

Agriculture and Visuality

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That ripe, firm, bright red tomato is speaking to you. It says, “Buy me!” And you do, because not only does the tomato look appealing, but the decision to make such a purchase hardly warrants a second of your time. The action involved in eyeing then buying produce is practically rote for many in modern-day industrialized nations. Regardless, however, of whether we take the time to think about it or not, we are actually culturally affected by those tomatoes. That is, the practices and processes of produce as they relate to food-getting have been intrinsic to the development of human civilization, and it is our experiences in those civilizations that shape us as individuals. So it seems to logically follow that if we investigate agriculture from its origins, we will be able to parse out the direct effects of agriculture on human culture and perception. For the purposes of this particular investigation, visual culture specifically will be the focal point.

Visual culture may not be the first realm one thinks of when the topic of agriculture is presented. Certainly when I was in conversation with Professor Tim Bober, local archaeologist and anthropology instructor at Kendall College of Art and Design, this was unfamiliar territory to him. However, in covering the origins of agriculture with me, he mentioned some important aspects of the topic that are entirely relevant to the understanding of visual culture. Of no surprise, he agrees with the anthropological consensus that the advancement of agriculture ushered in a revolution in human development. In fact, it is considered by most to be the greatest transformation in the history of human civilization. It should not be a stretch to conclude that a practice so impactful on so many elements of human life would also have an impact on visual culture.

While the practical significance of agriculture is obvious, its origins are not; there are several different theories as to why agriculture was first developed. It is not the concern of my research to determine which is the most accurate. The fact that agricultural practices

developed at all, that such systems and routines exist, is of importance here because the consequences of those practices is indisputable. And it is those consequences that directly affect visual culture. However, it is important to note that many archaeologists believe the length and scope of these affects can be traced back to the Middle East as early as ten thousand years ago. Subsequently, agricultural practices emerged independently in various regions of the world. This serves to highlight how the global agricultural shift was gradual, yet has ties to the fundamentals of human culture because of its ancient history. Humans did exist and cultivate cultural practices, some visual in nature, before the development of agriculture. However, the intensification of their symbolic significance – the way humans create, learn from, and alter their cultural symbolism on a grand scale – would not have happened had it not been for the mechanisms of social change set in motion by agricultural practices. Indeed, it probably would never have been possible before.

Perhaps the greatest reason that cultural practices of primitive humans could not evolve in more intricate ways was due to the similarity and repetition of their mostly practical, subsistence lifestyles. Because their daily lives were centered on the often difficult and always time-consuming methods of obtaining food, there was little time for other cultural pursuits. If food could be predictably collected in large quantities, so as to create a surplus, a diversity of activities could be undertaken that would affect the evolution of culture. As the techniques to cultivate crops improved, those surpluses were created, thus allowing developments in other areas of life. Therefore, agricultural efficiency allowed for the time that helped visual culture to flourish.

The next step in this logical progression is that if agriculture created a surplus of crops, and a surplus of crops created a surplus of time, then this also heightened *awareness* of time. According to George Church, professor of genetics and Harvard University,

“...the first clocks were hardwired into living things of all stripes, and then human beings started reinventing them and soft-wired them into our culture. Initially this was in service to the gods of agriculture, but the study and engineering of time spread aggressively into many of our technologies today.”¹ What this indicates is that the concept of time is biologically instinctual, but that instinct manifests itself into human culture. And as humans construct their cultures, then they construct their cultural sense of time.

Also related to the concept of time is the idea of causality, our sense of which can also be heightened culturally. Church explains, “the ability to tell long narratives in the form of epic poems and songs, and to draw cave paintings (as far back as 32,000 BCE), went hand in hand with a growing awareness of causality and the advantages that such causality brings.”² He combines that sense of causality with that sense of cycles of time. Together, those senses fueled the ability of early people to visualize how much food could and needed to be stored throughout the seasons. This led to an increasing importance and reliance on time, which permeated, affected, and created other aspects of culture. In terms of the way human senses help to construct and affect culture and the surrounding environment, perceptions of time prove useful.

As awareness and ideas about time spread through agricultural communities, new social and cultural associations were created. It is appropriate that Church refers to the “gods” of agriculture, because ideas concerning religion affect culture as well. The cyclical way that crops are grown and cultivated – “offered up” by a land governed by mysterious rules and unknown entities – feeds into the evolution of religions. According to Edward Banning, professor of anthropology at the University of Toronto, “It would not be too

¹ George Church, *Regenesis: How Synthetic Biology Will Reinvent Nature and Ourselves*, (New York: Basic Books, 2012), 153-154.

² Ibid.

surprising for Near Eastern ideology of fertility to go back to the early days of agriculture.”³ The mysteries of life, birth, and death, which many people turn to religion to provide answers for, are paralleled and foregrounded in microcosmic proportion by agriculture.

These questions along with the evolving traditions of religion and the developing techniques of agriculture become conflated; associating cycles of time and cycles of life with the habits necessitated by agricultural practices aided in heightening and intensifying the effects of religion in early cultures. Agriculture dictates activity in a predictable way, the repetition of which adds to the building blocks of culture. Specifically addressing visual culture, one does not have to look far to see just how significant religious imagery has been throughout human history. It is ultimately possible to conclude that even though agriculture was not the initial impetus for humanity’s religious practices, communities that developed agricultural techniques were afforded the kind of cultural systems that allowed for religious beliefs to become established, standardized and regulated. Established and standardized religion is a byproduct of fixed communities, which are themselves made possible by the ability predictably cultivate and obtain a surplus of food. So when agriculture is developed, cities are developed, and when cities are developed, religion and its hierarchies are developed. It is the imagery of these regulated religions that have been so influential in history, a reach unachievable without the practice of agriculture to guarantee the establishment of cities.

The growth of cities and civilizations is directly linked to efficient and predictable food-gathering, as mentioned above. For many communities, part of their agricultural

³ E.B. Banning, "The Neolithic Period: Triumphs of Architecture, Agriculture, and Art," *Near Eastern Archaeology*, 61 no. 4 (1998): 226.

efficiency came from record-keeping and the ability to track and allot quantities of agricultural goods. James Elkins describes the origins of writing as arising from this kind of record-keeping in his article, "Art History and Images That Are Not Art." He cites archaeologist Denise Schmandt-Besserat when he states, "...counting was once done with the help of small fired-clay sculptures in various geometric shapes, representing quantities of different agricultural goods."⁴ The sculptures themselves could represent numbers, but often they were pressed into clay tablets as marking implements. This is just one kind of example from the ancient Near East, but archaeologists agree that methods of calculation developed in various agricultural regions around the world. Mathematics, it seems, not only preceded written language for these cultures, but actually *prompted* the evolution of written language. In other words, if early people did not have a need for recording quantities, they would not have developed writing. It is through increasing reliance on agriculture directly that such record-keeping began, and so the visual systems of written languages are historically tied to agriculture as a practice.

If methods of calculation were needed for keeping track of agricultural goods, then the implication at this point is that the quantities of those goods were increasing. Surplus goods by definition are in excess of what needs to be utilized immediately. If entire communities and cities rely on the agricultural supply, then they will also rely on a system for distributing that supply. Thus commences the politics of distribution. According to Professor Bober, for ancient people, food was always a form of wealth. Whosoever controlled the supply, controlled the wealth. Individuals not only desire wealth, but in every culture, individuals also display their wealth. The demonstration of wealth and status is highly visual, so early on, the procurement of agricultural goods served as a visual way

⁴James Elkins, "Art History and Images That Are Not Art," *The Art Bulletin*, 77 no. 4 (1995): 564.

for citizens to exhibit their place in society. Subsequently, since wealth indicated societal power as associated with status, individuals of great wealth influenced societies' practices and behaviors based on the way they were able to visually inform their community of their powerful position.

The intensification of social politics is a hallmark of civilization. Perhaps the most important result that agriculture allows for is the formation of cities and the growth of civilizations. In the evolution of civilizations, no permanent city or city-state of significant size would have prospered without a substantial agricultural system, usually cultivated with their own resources, but sometimes by trade with another agricultural community. According to the anthropology textbook *Human Evolution and Culture*, "...agriculture itself gives populations the potential to grow and the development of a state only furthers that potential."⁵ The formation of cities is so important because city systems affect every facet of culture, and it is agriculture that affords this potential in the first place. If humans are sensory beings who affect their environment through the perceptions obtained using those senses, cities as constructed environments present new opportunities for modifying perceptions. As environmental perceptions change, this results in a discernable change in behavior, which manifests back into the environment.

One way that behavior changed in early cities was in altered social relationships. Banning cites anthropologist Peter J. Wilson when he explains,

[Domesticated people] fundamentally altered the social, and probably even the psychological, circumstances of the people who adopted village life...this process created a new social relationship, that of being a neighbor, as well as increased opportunities for the accumulation, hiding, and display of wealth,

⁵ Ember, Carol R. Ember, Melvin Ember, and Peter N. Peregrine, *Human Evolution and Culture: Sixth Edition*, (Upper Saddle River, NJ: Pearson Education, Inc, 2009), 207.

and consequently for privacy, secrecy, envy, suspicion, and growing differences in status between neighbors. These developments...constitute a fundamental break with the hunter-gatherer ethics of sharing, openness and egalitarianism.⁶

When early people changed their environment, they clearly changed their behavior. To occupy a more permanent residence can have an effect on what individuals feel that they own. Individual wealth starts to take on a greater psychological meaning, but this is then translated into the “real world” in which wealth actually confers power and influence, becoming a status symbol socially agreed upon and configuring society. Hunter-gatherers lacked this intensification of social psychology as they did not establish permanent residences; it is only with agricultural practices that such transformation was allowed to occur.

Social psychology is also affected by the architecture and infrastructure of settlements. The concept of “neighbors” suggests a certain density and proximity of citizens’ living spaces, affecting social relationships as demonstrated above. Infrastructure like irrigation systems are another example. Irrigation techniques in service to local agriculture are a complex undertaking. In order to make such systems as effective and organized as possible, group hierarchies often come into play. As stated in *Human Evolution and Culture*, “It has been suggested that the labor and management needed for the upkeep of an irrigation system led to the formation of a political elite, the overseers of the system, who eventually became the governors of the society.”⁷ Techniques used to increase agricultural efficiency due to increasing populations led to the procedures

⁶ E.B. Banning, "The Neolithic Period," 229.

⁷ Ember, Carol R. Ember, Melvin Ember, and Peter N. Peregrine, *Human Evolution and Culture: Sixth Edition*, 205.

employed to coordinate those populations around said techniques. Everyone in the community had a vested interest in the success of their local agricultural practices. Part of ensuring that success was in refraining from complicating the process with an overabundance of regulators, and allowing a limited number of individuals to make decisions that would affect the rest of the community. Early agricultural communities were undoubtedly the experimental sites of intensified practices in the politics of power and the reframing of societal perceptions and behavior.

A later function of these communities, as they grew into city-states, was security. Security as a practical concern goes hand-in-hand with wealth, resources, and territory. In the earliest sites of agriculture, there is little evidence of permanent fortifications in the city planning. In fact, Banning points out that in areas like Neolithic Jericho, storage facilities were not only unsecured by fortification, but were easily accessible in the schematics of the community.⁸ This suggests that perhaps the “wealth” of the time, largely consisting of agricultural goods, was plentiful for the region. Going further, this may also suggest that the residents of these early agricultural communities had not yet developed a strong sense of territory yet, or at least the sense of wealth that is associated with territory. However, as generations of populations remained rooted in certain cities, new cultural behaviors resulted that would augment that sense of territory and so the need for security.

Archaeologists and anthropologists recognize the permanence of populations as affecting cultural ideas about land-ownership and territory. The distinction among groups is described in terms of food-getting. For hunter-gatherers, the land itself does not have intrinsic value; a parcel of land has worth when food resources are present. If no food resources are present, they move on, thus establishing no permanent residence. They have

⁸ E.B. Banning, "The Neolithic Period," 219.

no use for land-ownership.⁹ Horticulturalists take up semi-permanent residence, but, again, they only cultivate the land until it is no longer resourceful and they, too, migrate. During their stay, kin groups may have allocated plots for their personal use, but as the land is not valuable once it is exhausted, they also have no use for land-ownership.¹⁰ The land itself takes on greater value when it becomes a permanent resource for permanent residents. For early people making the transition to permanent residency, agricultural techniques were a necessity. Culturally, individuals begin to feel that they own the land, that they have rights to it, if they are the ones working to sustain its resources.¹¹ Thus agricultural practices play a great part in constructing the cultural concept of territory.

Territory is intriguing as a visual concept because individuals often cannot see the entirety of “their” territory, or even the specific delineations of boundary. This applies on both a micro and macro level: individual plots, neighborhoods, cities, states, and countries. Though it may not be possible to physically see the whole of a territory, humans still have the ability to visualize mentally what territorial boundaries are. And this reflects back in other cultural behaviors, not just in the sense of what is owned, but of what requires protection. Additionally, these boundaries inform where people claim to be “from,” the cultures they identify with, and the manners in which this is displayed. For instance, flags are used to visually represent a territory; it is intended that the viewer reference a mental picture of the territory when they encounter certain design elements in a flag. None of this would have evolved if humans had not discovered and developed an efficient method of food-getting that would allow for permanent residence of large populations.

⁹ Ember, Carol R. Ember, Melvin Ember, and Peter N. Peregrine, *Human Evolution and Culture: Sixth Edition*, 271.

¹⁰ *Ibid*, 272.

¹¹ *Ibid*, 273.

Once permanent residence was established and early civilizations flourished, specialization occurred. As mentioned previously, if food could be predictably collected in large quantities, so as to create a surplus, a diversity of activities could be undertaken that would affect the evolution of culture. As the techniques to cultivate crops improved, those surpluses were created, thus allowing developments in other areas of life. Citizens began to forgo any involvement in cultivating food at all and focused on other crafts and activities.

Because of the increasing separation of many citizens from the tasks involved in agriculture, the political elite had an easier time establishing themselves. According to David Wengrow, professor of anthropology at University College London, the political elite used specialized craftsmen to their advantage to gain power. He explains, "...polities establish and maintain themselves by altering the sensuous environment of human experience and interaction within their sphere of control."¹² Those specialized craftsmen and artisans were part of what he terms "aesthetic labor." If the political elite aimed to alter the sensuous environment, it was best to do so by regulating aesthetic labor.

This regulation included appropriating the visual significance of craft and ceremony to solidify their powerful status. They even used agriculture directly as a visual symbol. Wengrow states, "The ordered cycle of royal ceremony and the temporal cycle of change in the non-human world would...have occupied the same space of social memory."¹³ As people were separated from agricultural production, their connection to it consisted of ceremony and symbolism. This was then associated with powerful individuals like religious leaders who prayed to the gods of agriculture or the overseers of the process who symbolically gave to or provided for the people.

¹² David Wengrow, "The Evolution of Simplicity: Aesthetic Labour and Social Change in the Neolithic Near East," *World Archaeology*, 33 no. 2 (2001): 169.

¹³ *Ibid.*

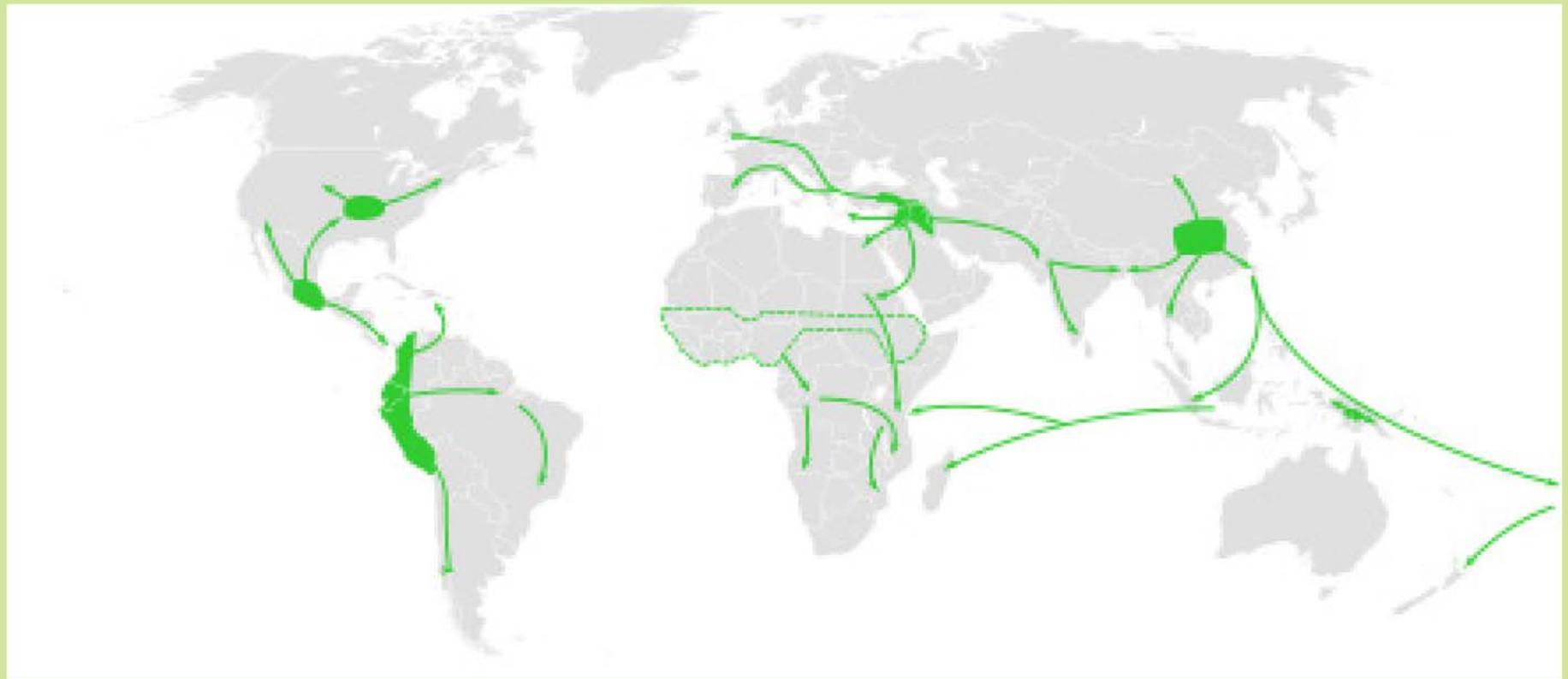
Since then, the rise of cities and civilizations never waned. Agricultural techniques became increasingly sophisticated as the percentage of the population directly involved in the process decreased. Many people in industrialized nations today have little knowledge of agricultural practices, and while this statement is not intended as a normative valuation, it demonstrates the limited awareness of how agriculture is connected to our everyday visual culture. But by investigating the origins of agriculture and the direct impact it had on cultural concepts such as time, territory and neighborliness as well as visual practices such as writing and display of wealth and status, we can see how our perceptions have been formed. Without ancient peoples' development of agricultural practices and methods, we would not know the kind of culture we do today. Permanent residency, density of population, and professional specialization would not be possible. So regardless of one's level of expertise in the intricacies of agriculture, it is not hard to appreciate how our environment has been affected and so our perception has been affected by the evolution of agricultural practices.

Bibliography

- Banning, E.B. "The Neolithic Period: Triumphs of Architecture, Agriculture, and Art." *Near Eastern Archaeology*. 61. no. 4 (1998): 188-237.
- Bellwood, Peter. "Early Agriculturalist Population Diasporas? Farming, Languages, and Genes." *Annual Review of Anthropology*. 30. (2001): 181-207.
- Church, George. *Regenesis: How Synthetic Biology Will Reinvent Nature and Ourselves*. New York: Basic Books, 2012.
- Elkins, James. "Art History and Images That Are Not Art." *The Art Bulletin*. 77. no. 4 (1995): 553-571.
- Ember, Carol R., Melvin Ember, and Peter N. Peregrine. *Human Evolution and Culture: Sixth Edition*. Upper Saddle River, NJ: Pearson Education, Inc, 2009.
- Flannery, Kent V. "The Origins of Agriculture." *Annual Review of Anthropology*. 2. (1973): 271-310.
- Wengrow, David. "The Evolution of Simplicity: Aesthetic Labour and Social Change in the Neolithic Near East." *World Archaeology*. 33. no. 2 (2001): 168-188.

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