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Hydrological Transformations: Water, Landscape, and Temporality of Medieval Social Change

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Abstract: Mutable and shifting, the changing nature of water management during the Middle Ages and Early Modern period have sustained intervals of change that were both technological and, as often, social. The distinctions between public and private estates, or varied local groups versus centralized systems of governance highlighted the diffuse power of water as a spiritual metaphor. It also led to an obsession with circumnavigating Earth's waters enroute to the New World. The metaphysical embodiment of a Christian spirit can be juxtaposed with the physical human body as a position that enacts miracles to occur. Equally important is the paleo-environmental impact that water played in developing ecological and agricultural patterns of development in Europe that began to implicate water management literature as a primary mode of economic development. From AD 400 onward, rapid transformations in social capital allowed groups in wet, marshy areas to form communities that had their hydrological structures away from the central authority. Social Baptism, as I here have defined, spread throughout Medieval Europe. However, as historians have demonstrated, it took time to develop unique social and technological traits that did not incorporate some standard or blueprint of governance that was infantile. In accordance, this paper will uncover and do more to prove that medieval water management, akin to Anabaptists, was a means of preserving evolving traditions that ultimately gave people a way of demonstrating a maturity of identity. They made new boundaries out of old practices, ousting with it paternalistic ritualism.

Keywords: Cultural History, Early Modern Europe, History of Science, History of Technology, Identity, Literary Studies, Postcolonialism

In Squatriti's *Water and Society in Early Medieval Italy* we do not find the same scholastic inquiry into how identity changed. Instead, Squatriti and historians such as Helena Kirchner and Ellen F. Arnold have decided to look toward the landscape and its implementation of wells, aqueducts, and cisterns as engineered vehicles of personal and social relations. Within the historiography of water management in the Early Modern era, scholars will undoubtedly find linkages between these works and their contemporaries in a disputation of the notorious Karl Wittfogel, a historian who wrote extensively on the idea of these social hydraulic-based societies. Kirchner argues in stark contrast to what she writes is a "Wittfogelian Paradigm" of these large water-based, and centralized societies (Kirchner, 2009). In other words, the necessity to make kin-based local groups outweighed the effect of overarching governance, which is what Wittfogel had been promoting since the middle of the twentieth century.

(Squatriti, 2002), likewise, makes a similar discovery in his book *Water and Society in Early Medieval Italy* where he invokes more of the Wittfogelian theory of "hydraulic societies" to dispute the power of centralized governing of these places (Wittfogel, 1957). Squatriti maintains that the Po Valley is a key illustrative region that exhibited the long-lost power of kings and monarchical control that last stood maybe from 400 to 500 CE through the Goths. There was not sufficient technological capacity or even human labor around that could

do it (Squatriti, 2002). Yet, the transition from the period of Roman decline meant that it was not, in fact, political governance that was predominating over water systems, but rather a communal identity that was carried over. So, from 400 CE to as late as the fifteenth century we find that the attitude of central authority was made over the presence of water. Water was the catalyst forming a national identity that as I write, was more similar than varied across regions and time.

Furthermore, this historiography on water management does not only find its meaning by referencing Karl Wittfogel through the works of Helena Kirchner or Paolo Squatriti, but we find that other historians such as Ellen F. Arnold, David Crouch, Briony McDonagh, and finally Rick Osborn reinforce the predictive quality of water control during and long after the early thirteenth century. Up to the 1700s, we have evidence of water milling that was "engineered" as early as the 1300s to replace old watermills in favor of more modern windmills (Osborn, 2006). And, as McDonagh's, Crouch's, and Arnold's work show us, "engineering" went beyond the technological framework of an altering landscape with machines. Instead, we find meaning as well through a monastic religious, and socio-economic awakening which, for the sake of this paper, proves the efficacy of historians not only viewing landscape changes but included the new formation of identities like the monks that Arnold references (Arnold, 2007). These groups held on to those time-held traditions that would be challenged in religious upheavals like the Reformation of England in the future, and what the monasteries with conversion practices reiterated is that when they cut down woodland or made room to grow a cult area, science undoubtedly grew along with it. This rise in secular opinions affected the manipulation of natural resources, like water, for both material and spiritual gain, most accentuated opposingly in miracles. A greater emphasis also has been placed on wetlands that had not been enclosed until 1781, estimating that governing diverse jurisdictions and large marshlands like Wallington that were always in flux made boundaries hard to rely upon and thus, the identity of the transforming fen had been created and carried for a long time (Crouch, 2016).

By setting a chronological precedent in our study here, we need to first address what Paolo Squatriti describes as what happened after 400 AD that lasted approximately 600 years, leading to the religious upheavals of water management. Popery and the advent of restoration projects were aimed at bringing life back into the declining public world. Roman conduits were restored, and even late Middle Age aqueducts that ran for miles during the falling centuries of Roman rule had been replaced, not merely technologically, but by new demographics of people inhabiting these dense areas (Squatriti, 2002). But as Squatriti also makes clear, many of these wonder projects to restore outdated water technology of the time were not that new (Squatriti, 2002). Something new, however, was the appreciation of monastic privilege and authority over diverse regions where communities of monks lived. In this way, we want to invert the relationship between post-classical Italy and our notions of public and private life. Monasteries, unique in their own right, often presided over the control of domestic supplies of water which made household use of wells and cisterns a wealthy people's affair. The religious communities and their elders reaped the benefits of becoming both public charters of religion but were also private economic beacons where the proper practice was maintained and regulated. A good example of this is in making standards for fishermen.

Piscaria is a term used to denote monks' influence over the types of water that people of the ninth century were accustomed to catching fish in, and also the kinds of fish that were suitable to eat. These monks are abundant in archives that reaffirm what historians have thought, which is that "the Biblical distinctions between Christ-like fresh-water fish and the demonic sea fish of the sort the Apocalypse promised were important" (Squatriti, 2002). Early medievalism in Italy presented a mystery that only cultural identity could ultimately fix. It was, that in the temporal environment of post-classical piscatory environments, there was a strong central authority that resided in each person individually. The paradox, so to speak, is that monasticism, piscatory fishing regulations, and private fisheries and their rights were all part of an informal social contract. The "body" of flowing water had not changed since Roman times, but the temporality of these new monastic tendencies of making "piscationes" property of churches most prominently spread the practice of extending fishing rights to lords, archbishops, and laymen who wanted to add social value to the rights of sovereign people (Squatriti, 2002). This is one of the few people-centered approaches to the history of water management because as Squatriti also presents, the machinery of the late Middle Ages was making humans' interactions with the natural world a tool of separation.

Disparate identities among people and the practice of engineering mills or watercourses through Italy is comparable to what Ellen Arnold writes about in "Engineering Miracles" where we find similar monastic trends. Squatriti has written about the "longue durée" to describe how this transition to modernity was all about connecting trends lost to time. And it is not only the windmills that can be an example of this, as we witnessed coming to fruition in the fourteenth century (Osborn, 2006). Instead, the popularity of well-known tools like Roman grain grinders and the water mills that powered them only increased their usage in the years leading up to 1000 AD (Squatriti, 2002). These proved that the secular authority was arranging common principles people could attest to through

both technology and belief. Arnold writes that like archival sources that showed the influences monks had in making regulated fisheries, the high Middle Ages from 600 AD to 1150 AD was a time when the economic and social power of Cistercian monks grew, too (Arnold, 2007). And since seventh, and eighth-century watercourses were being built alongside monasteries, there were often real saints like St. Hubert to the forests of Ardennes as well as with the enactment of miracles, and monks' religious writings that united people and made religious authority a water management tool. It was not centralized authority, but monastical control over waters that spread a common episcopal identity and ideological principles.

By the twelfth century, historians like Arnold have found that a "self-identity" of monks was present to help shape the narrative of water and its transformation within the landscape (Arnold, 2007). In reading about the Christian world, we also might notice that it was not the monks' identity that was shaping these changes, but as historians have shown it was water, rather, that was a powerful symbol. Ironically, the tool these monastic elders were using most was water to make miracles and traditions such as baptism even more ardent tools of conversion. There were three trends that Arnold highlights which can be part of our discussion, and they are hagiography, conversion, and miracles. We will start with hagiography, which was the writings about saints' lives. Instead of making technical treatises about the secular world on mills and other management tools, these religious people and groups relied upon divine methodologies instead. That inverse relationship is what makes belief so important. For the non-initiated and the laymen of medieval Ardennes, belief allowed them to sustain their passions. One such passion project was making hagiographic texts about the relics of St. Quirin's fountain, St. Remacle's fountain, and others like St. Hubert. These religious texts contrast well with the very real maps, and diagrams of hydraulic systems that are present in the articles by Crouch, McDonaugh, and Kirchner. Biographies of saints like St. Hubert, again, were common ways to get people to understand and associate miracles with the divine. Most of these "miracles" were recorded in hagiographical texts. My interpretation of these works is to attribute more emphasis to the actual taming of the natural environment by the monks and not rather on their success in miracles like curing a blind woman, and making water a source of metaphorical and symbolic meaning as Arnold goes into greater detail (493). As we have addressed, the transformation of "engineered" waterways helped build a common ethos of shared land rights among the people as they moved out of the Middle Ages. Historians should think more about that caricature of landscape and how it united people into shared kin groups across larger bodies of belief.

Helena Kirchner does not miss out on viewing the massive changes coinciding with the Al-Andalus irrigation systems (152). The identity of the Balearic Islands and the Al-Andalus region was predominantly Islamic beginning in the tenth century. Though we should ask, what brought certain groups together in harmony? Unlike Arnold who posits so much inquiry into the activity of converting the larger Ardennes area, Kirchner claims water allocation and the identity of the peasantry. Kirchner insists that it was peasants who had manipulated the watery areas that were prone to flooding in the peninsula and on the island to the advantage of making clan organizations. However, Kirchner also refrains from giving too much credit to the religious bastions of power in the Muslim-dominated area. Instead, the overarching power and authority that we see governing the peasantry is the landscape itself which has provided ancient kinds of watercourses that had to be uncovered through archeological fieldwork. Stratigraphy is the term used to define and demonstrate the phases of construction fieldwork (Kirchner, 2009). These areas contained ancient canals and some, which were able to flow under the St. Miguel de Balancat path or as the Ibiza and Granada watercourses show, a natural spring or stream. Andalusian peasant communities then were able to make alquerias based on hydraulic systems and the patterns of development that were available to them as migrating settlers. From 902 AD, we witness that the Umayyad amir, from Cordoba, was fomenting real change without governing these people at all. In interpreting these findings, it becomes clear that peasant arrival, settlement, and alliances were created as part of an extension of an empire that had relegated the migrant identity to the outskirts of the empire, on the Balearic Islands.

Magnanimously pardoning these peasant groups required that agricultural production grow in the adoption of kin-based patterns of development. However, as we have visited, there were real problems with this segmentation of "short distance" plots (Kirchner, 2009). How should historians frame the social value of landscape boundaries with such limited space? Although Kirchner does her best to provide an estimation of peasant labor and aptitude, it is the social capital that is available through rafals and alquerias that have just as much importance to our argument. In it, we find that the residential aspect of rafals and alquerias is categorical and should extend to incorporate more than the settlement patterns and demographics of these people. We want to know about the labels of these plots of land and the identity the landscape has acquired over time to become a hold of traditional villages in more places than this. And more than that, the political agreement of naming land rights even thwarted well-intentioned notaries who confused some of these words like rafal and alqueria. As time would have it, by the end of the

twelfth century, we came upon different agricultural categories such as those of East Anglian fens (Crouch, 2016).

In selections from *Churchwardens' Accounts of S. Edmund and S. Thomas, Sarum, 1443-1702*, by Henry J. Fowle Swayne in 1896 we have primary documentation of the dissolution of abbeys, parishes, and monasteries highlighting a large part of Tudor England in 1443-1702 (Swayne, 1896). In it, we discover that the inventories of these places had changed over time as recorded in these accounts for pre-Reformation and post-Reformation activities. Religious traditions and rituals, visual renditions, and practices of material culture highlight the ways they align with Henrician religious alterations beginning in the 1520s. Of them, a significant thread to follow throughout these accounts, and inventories, is the transformation of ritualistic practices such as an adult water baptism of Anabaptists. The Schleitheim Confession of Faith in 1527 was authored by Michael Sattler and he was later executed. Rituals for Roman Catholic churches were a stable of pre-Reformation life, and by the middle of the long sixteenth century changes to church practice made accounts essential for documenting the Feast of Easter and Good Friday alongside baptisms. Laborers and materials became less oriented toward worshipping the idols of Jesus's resurrection and also on diminishing their dependence on the Priest and his Clergy by putting more emphasis on the "persecuted flock" of churchgoers instead (Davies). These same churchgoers also had more hand in modifying the Reformation era changes, such as baptism and the obsession with water for youth that are witnessed in these parishes and monasteries. Thus, the following analysis of Fowle Swayne's Churchwarden Accounts will document the evolution of Reformation-era churches into more inclusive, diverse, and welcoming places for the whole of the English community.

With congregations changing to accommodate more diversity in attendance and visual displays, these churchwardens' accounts and inventories show evidence of changing religious practice through making new festivities during the time of Christmas, for example. The lighting, wax, and torches incurred fees that had been paid to the priest on an average of £17, 9s, and 6d. The currency of the times has been pounds (£), made of 20 shillings (s), made of 12 pence (d). And as the parish of St. Edmund in Salisbury discovered more skilled labor was needed to complete complex tasks like redoing carpentry, plumbers to do gutters, and masonry work. As the accounts from 1527-1533 prove these payments and reparations transformed what it meant to be part of the clergy. Instead of masking religious participation through zeal and worship of a vast array of saints and idols, Protestant hopefuls began to value the labor of Christ that like in themselves, was reflected through diverse donations of physical capital. Deskilling, as had been common in the post-Roman-Britain Middle Ages was now being revived in these big structural projects of the sixteenth century. The "commonwealth of Christians" ideology and sympathy for the poor became part of a theme that made anti-hierarchical and anti-popish rhetoric popular, and this is especially true in monetary terms (Davies, 1987).

Gatherings in the church had not only been to commemorate the traditions of mass and use of the altar and priest's position to serve God, but before 1550-1551 accounts, it limited access to positions of leadership. This is another stronghold of diversity that was being changed over time by first restricting the church members' power in their community, and then resifting it with cleaning. This kind of spiritual and physical cleansing made these quarters and spaces in the church available for the meeker churchgoers. Priests had no problem visiting many of the dark spiritually polluted areas because they were morally stronger than others, but this changed when gutters, worn bells, and rope, including dirty cloths and robes near the pewter and altar, had to be cleansed and paid on account of by the workers for hire, especially during the time of Easter or Christmas. Workers had new keys that allowed them more autonomy. And though the Deacon had cherished stained windows with nuns affixed to them, decorated clockwork, and fanciful pews, it was piles of nails and coal that became not mere rubbish to be discarded but developed into the backbone of all visual artworks (Swayne, 1896).

The regularities of burial graves are easily juxtaposed also to Anabaptism and a changing of the guard in birth practices. Women's roles in the church during this Reformation period (Davies, 1987)were brimming with resistance to Papist regulations and strictness. The best example to contextualize alongside the Churchwardens' Accounts as a primary source on this topic is Rose Hickman who was an early adherent of Protestantism. Her memoir concerns her time in Antwerp during Mary's reign and revealed that while Hickman gave birth to a child while presiding in Antwerp, she did her best to avoid the baptism of Papists (Cressy, 2005). Similarly, the accounts of burial grave requests prove that caring for the dead even before their passing required the love and care of a woman. Special pews were reserved for men's wives and families, a testament to devotional familial and feminine love (Swayne, 1896). These churches like St. Edmunds had become more of a family with equal parts affection and care rather than a hierarchical bureaucratic institution of the state. Also, it was not uncommon to find bred Ale and cheese being made and accounted for in these records to alleviate all their hard day's work.

Amounts paid based on various labors vary, but it is apparent through these accounts that parishes most valued the time spent making labor. This time spent making up labor is an example of Social Baptism. For up to 10 days one worker, or two, would

receive 15-20 shillings. And with other tinkering such as "making a saw pit" or hauling timber one could expect to get less than 10 pence (Swayne, 1896). In all, time spent making labor would erase many of the disparities in wage labor that this system would have incurred. It is no surprise then that to make a full pound, or more, skilled laborers would have to prove their merit with months of repeated work in a Social Baptism of labor. This then changed the association of the church with these ritual rites occurring only so often. Regular convening at local parishes survived through the Reformation creating a real community of believers dedicated to their local community, rather than sporadic decorations to rituals and iconoclastic traditions. Additionally, the range of contributions of middling sorts grew in the payments section of the accounts to include clerks, morning prayers, ringing of the bells, bread, and winemakers, washing of the clothes, candles, book of communication writing, deliverance of presentations to the register, and more. All of these transformed what it meant to be part of a "persecuted flock" of Protestants who embraced diversity and did away with the authoritarian regimes of priests and clergy.

By imposing their will onto the landscape, the volatile Wallingfen and its wetness had become more than a stagnant plot unsuitable for agriculture but was made into a cooperative landgrab various groups of people depended upon for claiming power. This area had not been enclosed and drained until the eighteenth century, 1721, and its 4500 acres were linked together only with a single causeway that was documented in the 1400s (Crouch, 2016). Thus, it is a brilliant exemplar of England's early engagement with the ineffectiveness of maintaining private land, and even public land for public use. What then was the identity of the fen until 1721? The evidence that Crouch and McDonagh present in "Turf Wars" suggests that the fen symbolized and was also characterized as something else altogether. It was a place where ancestors' "spirits" could then roam as representations of common rights that should not have been trespassed upon or made into separate properties. This area then was always in contestation between rival groups and people such that in one instance a Bishop's demesne was trespassed upon and they reached a court to deliberate about their common rights. Essentially then the fen was a battleground that led to our earliest disputes over the exploitation of land, and the people who inhabited these savage-like conditions were not spared an adequate Social Baptism. In other words, some things remained nameless in the eyes of the law, and as was the case with some monastic settlements, the water of the fen was a symbol of their inability to find control over the erratic, often worshipped weather patterns. Their powerlessness, represented and mirrored in their political disputes, was an ominous presence such that the identity of the inhabitants of the fen made them into sovereign charters with no real affiliation aside from their helplessness.

With no real legal repercussion present until the latter part of the thirteenth century, we should apprehend whether or not water management trends in the fen were perhaps part of the establishment of new transitional identities that would lead to the late Early Modern period full of Anabaptists that in the New World spawned America's Amish communities, Hutterites, and even the Mennonites. As such, let us view the transition out of the late Middle Ages as a time when increased augmented water management practices were a mechanism for transforming the identities of the community both physically and spiritually. For example, Crouch and McDonagh write that the creation of a court to oversee the fen was a direct result of changing practices in the thirteenth century, as was increased flooding (146). And Rick Osborn asserts through diverse evidence that the identities of old watermills were further antiquated by the advent of windmills from 1322 on (Osborn, 2006). It was not only that but the community efforts at limiting restriction made the wetland a place of respite for summer grazing and just a simple, "every man's land" (Crouch, 2016). In many ways "Turf Wars" and the Wallingfen are good representations of a commonality of identities shared amongst inhabitants that had no means of governing themselves. There were no real boundaries to the fen's land at all, and the only real differences were present in distant townships that probably had a distaste for that entire wetland area. It was, at once, simply a common.

Similarly, there are temporal shifts that occur in Arnold's "Engineering Miracles" that pertain to the conversion of the landscape and by the late twelfth century many of these places that monasteries had acquired became wholly Christian and were no longer pagan (483). Bathhouses of the Roman Empire were indeed pagan and adulterous according to (Eliav, 2023) in his book *A Jew in the Roman Bathhouse: Cultural Interaction in the Ancient Mediterranean*. Controlling water resources is the primary idea of the article. However, as this paper has depicted with some evidence, religious change fomented a greater appreciation of the spiritual themes that made water management possible in the first place. And like the section on notaries, from the Kirchner article, "Original Design, Tribal Management and Modifications in Medieval Hydraulic Systems in the Balearic Islands (Spain)," there was a trend toward growing the sanctity of record-keeping and archival, or legal documentation. All of these things required deft language to make proper assumptions and claims about land, machinery, and even people. Additionally, it was not only notaries that had to differentiate between rafals and alquerias, but people who needed to make claims about hagiographical texts where narratives of divine events were kept. What then, was the legal

identity of governorship? The church was not only beholden to recordkeeping and had to have a direct line of communication with the divines. It was or should at least include an implementation of a shared vocabulary or jargon. Arnold writes:

"The commissioner of the vita Remacli noted the rich trove of charters housed at the monastery, and the vita was quite indebted to the language and the narrative presented in the earliest charters. For example, when describing the foundation of the monasteries, the vita author engages directly with charter vocabulary, attempting to define and clarify a measurement term (leuga) from a Carolingian confirmation of one of the early charters" (486).

This is prime evidence of the sanctity of language, and also time. Further, within the article, we find reasons to look at the stories that, like a charter, were made to illustrate how different years incarnated various miracles at appropriate times.

The blending of hagiographical narratives, stories, and legal records is not too much unlike the classification of irrigation channels alongside their respective social proprietors. The people, or landowners, had tangible stories of their own, insisting that the realization of shared identities within aquaria was possible (not to be confused with alqueria) Squatriti uncovered (88). Universal practices were seldom around in Italy, especially in areas such as Sulmona, the Po-valley, Salerno's suburbs, and Bergamo in the 900s. Before the turn of the eleventh century, historians have shown individual owners had rights and were responsible for their ditches. According to Squatriti, and by the account of little evidence, cooperative irrigation was not present. Chronological, and again the temporal evidence suggests that Italy's agriculture was being manipulated by a small group of patrimonial lords who took control in post-classical Italy. However something is missing, and it is an appraisal of local opinions about who the aqueous areas belonged to. Again, we come upon a rampant and impressionable identification we have already mentioned, and it is the peasantry. Squatriti writes that these nomadic groups were able to thrive on tensions between all these disparate groups. According to Squatriti, "the arrangement hidden behind the term aquaricum was felt by the peasants of Carapell to be an unjust imposition contrary to age-old custom because their mountains… had remained untouched by the trend toward the privatization of water rights" (94). It becomes clearer that more people were able to find meaning within their disenfranchisement while also being led to the suburban bounds of Italy's waterfront. This is similar to what Kirchner described in the Balearic Islands and the peasantry that adapted, over time, to new irrigation methods.

The glorification of monks did not stop at these flooded wetlands, more landscapes were geographically isolated by natural barriers that included murky swamps, mountain cliffs, forests, and deserts, to name a few. They were in effect adventurous spirits. The Ardennes forests were supposed to be isolated and a place of solitary borders. Furthermore, these wild and remote areas were sometimes in conflict with the meekness that religious groups preferred and insisted on not altering the environment too much. There is one anecdote about St. Remacle, who in "words of his ninth-century biographer, to 'go to this deserted space (eremus locus), and there, remote from men, [live] without anything but God'" (Arnold, 2007). The attributes of water management at the Stavelot, Malmedy, and Ardennes locations were about glorifying divine intervention. It was also all about patronage and making these places religious centers of learning that people flocked to. In effect, the remote parts of the world also were symbolic of the remoteness of spirit that was mediating the divide between humanness and the unnatural worlds. And, as the advent of watermills and of course, windmills have shown us, people manipulated their world how they wanted. The goal of monks to separate their body and spirit from the natural world was something that also embodied the caricature of an alchemical process of transmutation, and water technology was a conduit, almost quite literally, of being the fountain, or mill, of the future modern world where machines would be prominent in Social Baptisms.

Well before the Industrial Revolution, watermills dotted the European landscape as a real testament to Roman and antiquity-based ingenuity. The predictive quality of early medievalism and also the late Middle Ages was foretold by the identity of not only monastic control of their resources like water but also of artifacts they left behind. The landscape was changing but people had felt tied to traditional water infrastructure such as mills. Arnold has demonstrated that access to these mills was prevalent near most villages since Roman times. And, as Arnold reiterated, the irrigation networks and the water of Ardennes in the medieval period flowed almost exclusively through several monastic watermills. And most charters documented just how prevalent they were in 650 and 1049. They could be then static objects, items that people were inclined to be associated with regardless. Evidence from the 1600s has been excavated to prove it. These monuments of history have been recovered through paleo-archeological digs and historians have been studying the practices of mill towns. Additionally, the temporal effect of residential plots, farming, grazing, and later drainage projects were engineering exercises that changed the inlet and hydrological processes of these tools gradually over time.

In Rick Osborn's "Evidence of Water Milling and River Management on an East Suffolk Manor During the Middle Ages" we are accosted by diagrams that show how areas that were prone to flooding were eventually reclaimed by draining after 1600. Similarly, in the Crouch and McDonagh article, "Turf Wars," we are also presented with reclamation projects that point to a shared identity in transferring the water as a power source, away from the fen and to watermills in places such as Broomfleet or Skelfleet (145). These kinds of evidence remained substantial as a source of generated labor and illustrate for historians now how trial and error over these plots led to more advanced engineering projects. Osborn goes into greater research about the ways of new channel engineering methods that were able to stop flooding or dikes that were barriers to water overflow. Stanway Lane is the primary evidence Osborn uses to show us how low land would have been used to cut inlets and rivulets that helped level the embankment where water was also profound (6-8). These two pieces of evidence from Wallingfen and East Suffolk manor proved that the quality of engineering projects depended upon mutual and not religious, as the other readings have shown, efforts to take control of the land. The only governing body in these extreme cases was the plight of workers, or in the example of peasants, a willingness to find a common enemy that was preventing their accord. As late as 1781, we discovered that the socio-economic and cultural identity of "common areas" is both an informality and a legal term.

This paper has proved the efficacy of attributing greater historical inquiry into the field of cultural identity and has made facets of late antiquity and post-classical water management and its governing strategies a topic of interest for historians of technology. Medievalists will be glad to know that Karl Wittfogel's theory of a governing body was not completely lost to the records of water and its many mills, wells, cisterns, and other conduits of domestic, private, and formerly public locations. Rather, common areas were alive from the late Middle Ages to the late Early Modern era popularizing the transformation of identity with religious conversions and the embodiment of engineering wetlands to the enthusiasm of its occupiers. To conclude, historians such as Ellen Arnold and Paolo Squatriti take impetus from the final years of the first millennium to rectify how engineering patterns utilized water as their source of power but ultimately reaped the benefits of a supernatural body like the body of Christ to unite them. This governing ethos of popular accord within local kin groups or socio-economic identities had greater significance than they might have posited by way of none other than Social Baptism. In the case of Wallingfen, large wetlands such as these as hotly debated places for centuries until their enclosure and then drainage by the eighteenth century made their sovereign land rights a point of contention. And, due to the volatile weather that entrenched them with rain, it was, in the end, a success of Social Baptism to be able to find mastery over it in any way.

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