Vision Fulfilled The Victory of the Pictorial Turn

Edited by András Benedek and Kristóf Nyíri

HUNGARIAN ACADEMY OF SCIENCES / BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS



Vision Fulfilled

Perspectives on Visual Learning

Edited by András Benedek and Kristóf Nyíri

Volume 1

Hungarian Academy of Sciences Budapest University of Technology and Economics

András Benedek / Kristóf Nyíri (eds.)

Vision Fulfilled

The Victory of the Pictorial Turn

Hungarian Academy of Sciences Budapest University of Technology and Economics András Benedek / Kristóf Nyíri (eds.) Vision Fulfilled: The Victory of the Pictorial Turn

Budapest:

Hungarian Academy of Sciences / Budapest University of Technology and Economics 2019

- © MTA–BME Open Content Development Research Group, 2019
- © The authors, 2019

The papers here collected have been accepted after a strict double-blind peer-review process.

Cover design: István Ocztos

ISBN 978-963-313-304-0





Contents

László Lovász
Opening Addressix
Kristóf Nyíri
Prefacexi
REINVENTING EDUCATION
András Benedek A New Paradigm in Education: The Priority of the Image3
Kristóf Nyíri A Hundred Years On Dewey's Democracy and Education Revisited17
Jean-Rémi Lapaire Mental Action as Visible Bodily Performance: An Educational Perspective
FROM IMAGE TO WORD: RHETORIC COMES TO AGE
Petra Aczél A New Rhetoric Again? Consolidating the Paradigm41
Eszter Deli Product, Process, Procedure A New Theoretical Framework for Visual Rhetoric in Disaster News Communication
Irma Puškarević The Culture of Typography Combining Rhetorical Resources with Typeface Design

Revisiting the Non-Conceptual	Michalle Gal
VISION, EMOTION, COGNITION Vicky Karaiskou Visuality and Emotional Governance in the Public Sphere	Visual Metaphors and Cognition:
Vicky Karaiskou Visuality and Emotional Governance in the Public Sphere	Revisiting the Non-Conceptual79
Visuality and Emotional Governance in the Public Sphere	VISION, EMOTION, COGNITION
Films that Think and Feel: Lessons from Forest of Bliss	Vicky Karaiskou Visuality and Emotional Governance in the Public Sphere93
Language of the Heart The Role of Pictures in the Hebrew Scriptures and in Rabbinic Reasoning	Pedro Branco Films that Think and Feel: Lessons from Forest of Bliss103
Analysis of Photographs of Kibbutz Youth Hikes in Israel	
A Way out of Semiotic Dualism Lessons from Sign/Spoken Bilingualism Research	Edna Barromi-Perlman Analysis of Photographs of Kibbutz Youth Hikes in Israel125
Péter Neuman The Surprising Usefulness of an Intuitive, Visual Approach to Quantum Field Theory	Szilárd Engelhardt A Way out of Semiotic Dualism Lessons from Sign/Spoken Bilingualism Research
The Surprising Usefulness of an Intuitive, Visual Approach to Quantum Field Theory	SCIENCE AND VISUALITY
How to Classify Images in Natural Sciences?	Péter Neuman The Surprising Usefulness of an Intuitive, Visual Approach to Quantum Field Theory145
	Catherine Allamel-Raffin – Jean-Luc Gangloff How to Classify Images in Natural Sciences? A Case Study in Nanoscience

Luc Pauwels
A Visual Framework for Producing and Assessing
Visual Representations
in Scientific Discovery and Communication167
Aminou oko Moktofi
Amirouche Moktefi Diagrammatic Researing: The End of Scontinion?
Diagrammatic Reasoning: The End of Scepticism?177
REVOLUTION ONLINE
James E. Katz
The Visual Turn in Mobile Communication:
Notes about Travel Experiences
Troub about 114 of Emperiores
Elke Diedrichsen
On the Semiotic Potential of Internet Memes201
Ágnes Veszelszki
Do Online Motivational Messages Tell a Visual Story?215
Past, Present, Future
Daniel L. Golden
Narrative Knowledge beyond the Pictorial Turn
Dhiling Stoellage
Philipp Stoellger As Turns Go By: New Challenges after the Iconic Turn239
As Turns Go by. New Chanenges after the Icomic Turn239
Kristóf Nyíri
Postscript
2 01
Notes on Contributors
Index

Visuality and Emotional Governance in the Public Sphere

1. Setting the Scene

When major national and social issues are at stake, influential public figures engage a combination of linguistic and visual strategies to promote their stances, with a view to communicate clear and concrete messages that will create alignments and consensus among the audience in public sphere. Stereotypical language and reference to familiar concepts that revoke shared memories, experiences and emotions, hold a predominant role among these strategies. Media multiply the effectiveness of shared memories. They selectively choose the most eloquent and dense, in content, arguments or moments of an event and involve image in communicating the concepts at stake.

The day before the Greek referendum on July 5, 2015, leftwing Greek magazine $X\omega vi$ (Honi) published Prime Minister Alexis Tsipras on its cover. Tsipras was depicted in a resistance gesture, identical to the Black Power Salute of John Carlos and Tommie Smith during the medal ceremony in 1968, at Mexico City. The word "OXI" ("No") – the epitome of what is perceived among Greeks as their iconic resistance and free-spirit symbol - in bold red letters underlined beyond doubt the meaning of his gesture: deny the bailout conditions. In September 2015, the TV footage of a baby's dead body from Syria, found on a Turkish coast, ignited fierce reactions and a crisis in the EU. Thirty years ago, in 1989, the Tiananmen Square Protests became a familiar event around the globe due to the iconic image of a man standing in front of a row of tanks. The visual power of the "Falling Man", the photograph of a man falling from the north tower of the World Trade Center on 9/11, turned it into an emblematic image. It is an automatic recall to the events of that day and became material for television shows, source of inspiration for articles,

a documentary (9/11: The Falling Man, 2006) and a novel (Don DeLillo, Falling Man, 2007).

2. Objective & Departure Point

This chapter has the objective to map, in broad lines, dispositions of memory-mediators (influential public figures) and memory consumers (the public). Point of departure is that language involves verbal and visual modes, and visuals contribute decisively in creating emotional governance and consensus because they are intertwined with emotions. In order to explore that point, the chapter focuses on neuroscience and psychology findings explaining the reasons why social consensus relies more on emotional governance than on reasoning processes among the audience involved. The chapter will engage art theories as well, because both the aforementioned public figures and the media base their impact on a line of selected – hence mediated – concepts and images presented in context in the exact same way arts do: Stage directors narrate only meaningful moments; theater stage directors and designers create interpretations of the texts and environments that underline and promote certain concepts; and visual artists depict only essential scenes of a story, counting on the beholders' knowledge and imagination to complete their narrative. They all aim to instigate perceptions among the audience and to activate maximum affective reaction.

3. Theoretical Frame: Visuals and Emotion

Implicit memory, the memory created unintentionally and without conscious recollection of the process or the event, and the "picture-superiority effect", based on the fact that the nature of memory is

¹ Daniel L. Schacter, C-Y Peter Chiu, and Kevin N. Ochsner, "Implicit Memory: A Selective Review", *Annual Reviews of Neuroscience* 16 (1993), pp. 159–182.

² Mary S. Weldon and Krystal D. Bellinger, "Collective Memory: Collaborative and Individual Processes in Remembering", *Journal of Experimental Psychology:*

visual and emotional,³ are key particles in the shaping of perceptions, dispositions and, ultimately, behaviours that rally social groups behind beliefs and ideals.⁴ For these reasons, they are the focal points in this analysis.

Language is a polysemantic system where visual and verbal modes are inextricably interrelated and co-depended.⁵ Foucault⁶, indeed, sustains that we are "governed and paralysed by language". Both words, "governed" and "paralysed", are mostly the outcome of implicit memory, which holds a key role in memory making, because it produces explicit knowledge.⁷ Implicit memory feels natural and "right", hence plays an important role in visual processing;⁸ is durable, and influential to behaviours;⁹ and proves to be much more efficient and faster to process complex knowledge structures than explicit, conscious memory.¹⁰

Implicit memory is directly correlated with visual stimuli and emotion, and the latter is intrinsic to visuals. There are two main consequences of that double correlation: Visuals create faster and

Learning, Memory, and Cognition, vol. 23, no. 5 (1997), pp. 1160–1175, the quoted passage on p. 1162.

³ Marvin M. Chun and Yuhong Jiang, "Contextual Cueing: Implicit Learning and Memory of Visual Context Guides Spatial Attention", *Cognitive Psychology* 36 (1998), pp. 28–71; see also Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain*, New York – London: Vintage, 1994; Robert B. Zajonc, "Feeling and Thinking: Preferences Need No Inferences", *American Psychology*, vol. 35, no. 2 (1980), pp. 151–175; Douglas F. Watt, "Consciousness and Emotion: Review of Jaak Panksepp's 'Affective Neuroscience'", *Journal of Consciousness Studies*, vol. 6, no. 6–7 (1999), pp. 191–200.

⁴ Patrick H. Hutton, "The Art of Memory Reconceived: From Rhetoric to Psychoanalysis", *Journal of the History of Ideas*, vol. 48, no. 3 (1987), pp. 371–392.

⁵ Wulf Kansteiner, "Finding Meaning in Memory: A Methodological Critique of Collective Memory Studies", *History and Theory* 41 (2002), pp. 179–197.

⁶ Michael Foucault, *The Order of Things: An Archaeology of the Human Sciences*, New York: Vintage, 1994, the quoted passage on p. 297.

⁷ Chun and Jiang, *op. cit*.

⁸ *Ibid*.

⁹ Ibid.

¹⁰ Pawel Lewicki, Thomas Hill, and Maria Czyzewska, "Nonconscious Acquisition of Information", *American Psychologist*, vol. 47, no. 6 (1992), pp. 796–801.

more efficient memory reactions than verbal modes. 11 and are able to evoke affective reactions more directly and faster than words, too.¹² In addition, according to Heath and Nairn "feelings and emotions have primacy over thoughts" ¹³. In his renowned work *The Emotional* Brain, LeDoux proved that emotions are "for the most part, generated unconsciously", meaning that humans are aware only of "the outcome of cognitive or emotional processing"¹⁵. We are able to detect only the visible part of the iceberg. The fact that emotional responses "can be created even when we have no awareness of the stimulus that causes them" and, mainly, "are more easily influenced when we are not aware that the influence is occurring"¹⁷ renders the "picture-superiority effect" fundamental to emotional governance in the public sphere. Pictures cement stereotypes and make integral part of propaganda. Especially when associated with collective values and goals, they trigger collective sentiments. ¹⁸ In addition, since affective reactions can occur with minor perceptual awareness, they are quicker and stronger than cognitive judgments, especially when they involve actual visual reminders. 19

There are three crucial manifestations of the visual stimuli that partake in the formulation of societal structures, with direct impact on emotional governance in the public sphere: visuality, repetition and visual narratives. Visuality is culturally and socially mediated

¹⁹ Paivio, op. cit.

¹¹ Allan Paivio, "Perceptual Comparisons through the Mind's Eye", *Memory &* Cognition, vol. 3, no. 6 (1975), pp. 635–647; see also Zajonc, op. cit.

¹³ Robert Heath and Agnes Nairn, "Measuring Affective Advertising – Implications of Low Attention Processing on Recall", Journal of Advertising Research, vol. 45, no. 2 (2005), pp. 269–281, the quoted passage on p. 269.

¹⁴ Joseph E. LeDoux, The Emotional Brain: The Mysterious Underpinnings of Emotional Life, New York: Simon and Schuster, 1996, the quoted passage on

¹⁵ *Ibid.*, the quoted passage on p. 21.

¹⁶ Heath and Nairn, op. cit., the quoted passage on p. 269.

¹⁷ LeDoux, op. cit., the quoted passage on p. 59.

¹⁸ Émile Durkheim, *The Elementary Forms of Religious Life* (1912), transl. by Karen E. Fields. New York: The Free Press. 1995.

and defines "how we see: how we are able, allowed, or made to see: and how we see this seeing or the unseen therein". Memory cannot exist but only within a cultural context²¹ because it depends on interpretation, and making sense is a matter of perception and choice of meaning. Repetition of the same visuals makes their concepts feel natural and expected, and builds a sense of safeness.²² Repetition establishes visuality because it happens in context. It holds an important role in the shifting of attention as well as in visual processing²³ because familiarity (i.e. implicit memory) shapes preferences²⁴ and that directly affects choices. Social stability or change are, indeed, based on the sameness of choices and on homogeneous arrays of reactions in the public sphere. In addition, this sameness acquires a pivotal role in the persistence of cultural patterns, norms and traditions and in constructing "us". Vice versa, cultural learnings shape automatic settings in our brains, related to predicted behaviours.²⁶ Last, but not least, visual narratives, the third manifestation of the visual stimuli, acquire profound significance in shaping perceptions of realities.²⁷ They are considered to be the most powerful mode of communication because "one role of visual context is to allow an incoming image to make contact with stored representations (mem-

_

²⁰ Hal Foster (ed.), *Vision and Visuality*, Seattle, WA: Bay Press, 1988, the quoted passage on p. ix.

Jerome Bruner, "The Narrative Construction of Reality", *Critical Inquiry*, vol. 18, no. 1 (1991), pp. 1–21.

²² Robert B. Zajonc, "Mere Exposure: A Gateway to the Subliminal", *Current Directions in Psychological Science*, vol. 10, no. 6 (2001), pp. 224–228.

²³ Árni Kristjansson and Gianluca Campana, "Where Perception Meets Memory: A Review of Repetition Priming in Visual Search Tasks", *Attention, Perception & Psychophysics*, vol. 72, no. 1 (2010), pp. 5–18; see also Lisa Maxfield, "Attention and Semantic Priming: A Review of Prime Task Effects", *Consciousness and Cognition* 6 (1997), pp. 204–218.

²⁴ Patrick H. Hutton, "The Art of Memory Reconceived: From Rhetoric to Psychoanalysis", *Journal of the History of Ideas*, vol. 48, no. 3 (1987), pp. 371–392. ²⁵ Zajonc, "Mere Exposure".

²⁶ Joshua Greene, *Moral Tribes: Emotion, Reason, and the Gap between Us and Them,* New York: The Penguin Press, 2013.

²⁷ Kansteiner, op. cit.

ory) of past interactions with identical or similar instances"²⁸. For that reason, narrative patterns are "inseparable from social standards"²⁹.

Repetition of visuals and visual narratives secure the effectiveness of "dominant narrators" due to their direct relation to the "seeing-is-believing" effect. As mentioned above, the repetition of a message turns it into a familiar concept and a natural, unquestionable *reality*. That *reality* tends to dominate mindsets and, eventually, influences behaviours. Research underscores that a member of a group who either dominates a conversation or is perceived as an expert – the dominant narrator – introduces or manipulates memories that cause "social contagion" under the condition that this social group already shares common memories, experiences, values and emotions. This process that promotes a certain version of the shared knowledge and memory as natural is pivotally important in shaping social consensus and cohesion, and in achieving emotional governance, precisely because social groups reflect the dominant narrators' perception of the issues at stake after the exposure to their rhetoric.

4. Theoretical Frame: Visuality in the Arts

Erwin Panofsky, the German art historian and author of the influential *Studies in Iconology*, proves to be very compatible with current

²⁸ Chun and Jiang, *op. cit.*, the quoted passage on p. 62.

²⁹ Kansteiner, op. cit., quoted passage on p. 185.

³⁰ Alexandru Cuc, Yasuhiro Ozuru, David Manier, and William Hirst, "On the Formation of Collective Memories: The role of a Dominant Narrator", *Memory & Cognition*, vol. 34, no. 4 (2006), pp. 752–762.

³¹ Christopher J. Pole (ed.), *Seeing Is Believing? Approaches to Visual Research*, London: Elsevier, 2004; see also Leslie R. M. Hausmann, John M. Levine, and E. Tory Higgins, "Communication and Group Perception: Extending the 'Saying is Believing' Effect", *Group Process Intergroup Relations*, vol. 11, no. 4 (2008), pp. 530–554.

³² Adam D. Brown, Alin Coman, and William Hirst, "The Role of Narratorship and Expertise in Social Remembering", *Social Psychology*, vol. 40, no. 3 (2009), pp. 119–129, the quoted passage on p. 119; see also Cuc et al., *op. cit.*, the quoted passage on p. 753.

neuroscience theories.³³ Panofsky defined three levels of "reading" an image: the subject-matter level, where the viewer recognizes and names the visual components of a picture; the iconography level, where cultural knowledge and memory intervenes and connects the image to a (familiar) story; and the iconology "reading", where the viewer attributes cultural value to the image and comprehends its importance based on the intrinsic artistic values as well as on the historical, economic and social context.

Although Panofsky focused mostly on the Renaissance, his studies on the mechanisms of making-sense, and on the role of stereotypical visual components and symbols in the pictures had a profound impact in the arts field. However, within the framework of this chapter, his theory of the three levels of image-reading directly associates with the aforementioned issues of memory-workings and visuality. Panofsky's point of departure is that there is always the purpose of meaning behind every depiction, hence the need to communicate a message. This idea resonates equally the functions of all arts, especially those involving visuality, as well as strategies applied by "dominant narrators", whether they are influential public figures or the media: Stereotypical verbal and visual language and selectively promoted narratives or chosen references to familiar concepts aim to the maximal legibility by the public. They all count on the premise that their public is trained to decode visual depictions and is capable to apply that knowledge. In every case, the culturally informed public comprehend the meaning of familiar visuals; perform automatic connotations based on their implicit memory; and emotionally react to symbols.

In painting and sculpture, at least until the era of modernism, artists counted on the pre-existing cultural knowledge of the viewers to recognize the symbols, the protagonists and the narrated events. They counted as well on their imagination to fill-in the missing parts of their narrative.³⁴ In the same line of thought as Panofsky, art his-

³³ Erwin Panofsky, *Studies in Iconology*, New York: Oxford University Press, 1939.

³⁴ *Ibid*.

torians, such as Ernst Gombrich³⁵ and W. J. T. Mitchell³⁶, elaborate on the beholders' ability to automatically search for meaning within the context of their culture in order to interpret. They extensively discuss, as well, the attribute of these arts to selectively narrate, to choose eloquent, dense and familiar visual components and, thus, extinguish the redundant "noise" that might render unclear the message. 37 In the exact same way, theater stage designers create environments that imply or induce certain emotional states and reactions, and insinuate the intentions of the text, according to the director's interpretation. Attention on selected moments of the action by the use of lights, sounds, special effects, and eloquent gestures of the actors, or the tones of their voices, is expected. Photography and cinema, during their first period of existence, used composition techniques applied mainly in painting and on the theater stage in order to create a minimum level of familiarity with their audience, and establish communication channels. Photographers capture the most eloquent facial or bodily expressions, or apply techniques of visual synthesis, such as points of view or proportions, to secure the desired interpretation of their image, counting, indeed, on the preexisting cultural memory and social experience of their viewers. Cinema stage directors stage meaningful moments of a story, and utilize stereotypes and symbols to shift attention and suggest preferences. At the same time, the two new species, when initially introduced to the public, associated their identity with the added value and glare of the academic arts and theater, with a view to foster their own prestige and authority.

_

³⁵ Ernst H. Gombrich, *The Image and the Eye: Further Studies in the Psychology of Pictorial Representation*, Oxford: Phaidon, 1982; see also Ernst H. Gombrich, *Art and Illusion: A Study in the Psychology of Pictorial Representation*, London: Phaidon Press, 1960.

³⁶ W. J. T. Mitchell, *Iconology: Image, Text, Ideology*, Chicago and London: The University of Chicago Press, 1986; see also W. J. T. Mitchell, *Picture Theory: Essays on Verbal and Visual Representation*, Chicago and London: The University of Chicago Press, 1994.

³⁷ Gombrich, *The Image and the Eye*.

In the public sphere, the actual three-dimensional space is a constant training arena that teaches its inhabitants through embodiment: Form and content are potent tools and drastically intervene with power and governance because they render the inhabitants' experience – hence their memories and emotions – tangible. How they move through urban structures, how they affectively react to architectural forms and volumes, what they expect to see, and how, by association, they make sense out of the surrounding symbols and aesthetics or the identities of buildings, becomes an on-going practice. It daily adds to and interacts with their existing knowledge, experience and behaviours in their role as individuals and group members. A double correlation exists here: Whether individuals or group members, the inhabitants are viewers and protagonists at the same time as well. In their role as protagonists, they are rather active agents: they position their own body in the three-dimensional public space; they react to correlations, symbols and identities; they affectively respond to aesthetics; and develop perceptions. In short, they react to their environment and make choices. In their role as viewers, they are recipients and consumers: urban structures, such as public and private buildings, roads, and squares with their aesthetics, volume and arrangement in space train their visuality, while that visuality mingles with their existing cultural patterns and defines their personality as protagonists. This constant and multilayer interaction among past knowledge and new stimuli, actual experience and trained mental dispositions, perceptions and tangible certainties co-creates awareness and identities, and verifies the seeing-is-believing effect.

5. Emotional Governance in the Public Sphere

The four examples mentioned in the beginning of this chapter – the *Honi* magazine cover in July 2015, the dead baby and the Tiananmen Square resistance footages, and the "Falling Man" photograph – make only a tiny example of the role visuality holds in everyday emotional governance. In the same way posters and advertisements apply a variety of conventions and promote only parts of a narrative

with the explicit purpose to catch the viewers' attention and persuade them, influential public figures exploit the results of implicit memory and the "picture-superiority effect" with a view to achieve consensus with the desired audience. Media, on their turn, base their influence on the polysemy of the images, ³⁸ their inevitably "conventional and contaminated by language" nature, and the emotions they convey. Public, the memory-consumers, either as individuals and group members, or as viewers and protagonists, react and participate to the – selected and mediated – narrated *realities* regardless of whether these *realities* are actual events, major national and social issues, or narratives of an artwork, a movie, a theater play, or a photograph.

_

³⁸ Mitchell, *Picture Theory*.

³⁹ Mitchell, *Iconology*, the quoted passage on p. 42.