# ANCIENT ROMAN BATHS

Student's Name

Course

Date

#### Introduction

Bathing was an important daily activity in the ancient culture and society of Rome being practiced across all social classes. Many cultures view bathing as an activity to be done in privacy but it was a public activity in Rome<sup>1</sup>. Bathing allowed people to mingle, relax, and gossip regardless of their positions in the social strata. Romans would complete their daily duties in the middle of the day and proceed to these baths. The ritual seemed like a symbol of Rome and proved that the Romans were very clean and thus better than people from other countries. The following paper discusses the creation, evolution, uniqueness of the ancient Roman baths as well as their influence on the Roman art.

#### Creation of Baths

The earliest descriptions of western practices of bathing emanate from Greece as Greeks began the bathing regimes that set the pace for modern spa processes. The Aegean people used washbasins, bathtubs, and footbaths for the cleanliness of individuals. The earliest findings that relate to these bathing areas are the baths in the palace complex located in Knossos, Crete, and the expensive alabaster bathtubs from Akrotiri, Santorini<sup>2</sup>. Greek mythology suggested that gods cure illnesses, blessed certain tidal pools, or natural springs<sup>3</sup>. In light of this, the Greeks built bathing facilities around the sacred pools for persons that sought to heal. Supplicants left various offerings at these sites for the God to heal those in need and give the cure to various diseases<sup>4</sup>. The Spartans proceeded to establish a primitive vapor bath. Bathing chambers were cut into a

<sup>&</sup>lt;sup>1</sup> Cath Andrews. "Ancient Roman Baths: Ancient Roman Architecture In Action," Explore Italian Culture, last modified 2008, accessed February 27, 2017, http://www.explore-italian-culture.com/ancient-roman-baths.html. <sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Ernest Archibald, "Bathing, Beauty and Christianity in the Middle Ages," *Insights* 5, (2012): 1-16.

<sup>&</sup>lt;sup>4</sup> Seneca, "The Roman Empire: In The First Century. The Roman Empire. Life In Roman Times. Baths | PBS," Pbs.Org, last modified 2006, accessed February 27, 2017, http://www.pbs.org/empires/romans/empire/baths.html.

hillside from where the hot springs emanated at the Serangeum that was an early balneum of Greece<sup>5</sup>.

A series of niches were cut into the rocks above the created chamber to hold clothing that belonged to the person bathing. One of the bathing rooms consisted of a decorative mosaic floor that depicted a driver and a chariot being pulled by four horses, a woman with two dogs following her and a dolphin underneath<sup>6</sup>. Therefore, early Greeks used natural features although they expanded and added their own amenities like shelves and decorations<sup>7</sup>. The Late Greek civilization saw bathhouses be built in connection with athletic fields.

Romans emulated or rather copied the bathing practices of the Greeks but surpassed the Greeks in regards to the sizes of their baths. Similar to the Greeks, the Romans had their baths as the focal center for recreational and social activities. The idea to build a public bath expanded with the development of the Roman Empire stretching to all parts of the Mediterranean, Europe, and North Africa<sup>8</sup>. Romans had sufficient water for domestic use, agricultural and industrial practices, as well as for their pursuits in leisure courtesy of the construction of aqueducts. The aqueducts provided water that was heated for use in the baths.

The Roman baths showed variations regarding simplicity to very elaborate and complex structures, size, decoration, and arrangement. A bather induced sweating by slowly exposing themselves to increasing temperatures in the case of a Roman bath<sup>9</sup>. The Roman bathhouses comprised of some rooms that got progressively hotter in a bid to accommodate the ritual. Most

<sup>&</sup>lt;sup>5</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Garrett G. Fagan, "The Genesis of the Roman Public Bath: Recent Approaches and Future Directions," *American Journal of Archaeology, (*2001): 403-426.

<sup>&</sup>lt;sup>9</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman Baths/.

of them had apodyterium or rather a room where a person (the bather) would store his clothes<sup>10</sup>. A frigidarium or rather a cold room progressed near the bather and contained a tank full of cold water, a tepidarium or warm room, and lastly the caldarium that was a hot room <sup>11</sup>. A brazier that sat underneath the hollow floor and had cold basins of water that the bather used for cooling heated the caldarium. A bather returned to a cooler tepidarium after a series of sweat and baths of immersion<sup>12</sup>. The bather received a massage in the cool tepidarium. Other baths would have a laconium where the bather completed the bathing process by resting and sweating<sup>13</sup>.

According to Fagan, famous and wealthy Romans were courteous of an idea to have a private gym for them to be built in the baths<sup>14</sup>. However, emperors spotted the idea well suited for public venues where the less fortunate in the society would praise the rulers for the facilities. The first bathhouses began in the 1st century A. D.<sup>15</sup> However, a few women went to the bathhouses to meet other women and gossip instead of exercise like others who were professional athletes. The above theory insists that the baths grew in both size and popularity as the emperors sought to outdo their predecessors by giving the public better, bigger and more bathhouses<sup>16</sup>. The competition among emperors saw the bathhouses spread all over Rome and the Romans soon adopted the bath houses and bathing practice as a culture that they would hold onto dearly for an extended period.

<sup>10</sup>Ibid.

<sup>&</sup>lt;sup>11</sup> Ibid.

<sup>&</sup>lt;sup>12</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/.

<sup>&</sup>lt;sup>13</sup> Cath Andrews, "Ancient Roman Baths: Ancient Roman Architecture In Action," Explore Italian Culture, last modified 2008, accessed February 27, 2017, http://www.explore-italian-culture.com/ancient-roman-baths.html.

<sup>&</sup>lt;sup>14</sup> Garrett G. Fagan, "The Genesis of the Roman Public Bath: Recent Approaches and Future Directions," *American Journal of Archaeology*, (2001): 403-426.

<sup>&</sup>lt;sup>15</sup> Ibid.

<sup>&</sup>lt;sup>16</sup> Ibid.

### Evolution of the Roman Baths with Time

The typical elements of the ancient Roman baths were an apodyterium, palaestrae, notation, laconica and sudatoria, calidarium, tepidarium, frigidarium, and massage rooms. The apodyterium was the changing room, palaestrae was the exercise room, a notation was an open swimming pool, laconica, and sudatoria were the superheated dry and wet sweating rooms. The calidarium was the hot room that was heated with a hot-water pool and a separate basin on which it stood<sup>17</sup>. Tepidarium entailed the warm room that was indirectly heated with a tepid pool, and the frigidarium was the cool room that was not heated and had a cold-water basin that formed the heart of the bathing complex<sup>18</sup>. All the above were the key components of the original Roman baths. However, the baths began to change or rather evolve with time. The baths began to include additional components and facilities that comprised cold-water plunge baths, private baths, toilets, libraries, fountains, halls, and outdoor gardens<sup>19</sup>.

## **Heating Systems**

The initial baths did not have a high degree of planning and usually comprised of an assemblage of diverse structures. However, the baths slowly took a beautiful symmetry by the 1st century as well as incorporating harmonious structures. The baths were often located in parks and gardens. The ancient baths were heated by braziers but acquired more sophisticated heating systems from the 1st century BCE<sup>20</sup>. Such heating systems entailed the use of under-floor heating that was called the hypocaust. The hypocaust was fuelled by burning wood in prafurniae

<sup>&</sup>lt;sup>17</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/.

<sup>&</sup>lt;sup>18</sup> Ernest Archibald, Bathing, Beauty and Christianity in the Middle Ages, (Insights, 2012), 1-16.

<sup>&</sup>lt;sup>19</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/.

<sup>&</sup>lt;sup>20</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/.

or furnaces. The heating was hardly a new idea as the Greeks had already employed a similar system. However, the Romans improved the concept to a greater scale by improving its efficiency to get the maximum of the same<sup>21</sup>. Huge furnaces from the fires conveyed warm air under the floors that were raised and stood on narrow pillars that were called pilae. The pillars were made of solid stone, polygonal or circular bricks and hollow cylinders. The floors had a paving of at least 60 cm square tiles that were decorsted in mosaics<sup>22</sup>.

### An Example of the Roman Floor



The Romans developed the idea of having heating systems via the walls, and as such, the walls gave the heating courtesy of hollow rectangular tube insertions carrying hot air from the furnaces. The walls also had bosses or rather individual bricks called the tegula mammata, the

<sup>21</sup> Ernest Archibald, *Bathing, Beauty and Christianity in the Middle Ages,* (Insights, 2012), 1-16.

<sup>&</sup>lt;sup>22</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman Baths/.

corners of a given side and served to trap hot air and increase insulation against loss of heat.

Usage of glass windows from the 1st century CE further allowed better regulation of the temperatures and addition of the heat from the sun to the room<sup>23</sup>.

Baths needed vast amounts of water, and the Romans built aqueducts and regulated reservoirs in the bath complexes for the provision of water. For instance, the reservoir of the Diocletian Bath in Rome had a capacity of 20,000 m<sup>3</sup> <sup>24</sup>. Large lead boilers that were fitted over furnaces heated the water. More water was added to the heated pools using lead pipes and a bronze half-cylinder that was connected to the boilers. Circulation of water into the pool was by convection.

It is thus well to state that the evolution of the Roman baths took place regarding size, complexity and decoration or sophistication. Examples of these baths are the Leptis Magna that was finished in c. 127 CE. It had well-preserved domes, baths of Diocletian completed in c. 305 CE in Rome and the large complexes of Ephesus <sup>25</sup>.

### The Bath of Caracalla

The Baths of Caracalla located in the southern parts of Rome remain the best-preserved baths of the Romans being second in size to the Trajan's Baths. The baths were the most luxurious baths the Romans ever built and were completed in c. 235 CE. The baths consist of massive walls and standing arches attesting to the imposing dimensions of a complex 6.9 million

<sup>&</sup>lt;sup>23</sup> Garrett G. Fagan, "The Genesis of the Roman Public Bath: Recent Approaches and Future Directions," *American Journal of Archaeology*, (2001): 403-426.

<sup>&</sup>lt;sup>24</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman Baths/.

<sup>&</sup>lt;sup>25</sup> Seneca, "The Roman Empire: In The First Century. The Roman Empire. Life In Roman Times. Baths | PBS," Pbs.Org, last modified 2006, accessed February 27, 2017, http://www.pbs.org/empires/romans/empire/baths.html.

brick wall with 252 interior columns<sup>26</sup>. The walls are 30 meters tall and cover an area of 337\*328 m. Moreover, they incorporate all the classic elements that one expects in such a bath.

According to Cartwright, the Roman baths evolved primarily regarding architecture courtesy of the changing times demanding few changes<sup>27</sup>. Wealthy Romans came with slaves to their bathing sessions so that the slaves would attend to their needs. Therefore, the bathhouses had three entrances: one for men, another for women, and the third one for the slaves. The preferred symmetry in the Roman architecture entailed a symmetrical facade despite the fact that the area for women was often smaller than that for the men because of lesser patrons<sup>28</sup>. The men's area was separated from that one of the women by large solid walls. The republican bathhouses had different facilities for bathing for both genders, but bathing became a mixed activity by the 1st century. However, Emperor Hadrian restored the gender separation after a while. The bathhouses had further amenities to that of the bathing ritual. For instance, the bathhouses in Rome would have spaces for housed food and booths for selling perfume. Some had stages to accommodate musical performances.

Romans proceeded to develop baths in their colonies and took advantage of natural hot springs that occurred in Europe. For instance, the Romans built baths at Vichy and Aix in France as well as in Buxton in England<sup>29</sup>. The baths took a turn and ceased being areas for bathing activities only but areas for recreational activities such as reading and exercising. Moreover, the bathhouses were improved to a fine art that reflected the physical advancements made by

<sup>&</sup>lt;sup>26</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/./.

<sup>&</sup>lt;sup>27</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman Baths/

<sup>&</sup>lt;sup>28</sup> Seneca, "The Roman Empire: In The First Century. The Roman Empire. Life In Roman Times. Baths | PBS," Pbs.Org, last modified 2006, accessed February 27, 2017, http://www.pbs.org/empires/romans/empire/baths.html.

<sup>&</sup>lt;sup>29</sup> Ibid.

Romans. Baths had deeper and more complicated rituals than the simple immersion and sweating process<sup>30</sup>. A good example of the advanced baths was the thermae that had various facilities for the bathing process<sup>31</sup>. It was an imperial complex for bathing where Romans would enjoy spending their day in after a long day of work. It was more than a building for bathing but also for socializing having a meeting place, exercise rooms, saunas, steam rooms, both hot and cold pools, as well as salons for cutting hair. It resembled the modern day spa<sup>32</sup>. The aspect of the Romans raising or rather improving the artistic nature baths is highly reflected in the thermae as it depicts of the complexities the Romans added to what was a simple ritual. Most cities in Rome had a thermae that facilitated courtship and making of friendships<sup>33</sup>. However, despite the thermae being sophisticated and extremely artistic, it varied in size from city to city<sup>34</sup>. Below is an example of a Thermae:

<sup>&</sup>lt;sup>30</sup> Garrett G. Fagan, "The Genesis of the Roman Public Bath: Recent Approaches and Future Directions," *American Journal of Archaeology*, (2001): 403-426.

<sup>&</sup>lt;sup>31</sup> Nielsen, Inge. *Thermae et Balnea: The Architecture and Cultural History of Roman Public Baths* (Vol. 1). Aarhus University Press, 1990.

<sup>&</sup>lt;sup>32</sup> Nielsen, Inge. *Thermae et Balnea: The Architecture and Cultural History of Roman Public Baths* (Vol. 1). Aarhus University Press, 1990.

<sup>&</sup>lt;sup>33</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/

<sup>&</sup>lt;sup>34</sup> Nielsen, Inge. *Thermae et Balnea: The Architecture and Cultural History of Roman Public Baths* (Vol. 1). Aarhus University Press, 1990.



Uniqueness of the Roman Baths

The baths of the Roman were unique and different from those of their Greek predecessors. Unlike the Greeks who sought to heal from the baths, the Romans sought comfort, relaxation, and recreation. Therefore, in a bid to attain the three things, the Romans designed and advanced their baths differently from those of the Greeks. The baths in Rome were like community centers because the conversation was necessary considering that bathing was a long process<sup>35</sup>. Many Romans would invite their friends to dinner parties at these baths, and politicians used them as platforms to convince fellow Romans to support them in their causes. The thermae had many components such as libraries, reading rooms and places to buy and eat food<sup>36</sup>. Baths in Rome had all these amenities in abundance, and the Roman society was very clean, as some people took bathes multiple times in a week.

<sup>&</sup>lt;sup>35</sup> Nielsen, Inge. *Thermae et Balnea: The Architecture and Cultural History of Roman Public Baths* (Vol. 1). Aarhus University Press, 1990.

<sup>&</sup>lt;sup>36</sup> Nielsen, Inge. *Thermae et Balnea: The Architecture and Cultural History of Roman Public Baths* (Vol. 1). Aarhus University Press, 1990.

Influence of the Roman Baths on how Romans Made and Changed Art

Despite the fact that public baths were features of Egypt and significant places for the Greeks, the Romans developed and advanced the concept of bathhouses to a very sophisticated degree. The bathhouses in Rome were expensive resembling the splendor that is usually given to royalties. The bathhouses fulfilled functions being fulfilled today by spa resorts as they entailed social, recreational, health and cultural centers as a whole. It was from these baths that the Romans envisioned and proceeded to build spas<sup>37</sup>. Archaeological evidence confirms that 111 thermal spa resorts in Italy today are built and spread on the sites of the ancient Roman baths. Such include the Montecatini, Saturnia, Chianciano and the natural spa located in Ischia having 29 Warm Springs<sup>38</sup>.

The Romans diversified the initial forms of baths because they wanted to have a useful art and architecture. In light of this, the Romans proceed to plan their cities building bridges, public baths, marketplaces, apartment houses, harbors, and aqueducts<sup>39</sup>. The Romans wished to tell the future generations of how Great Rome was every time they wanted to build something<sup>40</sup>. Romans put vital lessons of the ancient Greeks into practical use<sup>41</sup>. The baths were a tribute to the excellent skills of the great builders of Rome. It was from such great architectural features that Romans decided to build on a greater scale than their predecessors did. The aqueducts of the Romans were formed on three arch levels being piled onto each other and their baths enclosed by vast open areas such as the Bath of Caracalla. Romans acquired the use of concrete in their

<sup>&</sup>lt;sup>37</sup> Garrett G. Fagan, "The Genesis of the Roman Public Bath: Recent Approaches and Future Directions," *American Journal of Archaeology*, (2001): 403-426.

<sup>&</sup>lt;sup>38</sup> Garrett G. Fagan, "The Genesis of the Roman Public Bath: Recent Approaches and Future Directions," *American Journal of Archaeology*, (2001): 403-426.

<sup>&</sup>lt;sup>39</sup> Fikret K. Yegül. *Bathing in the Roman world*. Cambridge: Cambridge University Press, 2010.

<sup>&</sup>lt;sup>40</sup> Ibid.

<sup>&</sup>lt;sup>41</sup> Ibid.

structures as they chased for more permanent and durable structures<sup>42</sup>. The concrete would take any shape for the arches, domes, or vaults and enabled the architects to construct structures of great sizes.

The baths needed decorations to facilitate the sense of recreational features or aspects<sup>43</sup>. Given this, the Romans began using sculpture decoration to embellish their architecture. Most of the sculpture decor was a copycat of the Greek styles. Greeks significantly influenced the sculptures of Rome, but Romans had a significant input of originality skill in their portraits<sup>44</sup>. Such art was placed in various areas and rooms in the baths to create the desired sense depending on the function of the given area<sup>45</sup>. Romans took from the baths of the Greeks that portrayed their gods and made portraits that resembled the Roman emperors, generals, and senators having some degree of realism<sup>46</sup>. Roman portrait comprised of such aspects as the thinning of hair, making double chins and crooked noses that were the physical features of a person making them appear different from others<sup>47</sup>.

Art in Rome changed to assume the definition of expression where artists would express what they experienced at a given time. The paintings were done as a means of decoration being executed on the walls inside of the house. The murals of such made the rooms appear larger by giving them the illusion of depth or the creation of a pastoral landscape that did not have a

<sup>&</sup>lt;sup>42</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/.

<sup>&</sup>lt;sup>43</sup> Fikret K. Yegül. *Bathing in the Roman world*. Cambridge: Cambridge University Press, 2010.

<sup>&</sup>lt;sup>44</sup> Fikret K. Yegül. *Bathing in the Roman world*. Cambridge: Cambridge University Press, 2010.

<sup>&</sup>lt;sup>45</sup> Eugene J. *Dwyer. Pompeii's Living Statues: Ancient Roman Lives Stolen from Death*. University of Michigan Press, 2010.

<sup>&</sup>lt;sup>46</sup> Ernest Archibald, *Bathing, Beauty and Christianity in the Middle Ages,* (Insights, 2012), 1-16.

<sup>&</sup>lt;sup>47</sup> Lee Hall, "Ancient Roman Art And Architecture | Scholastic ART | Scholastic.Com," Scholastic.Com, last modified 2015, accessed February 27, 2017, http://www.scholastic.com/browse/article.jsp?id=3753873.

window or a particular view<sup>48</sup>. Romans further pursued various forms of architecture such as the painting of columns into compositions and frames used in the mural that gave them the sense of depth. Bathing usually entailed the usage of perception, and so the Romans adopted the use of perspective in their painting and artistic work. Among the common colors were black, red, and cream-white. The Roman painting had a high level of naturalism because the artists understood perspective and the use of shade and light. Romans further began painting many charming scenes from the natural setting and portraits as well as good-looking young men and women that were a resemblance of the Greek methods to make art from a natural environment<sup>49</sup>. Religion was also a primary factor that influenced the artistic transformation.

Romans built aqueducts all over the city introducing water into cities they had built and occupied as well as improve their sanitary conditions<sup>50</sup>. A ready water supply in the bathhouses allowed baths to become common features in the entire stretch of Rome. Eventually, a typical Roman lifestyle included exercise and healthy lifestyle that saw many people made trips to the gymnasium. The design of these facilities prompted the Roman architects to build various structures of different shapes and sizes in the city of Rome.

According to Dwyer, the need to have large airy rooms that had lofty ceilings created the architectural dome in Rome<sup>51</sup>. The earliest dome in Roman architecture still in survival came from the frigidarium of the Stabian Baths located in Pompeii dating back to the 2nd century

<sup>&</sup>lt;sup>48</sup> Mark Cartwright, "Roman Baths," Ancient History Encyclopedia, last modified 2013, accessed February 27, 2017, http://www.ancient.eu/Roman\_Baths/.

<sup>&</sup>lt;sup>49</sup> Lee Hall, "Ancient Roman Art And Architecture | Scholastic ART | Scholastic.Com," Scholastic.Com, last modified 2015, accessed February 27, 2017, http://www.scholastic.com/browse/article.jsp?id=3753873.

<sup>50</sup> Ibid.

<sup>&</sup>lt;sup>51</sup> Eugene J. *Dwyer. Pompeii's Living Statues: Ancient Roman Lives Stolen from Death.* University of Michigan Press, 2010.

BCE<sup>52</sup>. Furthermore, a concrete development facilitated the building of unsupported walls over wider areas in the form of stiff mortared rubble. The above was similar to the hollow vaults of brick barrels that were supported by buttress arches and iron tie bars. The following features became widely spread all over Rome influencing their form of art and architecture for years to come. The features became the key components of Roman architecture in building public facilities, and more so those that involved large constructions like the Basilicae or the Basilicae<sup>53</sup>. The influence continues to be seen even in modern time as the Roman art and form of architecture is used by modern designers. For instance, the Chicago Railroad Station, as well as the Pennsylvania Station located in New York, are a perfect copy of the frigidarium architecture of the Baths of Caracallae<sup>54</sup>.

#### Conclusion

Bathing was an important daily activity in the ancient culture and society of Rome being practiced across all social classes. Bathing originated from Greek as Greeks built bathing facilities around sacred pools for persons that sought to heal. Romans emulated or rather copied the bathing practices of the Greeks but surpassed the Greeks in regards to the sizes of their baths. The idea to build a public bath expanded with the expansion of the Roman Empire stretching to all parts of the Mediterranean, Europe, and North Africa. The main idea behind the creation of baths remains unclear with differing theories explaining the same. Another theory insists that baths came about from the desire of wealthy people to have luxurious places to recreate and relax. The typical elements of the ancient Roman baths were an apodyterium, palaestrae,

<sup>&</sup>lt;sup>52</sup> Ibid.

<sup>&</sup>lt;sup>53</sup> Lee Hall, "Ancient Roman Art And Architecture | Scholastic ART | Scholastic.Com," Scholastic.Com, last modified 2015, accessed February 27, 2017, http://www.scholastic.com/browse/article.jsp?id=3753873.

<sup>&</sup>lt;sup>54</sup> Lee Hall, "Ancient Roman Art And Architecture | Scholastic ART | Scholastic.Com," Scholastic.Com, last modified 2015, accessed February 27, 2017, http://www.scholastic.com/browse/article.jsp?id=3753873.

notation, laconica and sudatoria, calidarium, tepidarium, frigidarium, and massage rooms. The Romans developed the idea of having heating systems via the walls, and as such, the walls gave the heating courtesy of hollow rectangular tube insertions carrying hot air from the furnaces. The walls also had bosses or rather special bricks called the tegula mammata at the corners of a given side and served to trap hot air and increase insulation against loss of heat.

Baths needed vast amounts of water, and the Romans built aqueducts and regulated reservoirs in the bath complexes for the provision of water. The Roman baths evolved primarily regarding architecture courtesy of the changing times demanding few changes. The baths of the Roman were unique and different from those of their Greek predecessors because the Romans used them to gain comfort, relaxation, and recreation, unlike the Greeks that considered these places sacred. Therefore, the design of Roman baths was far much different from those of the Greeks because of the desires they were to fulfill. The Romans diversified the initial forms of baths because they wanted to have a useful art and architecture. The Roman baths have significantly influenced and changed the manner in which Romans made art and architecture. Art in Rome changed the definition of expression where artists expressed what they experienced at a given time.

## Bibliography

- Andrews, Cath. "Ancient Roman Baths: Ancient Roman Architecture In Action." Explore

  Italian Culture. Last modified 2008. Accessed February 27, 2017. http://www.exploreitalian-culture.com/ancient-roman-baths.html.
- Archibald, Ernest. "Bathing, Beauty and Christianity in the Middle Ages," *Insights* 5, (2012):1-16.
- Cartwright, Mark. "Roman Baths". Ancient History Encyclopedia. Last modified 2013. Accessed February 27, 2017. http://www.ancient.eu/Roman Baths/.
- Dwyer, Eugene J. *Pompeii's Living Statues: Ancient Roman Lives Stolen from Death*. University of Michigan Press, 2010.
- Fagan, Garrett G. "The Genesis of the Roman Public Bath: Recent Approaches and Future Directions," *American Journal of Archaeology*, (2001): 403-426.
- Hall, Lee. "Ancient Roman Art And Architecture | Scholastic ART | Scholastic.Com".
  Scholastic.Com. Last modified 2015. Accessed February 27, 2017.
  http://www.scholastic.com/browse/article.jsp?id=3753873.
- Nielsen, Inge. *Thermae et Balnea: The Architecture and Cultural History of Roman Public Baths* (Vol. 1). Aarhus University Press, 1990.

Seneca. "The Roman Empire: In The First Century. The Roman Empire. Life In Roman Times.

Baths | PBS". Pbs.Org. Last modified 2006. Accessed February 27, 2017.

http://www.pbs.org/empires/romans/empire/baths.html.

Yegül, Fikret K. Bathing in the Roman World. Cambridge: Cambridge University Press, 2010.