
- Moody, R. (1988). Personality Preferences and Foreign Language Learning. *The Modern Language Journal*, 72(4), 389-401. doi:10.1111/j.1540-4781.1988.tb04198.x
- Razmjoo, S. A., & Shaban, M. (2008). On the relationship between introversion/extraversion and grammaticality judgment among the Iranian EFL learners. *The Iranian EFL Journal Quarterly*, 2, 128-138.
- Revelle, W., Amaral, P., & Turriff, S. (1976). Introversion/extraversion, time stress, and caffeine: effect on verbal performance. *Science*, 192 (4235), 149-150. doi:10.1126/science.1257762
- Robinson, D., Gabriel, N., & Katchan, O. (1994). Personality and second language learning. *Personality and Individual Differences*, 16, 143-57.
- Rossier, J. (1975). Extraversion-Introversion as a Significant Variable in the Learning of Oral English. *Dissertation Abstracts International*, 36, 7308A - 7309A.
- Sarani, A., Abousaeedi, A., & Ahmadian, M. (2011, Summer). Vocabulary Learning Strategies Used by extraverted and Introverted Iranian EFL Students. *Iranian Journal of Applied Language Studies*, 3(2), 187-207.
- Sanchez-Marin, M., Rejano-Infante, E., & Rodriguez-Troyano, Y. (2001). Personality and academic productivity in the university student. *Social Behavior and Personality*, 29, 299-305.
- Skehan, P. (1991). Individual Differences in Second Language Learning. *Studies in Second Language Acquisition*, 13(2), pp. 275-298. doi: 10.1017/S0272263100009979.
- van Daele, S., Housen, A., Pierrard, M., & Debruyne, L. (2006). The effect of extraversion on oral L2 proficiency. *Eurosla Yearbook*, 6, 213-36
- Wakamoto, N. (2000). Language learning strategy and personality variables: Focusing on extraversion and introversion. *IRAL - International Review of Applied Linguistics in Language Teaching*, 38(1). doi:10.1515/iral.2000.38.1.71
- Young, D. J. (1991). Creating a Low-Anxiety Classroom Environment: What Does Language Anxiety Research Suggest? *The Modern Language Journal*, 75(4), 426. doi:10.2307/329492
- Zeidner, M., & Matthews, G. (2000). Intelligence and personality. In R. Sternberg (Ed.), *Handbook of intelligence* (pp. 581-610). New York, NY, USA: Cambridge University Press.

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