Monastic Lessons

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L'architecte travaille la forme: il la décompose, en étudie les propriétés, la reconstruit; il se débat avec elle et la manipule pour obtenir la réponse la plus claire et la plus cohérente à un problème donné. C'est une lutte avec la forme, et non contre ou au détriment de la forme; car une activité complexe ne peut s'inscrire que dans une forme précise.

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Introduction

This personal reflection stems from a fundamental question that every architect, or at least every student, should ask himself at some point of its training: what is the purpose of the architectural discipline today? Through which investigations can I contribute to the architectural debate, dealing with issues related to current reality? Therefore, a stock of the situation in terms of political and social struggles seems to me an unavoidable starting point in order to contextualize the concerns at the base of this theoretical statement. It must be widely admitted that we live in times of deep crisis on many fronts, in which recessionist scenarios appear to be considered more and more seriously. Facing a more or less imminent collapse, it is necessary to rethink the way our society works and more precisely the way we inhabit, our manner of *being in the world* [1]. Monastic architecture has distinguished itself over the centuries for its ability to give form to alternative ways of life, providing collective housing solutions whose principles are worth being investigated.

In general terms, we can admit that life is getting precarious worldwide, and the results of this situation are related to the conditions of the built environment in which we live. Metropolises embed the profound paradox of an infinite growth that today, more than ever, sounds like inconceivable. Sébastien Marot

Aldo van Eyck. Playground at Laurierstraat, Amsterdam. 1965.
Photography: Ed Suister.

1. Heidegger, Martin. *Bauen, Wohnen, Denken*. 1980.
2. Marot, Sébastien. *Taking the Country's Side: Agriculture and Architecture*. 2019. p. 6
3. Marot, Sébastien. *Op. Cit*. p. 209
4. Harvey, David. "The Creation of the Urban Commons" in *Rebel Cities: From the Right to the City to the Urban Revolution*. 2012.
5. Ibid.

rightly points out that the global population will keep growing over the next decades and will most likely concentrate, as it does now, in larger and larger metropolises; however, probing the future in terms of climate change, social justice or resources scarcity, this same urbanization looks impossible [2]. It can be affirmed, from the overwhelming evidence of the global consequences, that the foundations of this essentially unstable condition can be founded within the consumer society and its capitalistic concentration, "of which metropolises and their touristic satellites are both the magnets and the most obvious products"[3].

Cities have failed since their purpose of representing the very place of communal life, of gathering individuals in a socially and environmentally sustainable system, was overtaken by the productive logics of the capitalistic system. David Harvey reviewed the impact of market-driven politics on contemporary cities by putting special emphasis on commons. He highlights the fact that recent preoccupations about the increasing loss of urban commonalities "reflects the seemingly profound impacts of the recent wave of privatizations, enclosures, spatial controls, policing and surveillance upon the qualities of urban life in general, and in particular upon the potentiality to build or inhabit new forms of social relations within an urban process influenced, if not dominated, by capitalist class interests"[4]. In other words, "capitalist urbanization perpetually tends to destroy the city as a social, political and livable commons […]"[5]. This analysis clearly points out the role of capitalist urbanization as the root of the current metropolitan condition, provoking many detrimental consequences. A mass migration of people leaving the countryside every year to move towards few overcrowded metropolises has also been observed. Combined with the productive and speculative forces dominating cities, of which Harvey expressly

Francesco Rosi. Le mani sulla città. 1963.

6. Madden, David & Marcuse, Peter. *In Defense of Housing*. 2016. p. 4
7. Ibid.
8. Ibid.
9. Frederick Engels. *The Housing Question*. 1872. p. 18; in Madden, David & Marcuse,
Peter. *In Defense of Housing*. 2016. p. 6

speaks, this phenomenon generates a wide question that urges to be treated: how do we live together? How to think about new forms of collective habitation in an aware and meaningful way? No one can fail to see that unaffordability, segregation, displacements and, more generally, gentrification have become a daily occurrence in modern cities; entire neighborhoods and localities are being violently reshaped by speculative real estate investments, using housing as primary instrument. This condition obviously leads to a great lack of affordable housing within cities, a problem which is often understood in purely quantitative terms, namely as a technical problem solvable through technocratic means [6]. Madden and Marcuse propose a wider perspective about this issue, treating housing rather as a political-economic problem: "the shape of the housing system is always the outcome […] of social antagonisms"[7]. On the basis of this militant review, they situated the antagonism precisely in the "conflict between housing as lived, social space and housing as an instrument for profit-making"[8]. Even if this broadly diffused condition can be easily associated to the last decades, as the surprising product of a corrupted system, it is still not possible to take refuge in ingenuity or unpredictability with regard to it. Frederick Engels argued back in 1872 that housing problems should be understood just as part of the "numerous secondary evils which result from the present-day capitalist mode of production"[9]. It is certainly not a question here to dive deeper into political resolutions; this concise illustration of the housing crisis has the aim to contextualize the urgent necessity to rethink habitation as a shared good, giving importance again to the notion of community. In this regard, the words of Madden and Marcuse are a proper summary of these concerns: "The experience of crisis in the residential sphere reflects and

Dogma. Communal Villa. 2015

10. Madden, David & Marcuse, Peter. *Op. Cit.* p. 10
11. Ortiz-Ospina, Esteban. *The Rise of Living Alone*. Accessed October 28, 2021.
12. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 37

amplifies the broader tendencies towards insecurity in capitalist societies. Housing crisis is a predictable, consistent outcome of a basic characteristic of capitalist spatial development: housing is not produced and distributed for the purposes of dwelling for all; it is produced and distributed as a commodity to enrich the few"[10]. I share the belief that a serious rethinking of the notion of habitation can still have a concrete impact both on the city as a livable place for communities and on single inhabitants' life conditions.

One of the main outcomes related to contemporary challenges lies in a particular phenomenon which is in a certain sense related to the housing crisis, but dealing more closely with societal issues: the rise of single dwellers. Statistics prove that this occurrence is increasing worldwide; the number of single dwellers doubled in the last few decades, with a major peak in the last fifteen years. In some northern cities such as Stockholm, single dwellers already represent sixty percent of the total households[11]. This obviously imposes new urban challenges both in terms of housing adequacy and social connections. Added to the relative instability and precariousness arising from neoliberal market logics, especially in metropolitan contexts, this condition gives a new meaning to what is commonly known as *nomadism*. People are increasingly uprooted, by choice or by necessity; moving often and accepting short-term or freelance jobs are becoming a norm in the metropolitan scene. The philosopher Walter Benjamin intensively experienced this particular way of life, since at forty he "found himself living in a situation of constant uncertainty, working as a freelance critic and changing address frequently (in the 1930s he moved 19 times)"[12]. If Benjamin's condition sounds more like an outward imposition due to the extreme circumstances of the post-war Europe, an example of
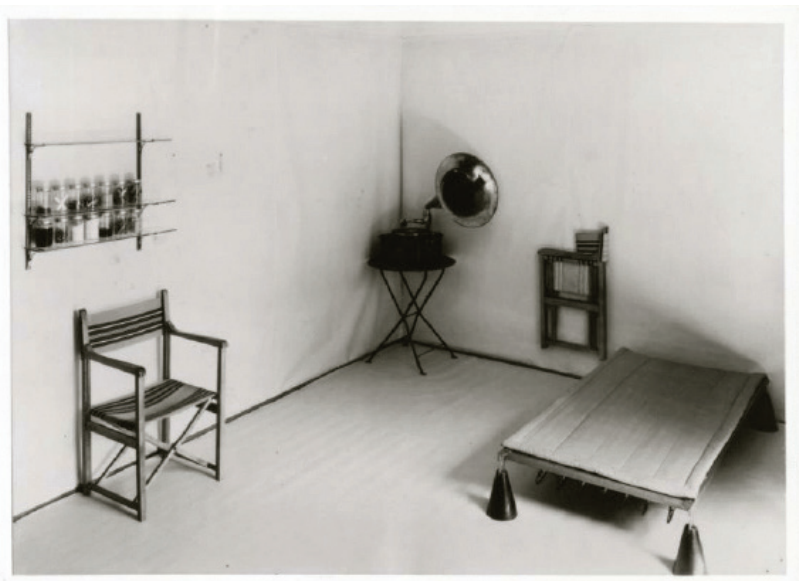
Hannes Meyer. Co-op Zimmer. 1926.

13. Aureli, Pier Vittorio. *Less is Enough.* 2013. p. 38
14. Aureli, Pier Vittorio & Tattara, Martino. "Soft Cell: The Minimum Dwelling" in
Architectural Review, Issue 1453. August 2018.
15. Aureli, Pier Vittorio & Tattara, Martino. *Op. Cit.* p. 107
16. Aureli, Pier Vittorio. *Less is Enough.* 2013. pp. 40-41

a willingly chosen nomadic way of life within a metropolitan context can be found in Charles Baudelaire and his well-known definition of *le flâneur*. Pier Vittorio Aureli mentioned that "Baudelaire abhorred traditional apartment dwelling and lived instead in tiny rooms, moving often […]. Like a monk, Baudelaire reduced his personal belongings to a minimum in order to use the city itself as a vast habitation, a place large enough to be adrift"[13]. By obligation or by choice, the individual and nomadic way of life has become such a wide-ranging phenomenon, that cities can't avoid to question themselves about the possible fashions of hosting and incorporating it within the urban fabric. In this regard, the individual room could be a way to establish a manifesto for the city through the most intimate domestic space[14]. Questioning these issues Aureli investigated the Co-op Zimmer, a room staged and photographed by Hannes Meyer to support his contribution to the publication "Die Neue Welt" in 1926. Meyer turned out to be particularly sensitive to "the increasing uprootedness and nomadism of metropolitan living, where workers were roaming from place to place, from city to city, from nation to nation"[15]. Co-op Zimmer was thus intended to showcase this particular way of life, to be its architectural embodiment, by means of an interior that was easy to inhabit and whose furniture was reduced to the minimum required. "The room is implicitly a space that is never self-sufficient. Like the monastic cell, the Co-op Zimmer is not a form of possession but rather the minimal space that allows each individual person to live by sharing the rest of the dwelling space. Here, privacy is not property, but rather the possibility of solitude and concentration – a possibility that our "productive" and "social" lives often tend to eliminate"[16].

From the speculative forces driving metropolitan housing
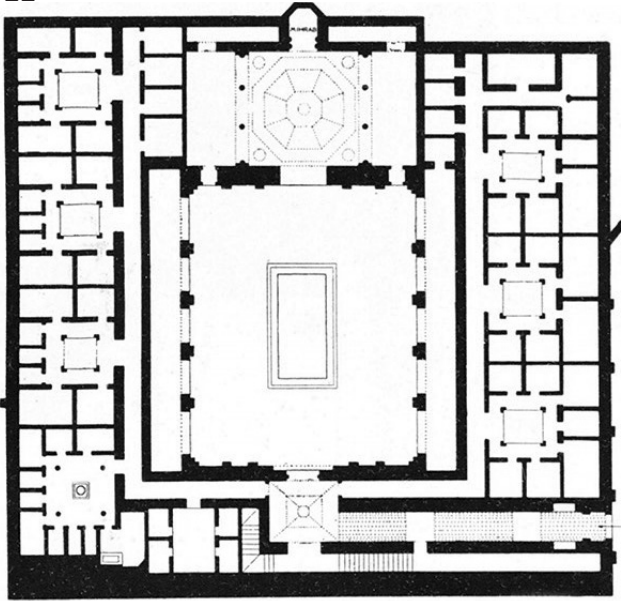
Abd Allah al-Ghalib. Ben Youssef Madrasa, Marrakech. 1565.

developments to the fundamental role of the individual private space, housing as a theme plays an important role in the relationship between the architectural discipline and societal issues at large. The following chapters should be read as a reflection on human habitation and its possible broader repercussions, through the investigation of some European monastic movements. Studying the formal solutions which allowed some of the most extreme experiments in terms of collective dwelling could reveal typological principles worth being enhanced. Since the history of monasticism is an extremely intricate network of overlapping movements and orders, the focus is placed on three isolated moments which seem to me of particular interest in terms of architectural representation of a precise ideology. Each of these three moments has been able to translate its specific way of life into an architectural type: The Coptic Laura, The Abbey and the Charterhouse. In the three cases, the question will be raised about the capacity of a specific architecture to generate and influence new living habits or, on the contrary, about the rise of new architectural forms resulting from the needs of a particular way of life. Monasticism explicitly conveys this constant dialogue between cause and effect, that can be easily applied to architecture and the related human habits. The purpose of the following chapters is then to provide a critical overview of these western monastic structures, striving to understand how the architectural space in terms of form, composition and distribution, reacted to and influenced these particular ways of living together.

Theoretical premises

In the light of current socio-political conditions, it is clear that the very notion of collective housing needs to be radically refounded on new ideological conditions, not depending on speculative market-driven strategies but, on the contrary, on the profound dwelling needs of human life. To that end, monastic architecture seems to be a moment of architectural history worth being studied as the producer of some of the earliest and most radical forms of collective housing. Being aware of the risks associated with investigating historical events seeking relations and principles linked to contemporary problems, I join the concerns of Iñaki Ábalos, who conducted his research on communal palaces "not without fear of falling into interpretative overreach"[1].

Before delving into the actual exploration of monasticism and its unique architectural declinations, I feel the need to clarify some theoretical statements regarding a certain autonomy of the architectural discipline and the possible resorting to what might be reductively called as *knowledge reuse*. According to Aureli, "[Aldo] Rossi's hypothesis of autonomous architecture [was] a theory of form liberated from the sequence of formal styles in the service of the dominant institutions"[2]. Aureli suggests the possibility of a politically autonomous architecture,

Charles-François Daubigny. Vue d'un phalanstère, village français d'apres la théorie sociétaire de Charles Fourier. 19th century.

1. Ábalos, Iñaki. *Palacios Comunales Atemporales*. 2020. p. 11
2. Aureli, Pier Vittorio. *The Project of Autonomy*. 2008. p. 57
3. Aureli, Pier Vittorio. *Op. Cit*. p. 58
4. Montresor, Marina & Lando, Stephan. *Defining Criteria*. 2018. p. 50
5. Ábalos, Iñaki. *Op. Cit*. p. 12
6. Lapierre, Éric. *Economy of Means*. 2019. pp. 123-125

capable of surviving as an independent discipline at the service of the city seen as a social body, rather than providing a tool to its dominant institutions. More precisely, Rossi sought to "continuing the modern tradition […] as a political and cultural project, a recognizable architectural development aiming to establish an alternative to the capitalistic city"[3]. If Rossi's position can be blamed of excessive optimism on regards of architecture's capacity of influencing political and economic procedures, thus on the possibility of an absolutely autonomous architecture, a position bending toward his convictions can nevertheless be taken. François Charbonnet suggests that architects "can still choose between a blind allegiance to contemporary demands and expectations and a critically articulated approach to it"[4], thus granting architecture a certain degree of liberty and giving it the possibility to critically oppose the system in which it finds itself acting.

In parallel, a few words need to be spent regarding the existence of a timeless foundation of the architectural discipline, allowing it to assume a sort of atemporal character and linking it to the Nietzschean idea of *eternal recurrence*[5]. If history can be assumed as "an entangled continuum that can potentially be reactivated", then as architects we should seek coherent solutions within the wide history of architecture, avoiding aesthetic derivations but rather "putting into practice formal solutions issued from the discipline of architecture […]. This will enable architecture to continue to exist as a sophisticated cultural medium that allows our environment to function in a harmonious manner"[6]. It is after these convictions that I intend to set up this investigation, rediscovering theoretical knowledge through an open, critical and non-methodological approach, close to Roland Barthes's reading of Deleuze's notion of culture: "for me,
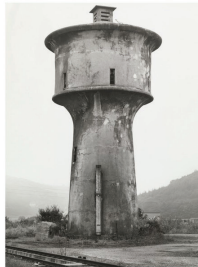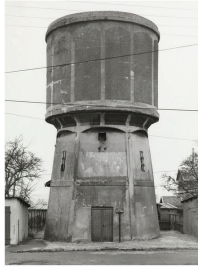
Bernd & Hilla Becher. Water Towers. 1988.

culture as "training" (≠ method) evokes the image of a kind of dispatching along an eccentric path: stumbling among snatches, between the bounds of different fields of knowledge, flavors"[7].
In order to clarify some resolutions of the following discourse, it is finally necessary to provide precise clarifications regarding the notion of type in architecture, since it embeds in its very definition some of the previous assumptions regarding the atemporality of architecture. Carlos Martí Arís accurately defined the architectural type as follows: "le type architectural se caractérise par la présence d'un invariant formel qui se manifeste dans des exemples divers et se situe au niveau de la structure profonde de la forme. Le type n'est pas une chose en soi, mais une analogie structurelle entre différentes choses, un concept découlant de la relation que l'on établit entre les choses"[8]. The notion of *formal invariant* mentioned by Arís suggests that an atemporal component in architecture could actually exist and manifest itself regardless of space-time conditions. Typology could thus be defined as the study of permanent, structural aspects of a form and its capacity to associate apparently dissimilar examples, or even of generating new ones. Furthermore, Arís stated that "Le type relève du concept, et non de l'objet. Il englobe une famille d'objets qui possèdent tous la même condition essentielle, mais ne correspond à aucun d'entre eux en particulier. Le type contient une description qui permet de reconnaître les objets qui le constituent. Le type se réfère à la structure formelle. Il n'est pas concerné par les aspects physionomiques de l'architecture"[9]. This exhaustive definition allows to consider that the atemporal condition of architecture could be explored through typological analysis, enabling a renewed look toward architectural history, with the possibility to build formal relationships without stumbling into the risks of a superficial historicism.
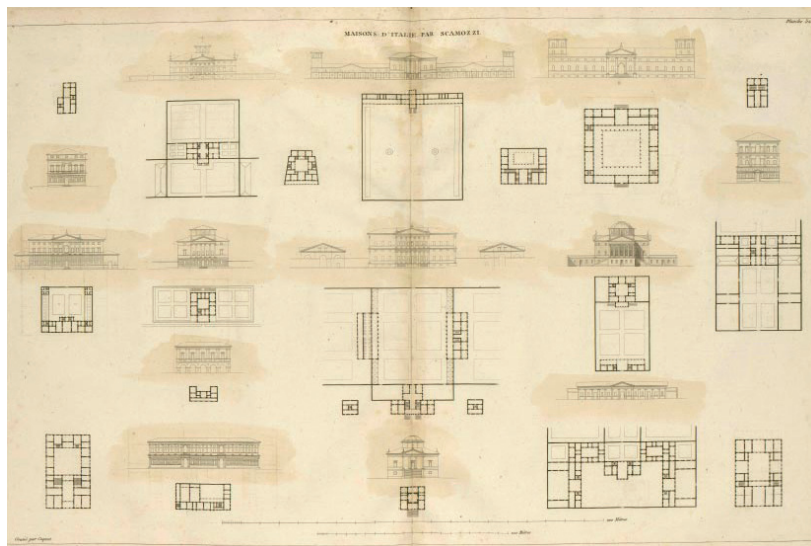
Jean-Nicolas-Louis Durand. Recueil et parallèle des édifices de tout genre, anciens et modernes, Planche 52. 1800.
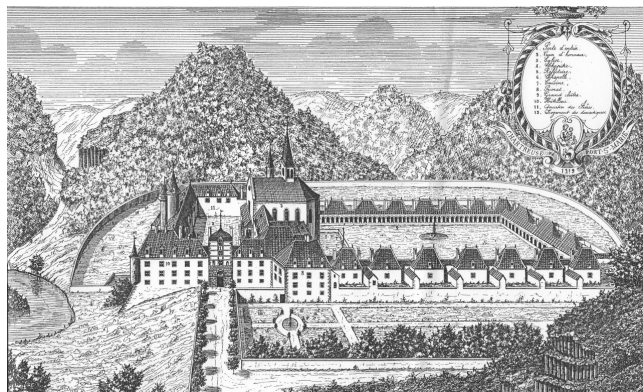
Chartreuse de Port-Sainte-Marie. 1219.

7. Barthes, Roland. *How to Live Together*. 2002. p. 4
8. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture*. 2021. p. 26
9. Arís, Carlos Martí. *Op. Cit*. p. 30
10. Arís, Carlos Martí. *Op. Cit*. p. 113

Despite the different conditions and contexts, the atemporal core of architecture stays the same: "L'architecte étudie les similitudes structurelles pouvant exister entre les modes archétypaux du comportement humain et les formes du monde matériel. Une telle recherche permet de donner aux activités leur juste place et, pour ainsi dire, de les formaliser"[10]. Giving a material form to human acts implies the set of formal rules able to link space to ritual, intended as the series of gestures which constitute the individual's daily life. The link between architecture and rite reports directly to monastic architecture as one of the purest expressions of this idea, as the materialization of a very precise way of life. The notion of type becomes then extremely useful, since it allows to tackle monastic architectural types as general formal solutions enabling the manifestation of disparate examples.

Images marked with the symbol «§» are not illustrations to support the reading, but rather aim to stimulate typological and transversal reflections, creating an architectural imagery and provoking theoretical glimpses throughout this historical investigation.

The Coptic Laura

The influence of monasticism played an extremely important role in the development of western domestic space; the individual cell as a reduced intimate space to be maintained in a complex balance with more collective ones has been a valid solution throughout the last centuries, attracting the interest of numerous architects and researchers. Coptic monasticism and its architectural declination in the Laura as a form of habitation prove to be of particular interest as the earliest and most radical concretization of this way of life.

Although the very origins of monasticism can be founded in the Buddhist culture around the third and second centuries BC, the same tradition has been adopted by Christians almost five centuries later, with very close ideological and architectural aspects. What clearly distinguished the foundation of western monasticism lied in the precise political and economic context in which it firstly took place. Because of the Edict of Thessalonica declaring Christianity as a State religion for the Roman Empire in 380 AD, many moral problems were engendered mostly by the controversial role of the bishops as public authorities on citizens' spiritual questions. This particular event inscribed itself in an precarious political and economic situation, which would lead to the collapse of the western Roman Empire only a few
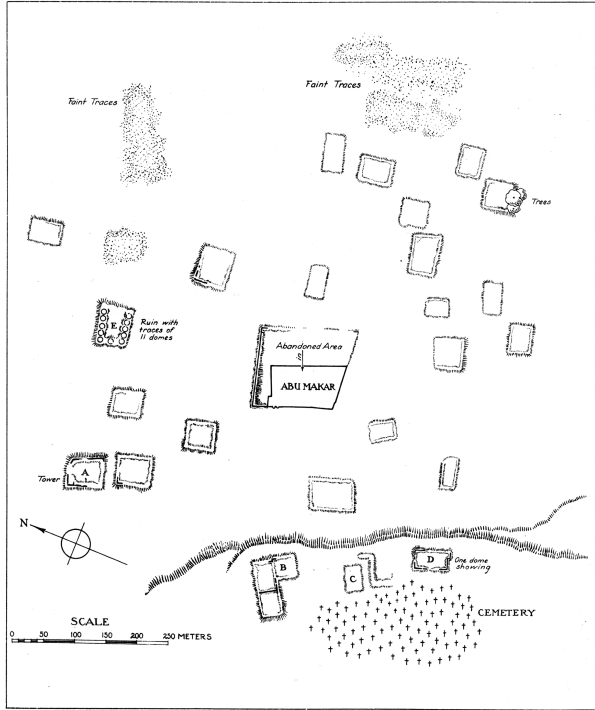
Hugh G. Evelyn White.
The Laura of St. Macarius, Survey Plan. 1933.

1. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 16
2. Aureli, Pier Vittorio. *Op. Cit.* p. 15
3. Barthes, Roland. *How to Live Together.* 2002. p. 26

decades later. A critical attitude towards power institutions was strongly integrated in the public opinion, especially in the part of population which, for religious reasons, was impacted by the alliance between Church and State. Since its beginnings, monastic culture has been characterized by the principles of an ascetic life and a critical renunciation towards society, leading the first heroic monks to leave their possessions and follow a hermitic way of life, seeking solitude and the development of an individual spirituality. Aureli provides an interesting insight on this historical moment: "Monastic life began in the deserts near Syria and Egypt, places that gave the early hermits a cultural *tabula rasa* where they could start again from scratch. From the outset, monasticism manifested itself as an inevitable and radical critique of power, not by fighting against it, but by leaving it"[1].

The subjects of this first and radical chapter of monastic history are commonly defined as "desert fathers", Christian hermits who concretely pursued asceticism as "a way to radically question given social and political conditions in a search for a different way to live […]"[2]. A fundamental reference for the understanding of these early monks and their precise habits is the extensive research conducted by Roland Barthes on the occasion of his seminar at the Collège de France in 1977, titled "How to live together". The concept of asceticism resonates with Barthes' definition of *anachoresis*, an essential aspect for the establishment of hermitic monasticism: the act of withdraw from the world and society as an individual's solution to the crisis of power[3]. What started out as a marginal protest of a few radical citizens, developed quickly into a popular movement capable of attracting thousands of people. It was estimated that "the Mountain of Nitria", an isolated desertic place which, by
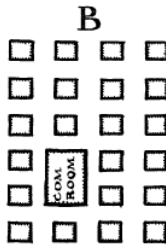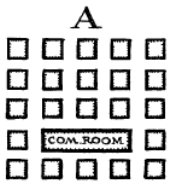
Carl Bertil Lund.
The Pachomian fold or house: its presumptive development. 1973.
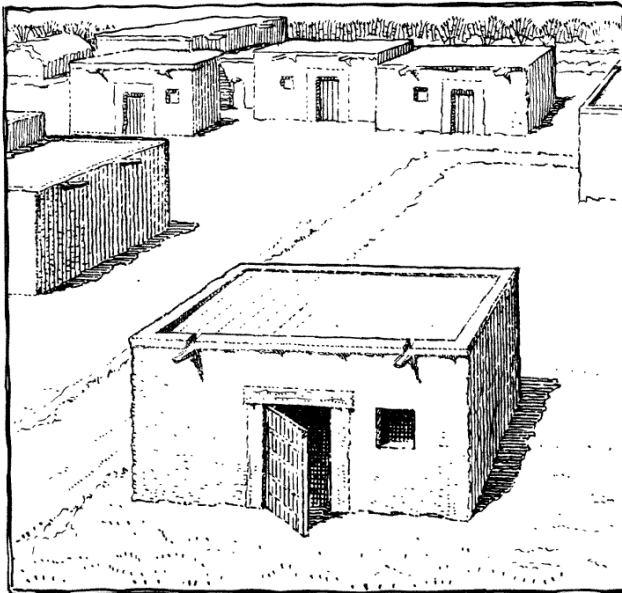
Carl Bertil Lund.
Primitive mud-built houses of a type the Egyptian desert monks built themselves. 1973.

its geographical position, turned out to be particularly attractive for the practice of solitude, hosted up to five thousand monks at the end of the fourth century [4]. The shared economic, political and spiritual reasons leading the desert fathers to their radical choice of life acted as a binder, driving many of them to gather around a leader or a particular place and thus establishing the early forms of semi-hermitic monasticism.

The first heroic phase of monasticism, characterized initially by hermit monks dwelling in isolated caves and later on in small semi-hermitic communities, left very little in terms of architecture. Nevertheless, many written findings allow us to understand quite precisely their manner of inhabit and the related architectural organization. The essence of the semi-hermitic way of life characterizing the origins of western monasticism is finely resumed by Barthes' notion of idiorrhythmy: "something like solitude with regular interruptions: the paradox, the contradiction, the aporia of bringing distances together – the utopia of a socialism of distance" [5]. This way of living together has the merit of ensuring that each inhabitant maintains his own personal rhythm of life, and this precise aspect is inscribed in the architecture of the Laura itself, namely "an informal aggregate of scattered cells around the central one of the community's founder and a small church" [6]. The spread of this model was such that it ended up becoming an effective paradigm, linked to the Laura as architectural type, allowing free declinations of the same principle. Idiorrhythmic monasticism granted great freedom to the monks, since mobility and flexibility both in time and space were insured. This particular condition was spatially translated in an architectural structure composed by a strong centrality, generally provided by a church or a shared facility, surrounded by an undefined number of scattered individual cells.
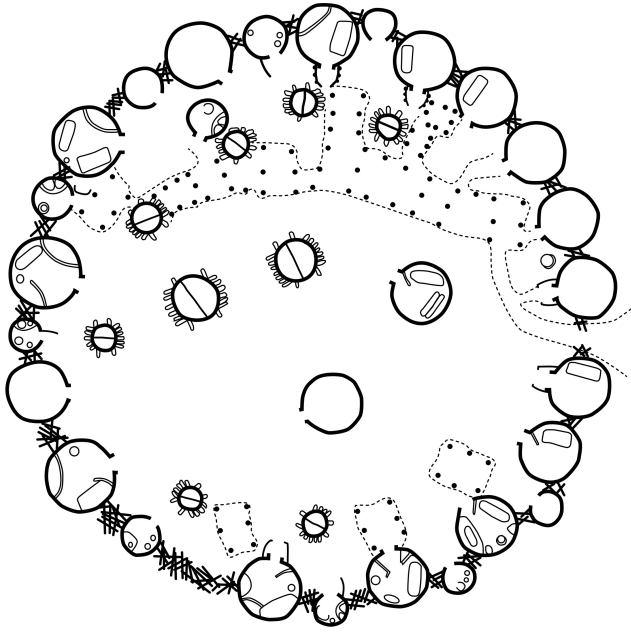
§ - Socks Studio.
Musgum's mud huts plan, Cameroon.
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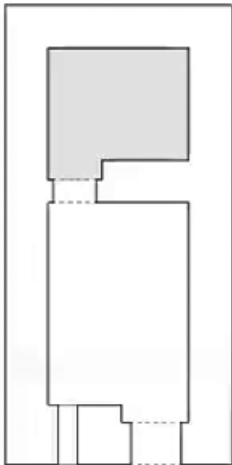
Pier Vittorio Aureli.
Monastery of St. Macarius at Nitria, Egypt, in
the 4th century AD. Detail. 2020

The monks used to live and contemplate in complete solitude during six days, gathering on Sundays for sharing experiences and communal practices. The absence of any kind of enclosure or physical boundary allowed them to move freely from place to place, according to their own individual need, while the lack of an imposed authority or any other kind of controlling power ensured the political autonomy of the individual; this was precisely one of the main reasons which originally led them to follow this unconventional way of life. Idiorrhythmic monasticism induced the appearance of the single dweller for the first time, intended as an individual within a community of individuals. The repetition of almost identical cells represents the architectural incarnation of this ideology, since the distanced living together of idiorrhythmic monasticism is embedded in the Laura's plans. The cell was by definition a small, autonomous space designed for one person, dimensioned around the body of the monk and built directly by himself as the first initiative act of a monastic way of life [7]. Symbol of protection and intimacy, it not only provided a minimal shelter to the monk, but it also contributed to reinforcing its individuality and sense of self in a completely new way, thus setting new dynamics in the notion of collective life. Pier Vittorio Aureli and Martino Tattara reaffirm that "living together is only possible when there is always the possibility of being alone" [8], emphasizing the importance of an individual intimate space for human habitation and tracing its origins back to the early monastic cell: "this form of monasticism was the seedbed for what would later become a fundamental typology of the modern world: the single room" [9]. There is no doubt that early monastic communities had to deal with the extremely delicate balance to be maintained between the individual and the community, and that their success was due precisely to the
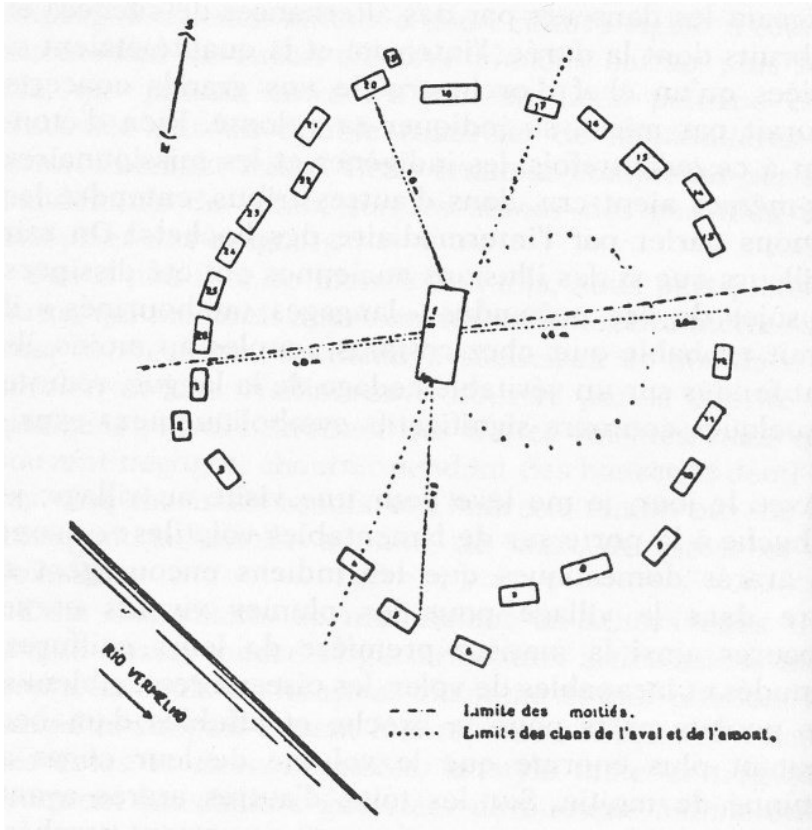
§ - Claude Lévi-Strauss.
Plan of Bororo de Kejara village, Brazil. 1936.

4. Hatch, William H.P. "A Visit to the Coptic Convents in Nitria", in *The Annual of the American Schools of Oriental Research*. 1925. p. 94
5. Barthes, Roland. *How to Live Together.* 2002. p. 6
6. Horn, Walter. "On the Origins of the Medieval Cloister". in *Gesta*. 1973. p. 15
7. Dunn, Marilyn. *The Emergence of Western Monasticism*. 2003. p. 14
8. Korody, Nicholas. *Living together is only possible if there is always the possibility to be alone*. Accessed June 21, 2021.
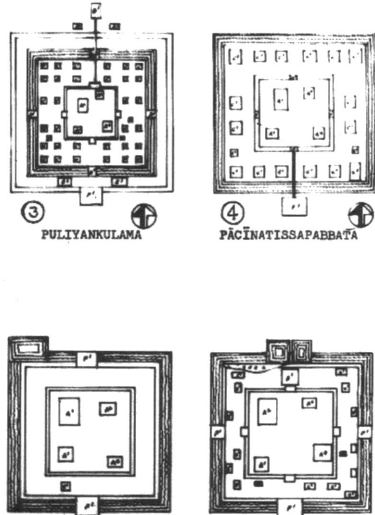9. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 20

§ - Kisho Kurokawa. Nakagin Capsule Tower Building, Tokyo. 1972. Photograph: Noritaka Minami. 2012.
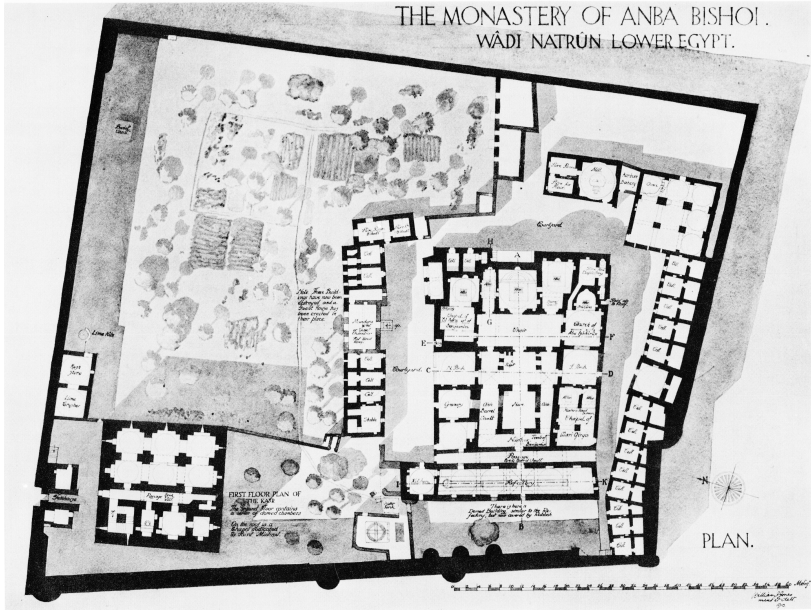
Hugh G. Evelyn White.
Pachomian Monastery of Anba Bishoi, Egypt, in the 9th century. 1933.

§ - Wolfgang Braunfels.
Buddhist monasteries, Sri–Lanka, in 6th to 10th
centuries AD. 1969.

very idea of idiorrhythmy.

One of the first revolutions in the history of monasticism lies in the wide spread of Pachomius the Great's teachings, that sealed the birth of cenobitic monasticism. Pachomius, a charismatic Egyptian monk, introduced for the first time the idea of coenobitism, namely a communitarian practice of monasticism under the direction of an authority, as a response to the pragmatic difficulties encountered in the practice of hermitism. The growing popularity of monasticism coincided with the need for a better organization, especially within large communities such as Nitria or Tabennisi. Pachomius established the first proper monasteries, fundamentally seeking a more communitarian life and gradually giving up on the solitude which characterized the first heroic monks. As a former hermitic monk, he also realized that a sustainable hermitic life could only happen through a communitarian self-care, ensuring physical protection and a sufficient amount of resources. Although the individual cell remained as a fundamental element in the architectural structure of the pachomian monasteries, the communitarian spaces and activities started gaining more and more importance, while commitment to labor as a shared productive activity aimed to a stronger self-sufficiency. Unsurprisingly, such an organization required the institution of an authority within the community, thus braking the delicate balance insured by idiorrhythmic monasticism. Barthes points out that "historically, the passage from hermitism to coenobitism immediately marked the introduction of a hierarchy: the invention of the chief", delineating a strong opposition between idiorrhythmy and coenobitism founded precisely on the introduction of an authority [10]. Unlike idiorrhythmic charismatic leaders, who played mostly a role of model for the monks who freely chose to follow their example,

§ - Oswald Mathias Ungers.
Einkreisung, in Morphologie: City Metaphors. 1982.
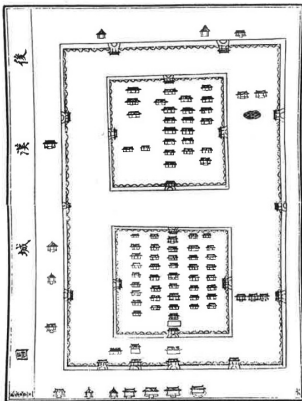
§ - Eastern Han Luoyang. 1st century AD.

cenobitic chiefs benefitted from an institutionalized decision-making power above their community. This drastic ideological transition had direct spatial and architectural repercussions, essentially gravitating around the concept of *stabilitas loci*. Art and architecture historian Walter Horn gives a typological description of the general form of the early pachomian monasteries: "the large number of monks called for a systemic approach to the problem of housing and eating, and […] as the monastery grew, the formerly scattered cells had to be brought together into ordered groups in a grid […] that could adopt a variety of configurations"[11]. In addition to the systematic presence of a church and a common room, Horn suggests the simultaneous appearance of collective spaces such as workshops, guest houses, communal kitchens, refectories and chapels, gradually transforming monasteries into well-organized micro-universes. The important reciprocity between the individual and the community proper to coenobitism is mirrored in the plan of the pachomian monasteries, in the same way that the Lauras represented, through their formal organization, the semi-hermitical way of life typical of the beginnings of the monastic movement. Monastic architecture demonstrates its ability to integrate, materialize and influence ways of life, thus creating a link between the tangible, material world and its symbolic meanings. In this regard, an architectural element extensively employed since the introduction of coenobitism is highly representative: the enclosure wall. "Pachomius set about the architectural solution to the special requirements of the monastic community by surrounding his monastery with a wall – not so much in response to brigandry (at least not initially), but rather because the wall was a symbol of monastic self-determination"[12]. Although there are conflicting opinions about the original purpose of the enclosing
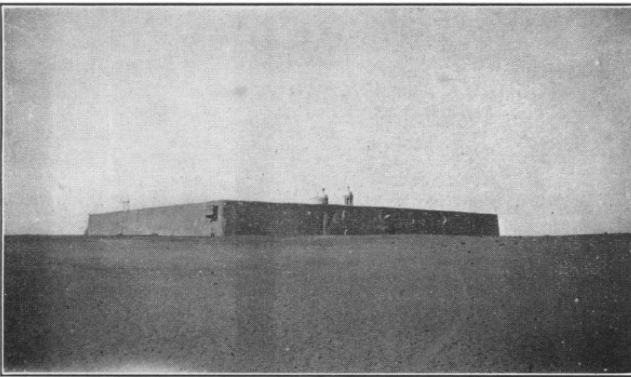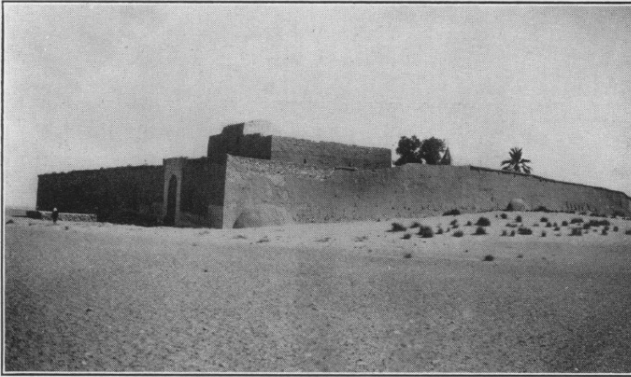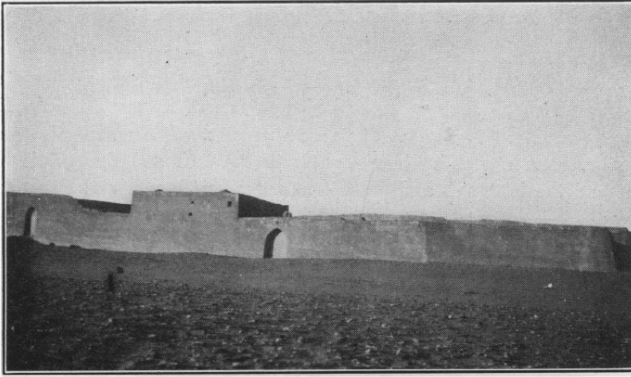
William H.P. Hatch.
Coptic Convents in Nitria, Egypt. 1924.

wall, whether it was meant since the beginnings as a symbol of detachment from the surrounding reality or a physical protection against the frequent robberies, it represents well the capacity of monastic architecture to give material form to a precise ideology. The enclosure wall surrounding the increasingly complex monasteries, as fully depicted by the travel reports of William H.P. Hatch, presented very few and narrow entrance gates, demarcating a violent threshold, a clear definition of an interior and an exterior [13]. Mariabruna Fabrizi and Fosco Lucarelli define the enclosure as an archetype evoking protection from the outside and the construction of a centripetal space for a community [14]. The notion of *stabilitas loci* introduced by Pachomius, in clear opposition to the idiorrhythmic spatial flexibility, was thus firmly relying on the influence of the enclosure wall on the monks' way of dwelling as a community and their perception of the surrounding environment. "The enclosure defines a territory, and by extension the identity of its occupants"[15]; the act of tracing a limit, of establishing a physical perimeter, consolidates the inhabitants' sense of belonging, projecting the space towards the inside and anchoring the community to the place. This architectural revolution gave birth to a major paradox that haunted the history monasticism, and which is well described by Barthes as follows: "making it impossible for the enemy to get in gets converted, through excess, […] into the self-imposed impossibility of getting out"[16]. The enclosure proved to be a critical and ambivalent element, both reinforcing the sense of community and provoking its increasingly problematic confinement.

Coptic monasticism, from the early Lauras to the later pachomian structures, provides a range of radical and intense experiments in the domain of human habitation, essentially basing their architectural solutions on the importance of the single
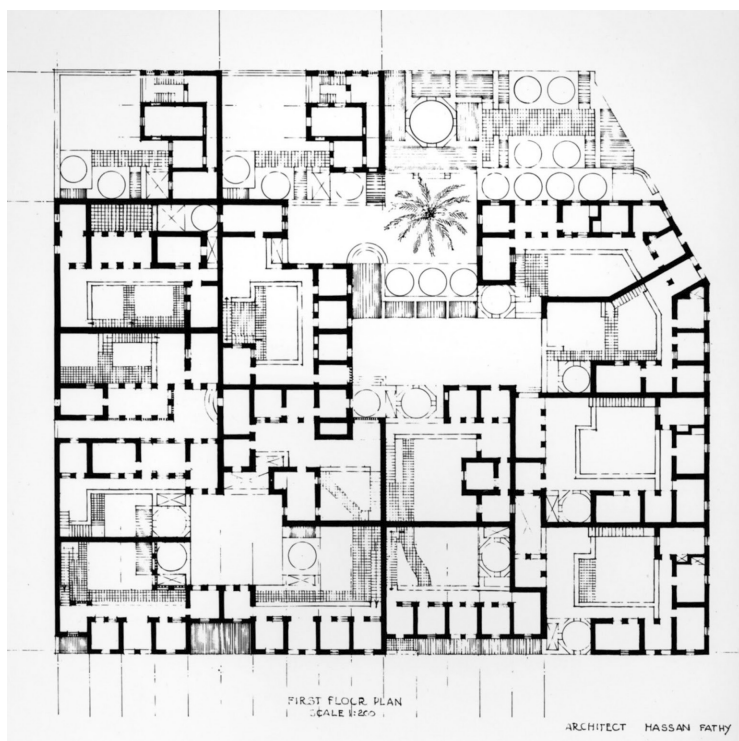
§ - Hassan Fathy.
New Barrid Village in Kharga, Egypt. 1967.

10. Barthes, Roland. *How to Live Together.* 2002. p. 54
11. Horn, Walter. "On the Origins of the Medieval Cloister". in *Gesta*. 1973. p. 16
12. Ibid.
13. Hatch, William H.P. "A Visit to the Coptic Convents in Nitria", in *The Annual of the American Schools of Oriental Research*. 1925.
14. Fabrizi, Mariabruna & Lucarelli, Fosco. *Inner Space*. 2019. p. 44
15. Barthes, Roland. *Op. Cit*. p. 58
16. Barthes, Roland. *Op. Cit*. p. 60
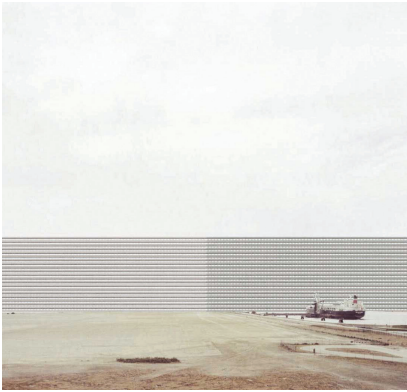
§ - Dogma.
A Simple Heart. 2009.

Kellia archeological site, Egypt. Date unknown.
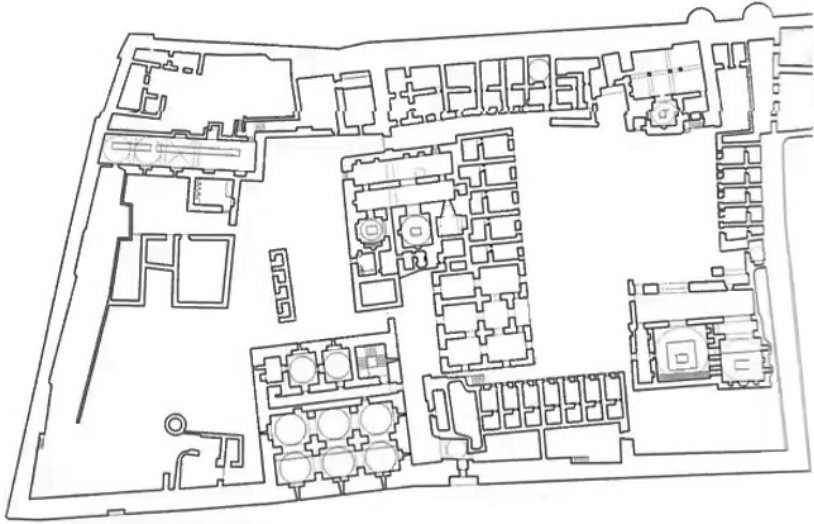
Monastery of St. Macarius at Nitria, Egypt, in 4th century AD.
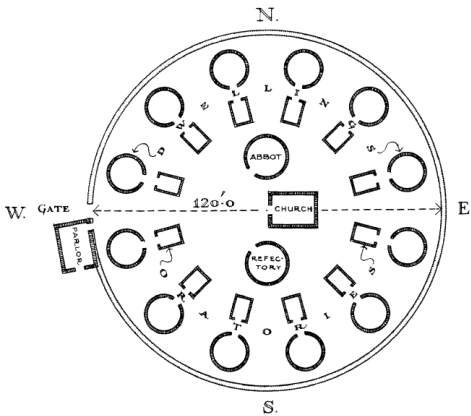
§ - Carl Bertil Lund.
Schematic plan of Abbington Abbey,
Engalnd, in 675 AD. 1973.

dweller, materialized through the individual cell, and the complete sharing of the collective spaces. The ambiguous function of the enclosing wall and authoritarian control introduced by Pachomius can be politically read as a first attempt to institutionalize, and thus annihilate, the idiorrhythmic forms of collective life, weakening individual freedom and promoting the creation of collectivities which hierarchical power makes easier to control. Nevertheless, the effectiveness of this architectural type is demonstrated by its wide spread in the following centuries and its flexibility is proven by the surprising hybridizations resulting by its combination with diverse local traditions.

The Abbey

Since the introduction and diffusion of the pachomian ideas about the necessity of a communitarian way of life as a frame for a sustainable practice of asceticism, monastic history in terms of architecture can be read as a long process of coenobitic consolidation within the spatial organization of monasteries. The progressive giving up on the dichotomy between the individual and the community, which constituted the very essence of the early forms of monasticism, resulted in a decisive architectural alteration: the renouncement to the individual cell as the architectural foundation of the monastic structure.

The transition leading from pachomian monasteries to the widely spread Benedictine abbeys has given rise to some remarkable hybrid solutions, of which Horn gives some precise descriptions [1]. As an example, the monastery of Jumièges, founded around 655 AD, presents itself as a fortified enclosure integrating a church, several chapels and a guest house. In Jumièges, "the monks did not live in individual cells, but were bedded on the upper level of a huge double-storied house", whose ground floor included the refectory and the cellar [2]. If the overall spatial layout refers directly to late examples of Coptic monasticism, namely a grid-based composition within a squarish enclosure, the introduction of a communal dormitory situated at the upper level of a
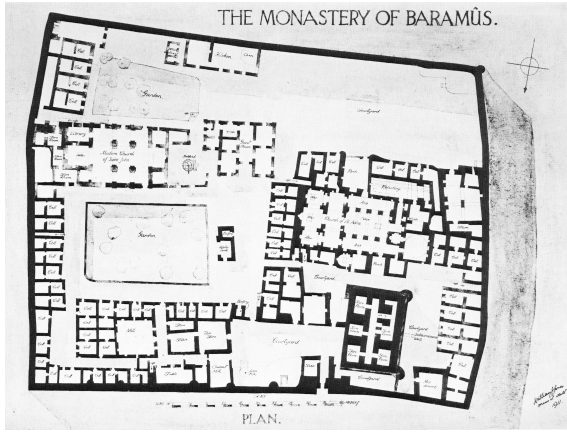
Hugh G. Evelyn White.
Monastery of Baramûs, Egypt, in the 5th century AD. 1933.
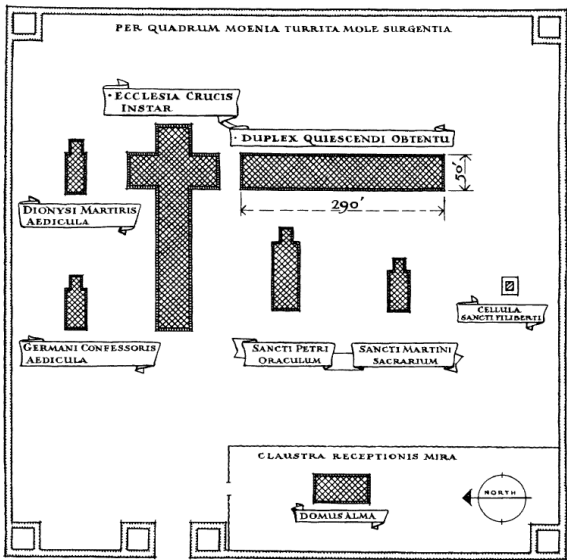
Carl Bertil Lund.
Schematic plan of the Abbey of Jumièges, in 655 AD. 1973.

1. Horn, Walter. "On the Origins of the Medieval Cloister". in *Gesta*. 1973.
2. Horn, Walter. *Op. Cit*. p. 34
3. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 22

multifunctional building is clearly related to the Benedictines'
understanding of collective habitation. Due to its architectural
characteristics, such as the lack of a cohesive character and the
rigid threshold laid down by the enclosure wall, it is difficult
to define Jumièges as a proper abbey. Nevertheless, it serves as
one of the inevitable precursors for the development of the best
known monastic architectural type.

A crucial moment for the establishment of the Benedictine order
through the whole European continent resided in the Carolin-
gian political and cultural reform, at the beginning of the eighth
century. The Visigoth monk Benedict of Aniane understood the
political potential of the Benedictine rule, formulated in 534
AD by Benedict of Nursia, and acted as an emissary between
the religious order and the Carolingian authorities. The influ-
ence of Aniane resulted in the imperial decision to invest in the
Benedictine order, with the clear aim of reinforcing the territo-
rial control on the Holy Roman Empire, transforming for the
first time monasticism in a fundamentally political institution.

The rise to power of the Benedictine rule as the leading example
for the whole monastic organization had clear repercussions on
the monks' way of life and, consequently, on the architectural
identity of monasteries. A radicalized coenobitism was imposed
through the abolishment of any kind of individual space, thus
promoting the proliferation of increasingly developed common
facilities. The introduction of manual and intellectual labor as
an integral part of the daily practice carried out by the monks
contributed to the evolution of such spaces, of which the library
or the garden are just some of the most common examples. De-
prived of their individual spaces, the monks found themselves
sharing the leftover time in productive activities, putting their
bodies and minds at the service of the community. In order
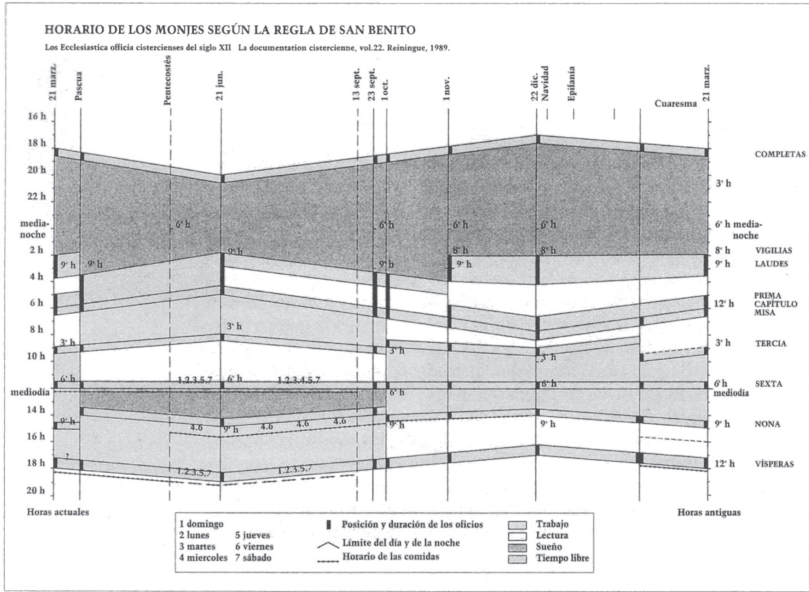
Jean-François Leroux-Dhuys.
Schedule of the monks according to the Benedictine rule. 1989.
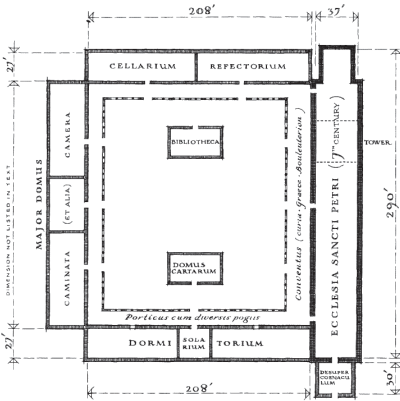

Carl Bertil Lund.
Abbey of St. Wandrille, in 833 AD. 1933.

4. Coomans, Thomas. *Life Inside the Cloister*. 2018. p. 86
5. Irvine, Richard D.G. "Stability, Continuity, Place", in *Religious Architecture*. 2013. p. 27
6. Barthes, Roland. *How to Live Together*. 2002. pp. 90-93

to prevent possible disorders and establish a common rhythm in the monastic community, Benedict introduced an aspect of fundamental importance in the future evolution of the abbeys and their architectural composition: a collective daily schedule. "Within cenobitic monasticism, life is formalized in minute detail. […] Not only specific moments, but all actions, even the most simple daily routines, are ritualized in an incessant *opus dei*. The cenobitic monastery provides us with the first instance of the management of time through strict scheduling"[3]. This meticulous organization needed the reinforcement, through the imposition of the monastic rule, of two critical aspects already introduced by Pachomius; the patriarchal organization of the community was implemented by the figure of the abbot, representing a sort of leading *pater familias*, while the *stabilitas loci* was strengthened by the monks' lifelong commitment to a particular place. "Stability, according to Benedictine spirituality, is the visible, physical expression of a deeper reality – that of communion. It is around that reality of communion that the whole way of life of the monastic community is built"[4]. Richard Irvine states in a clear way how all the elements introduced by the Benedictine rule cooperate for the ultimate goal of establishing a strong sense of belonging: "Taken together, what we see is a powerful commitment to becoming part of a household"[5]. Although the personal choice of joining the rule constitutes the foundation for the well-functioning of this social system, it is impossible not to heed Barthes' critical vision as assiduous defender of idiorrhythmy, essentially defining the radical Benedictine coenobitism as an oppressive control apparatus, using hierarchy and institutionalized power to eradicate any form of alternative practice of monasticism[6].

One of the most immediate results of the strict scheduling
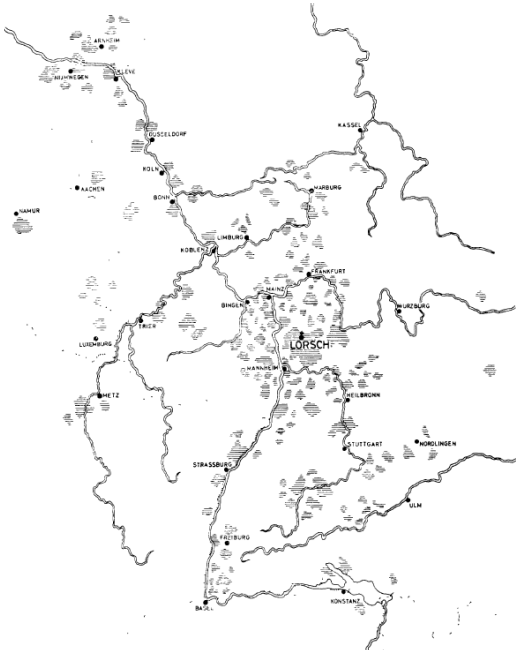
Walter Horn.
Map showing the distribution of the land held by the
monastery of Lorsch in Germany. 1933.

Pieter Pourbus.
Ten Duinen Abbey in Koksijde, Belgium. 1571.

introduced by Benedict was the extremely efficient productivity of monasteries, both in terms of intellectual and physical work. Marilyn Dunn envisages the existence within the monastic enclosure of "workshops producing goods made by the monks who have mastered the crafts" and suggests that the agricultural work of the monks might have been crucial to the monastery's survival[7]. "In proposing that a monastery should be so arranged that all necessary things, such as water, mill, garden and various crafts may be within the enclosure, Benedict made the monastery economically independent of the secular world", thus clarifying that the tendency towards autonomy is embedded in the rule itself [8]. In this regard, Marot describes the origins of Benedictine monasticism as "a phenomenon of spatial and political contraction into smaller vernacular communities […] a movement of exile and recollection in remote rural areas, where sisters and brothers invested their energy and care in both the cultivation of the earth and […] the transmission of a cultural legacy"[9]. Agriculture played a central role in transforming monasteries, by means of their self-sufficiency needs, into actual proto-industrial organizations. This intense ethos of production increased the quality of the political relationships between the abbots and imperial authorities, turning monasteries into powerful points of territorial control, capable of assuring a constant amount of economic income. Politically and economically corrupted, monasticism converted itself from a scattering of self-sufficient communities to an highly developed web of productive hubs, defined by Horn as "monastic agrarian feudalism"[10]. The abbey of Cluny, one of the most famous examples of this type, has been described as a territory humanized to the extreme by means of a fine network of productive threads, thus exceeding the scale of the building to become a territorial factory and
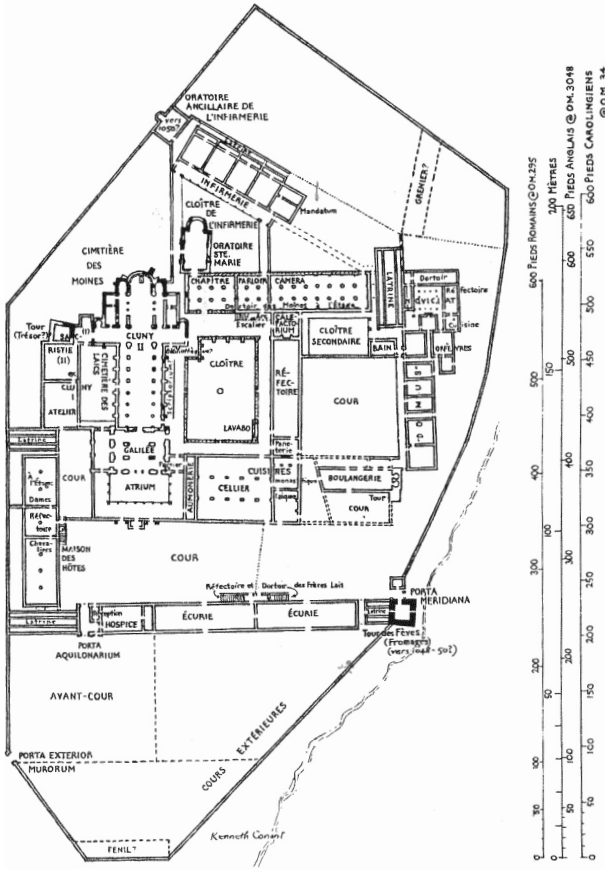
Kenneth J. Conant.
Ground plan of the Abbey of Cluny II in 1050. 1975.

7. Dunn, Marilyn. *The Emergence of Western Monasticism*. 2003. p. 125
8. Horn, Walter. "On the Origins of the Medieval Cloister". in *Gesta*. 1973. p. 40
9. Marot, Sébastien. *Taking the Country's Side: Agriculture and Architecture*. 2019. p. 111
10. Horn, Walter. *Op. Cit.* p. 40
11. Prieto, Eduardo. "Historia Medioambiental de la Arquitectura" in Ábalos, Iñaki. *Palacios Comunales Atemporales*. 2020. p. 39
12. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture.* 2021. p. 113
13. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 23

developing, later on, into a city in its own right [11].

The period between the tenth and twelfth centuries can be considered as the highest in terms of economic growth and architectural production, making abbeys a symbolic type of monastic architecture reproduced in large numbers throughout Europe. Nevertheless, this specific moment coincides with the profound corruption of the very ideals of monasticism, namely the pursuit of an ascetic life as an individual critic to power and the possibility of a collective life respectful of everyone's personal rhythm.

It is particularly interesting to understand how architecture participated to this transformation process and which spatial resolutions had to be generated in response to this new way of life. "L'architecte étudie les similitudes structurelles pouvant exister entre les modes archétypaux du comportement humain et les formes du monde matériel. Une telle recherche permet de donner aux activités leur juste place et, pour ainsi dire, de les formaliser. Dans ce sens, l'architecture est une procédure capable de donner forme à l'activité. […] Tout rite renvoie à une forme, et l'opération par laquelle l'activité adopte une forme stable constitue l'architecture ; d'où le lien profond entre architecture et rite" [12]. The extremely diversified dimension adopted by Benedictine monasticism, including a variety of programs and communal rituals, demanded an equally complex spatial organization. Architectural planning and composition became fundamental in order to produce plans capable to combine this multiplicity of spaces in a single place. "Rather than a generic container or a symbolic monument, the architecture of the monastery is an apparatus that obsessively frames and identifies living activities"[13]. Aureli clarifies in a subtle way the paradoxical tension between architecture as the result of a particular spatial need and its capacity, once materialized, to influence those same

$ - Pietro Longhi.
Convitto in casa Nani alla Giudecca. 1755.
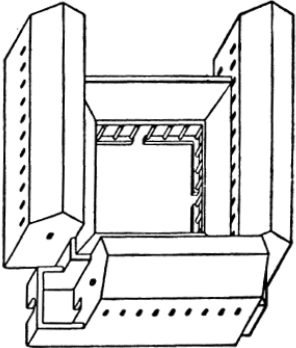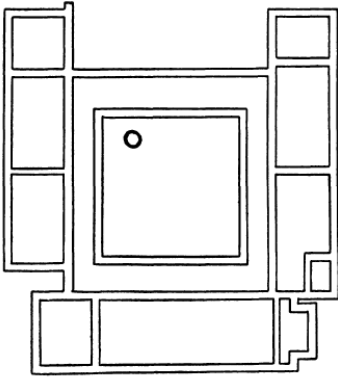
Walter Horn.
Plan and isometric reconstruction of the monastery of Lorsch,
Germany, in 765 AD. 1973.

activities who induced its formation: "And yet what is meant above all to condition the life of the monks is the architecture of the monastery. Within the monastery, form follows function in the strictest way possible. Like a functionalist building, the typical form of the medieval monastery is simply an extrusion of the ritual activities that take place within"[14]. The relationship between the human activities taking place in the monastery and the spaces provided for this purpose was very precise, and acted as a reinforcement to the time scheduling imposed by the order. As a result, architecture participates to a complete control and collectivization of the daily rituals of the monks. Despite this seemingly dehumanizing character, monasteries assumed a different meaning through the life of the monks. "This is about home" states Irvine to introduce an interesting analysis on Benedictine abbeys, simply described as practical architectures for living[15]. Focusing on the domestic aspect of these sophisticated architectural structures, Irvine considers that the monastic buildings "express the aspirations of a group that wanted to build a home: living, working and growing through social interaction"[16].

Since the Benedictine rule "neither assumed nor proposed to establish any fixed relationships between the component parts of the monastery"[17], the greatest challenge for monastic architecture was to allow and organize the coexistence of two essentially opposed programs: the intimate, domestic life of the monastic community and the productive hub allowing the economic and political autonomy of the abbey. In a very practical way, it was a matter of arranging diverse volumes in a functionalist disposition, taking into account both their proper program and their physical properties and reconciling them with the topographical situation. As an example, it was observed how the position of
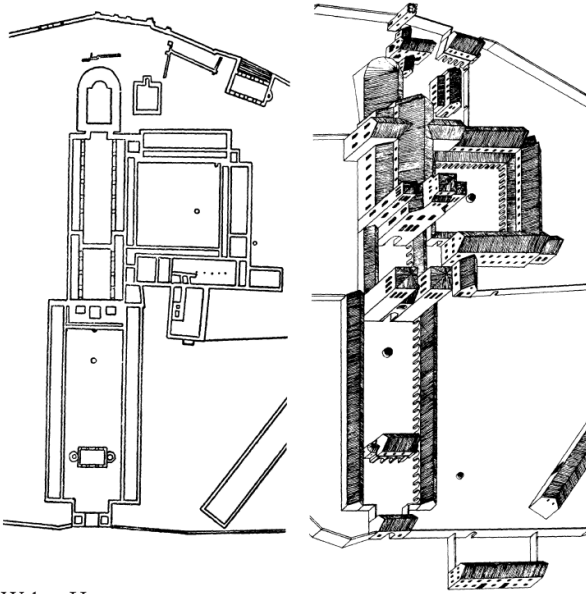
Walter Horn.
Plan and isometric reconstruction of the monastery of Richbold,
Germany, in 804 AD. 1973.

14. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 23
15. Irvine, Richard D.G. "Stability, Continuity, Place", in *Religious Architecture*. 2013. p. 25
16. Ibid.
17. Horn, Walter. "On the Origins of the Medieval Cloister". in *Gesta*. 1973. p. 19
18. Lapierre, Éric. *Economy of Means*. 2019. p. 55
19. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture.* 2021. pp. 138-139

Hisao Suzuki.
Thoronet Abbey. 2006.
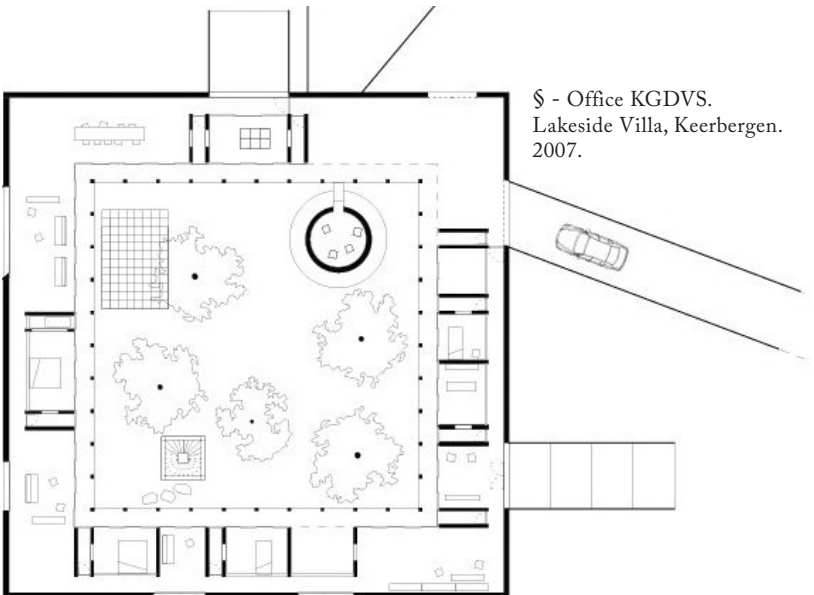
§ - Office KGDVS.
Lakeside Villa, Keerbergen.
2007.
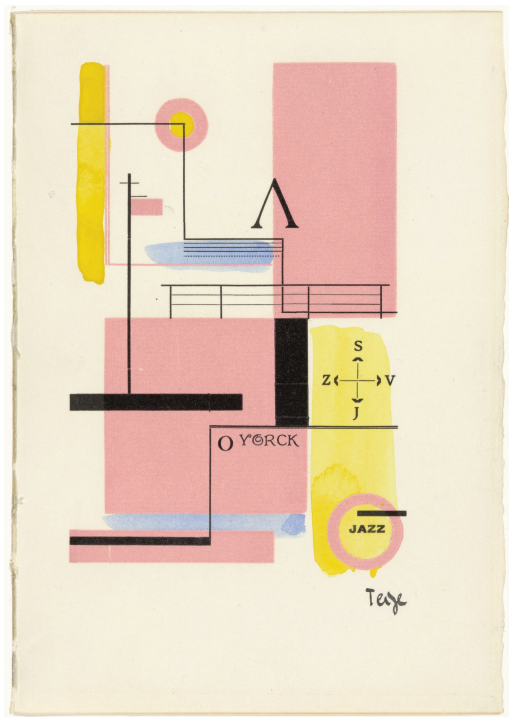
§ - Karel Teige.
Composition with typographic elements. 1928.
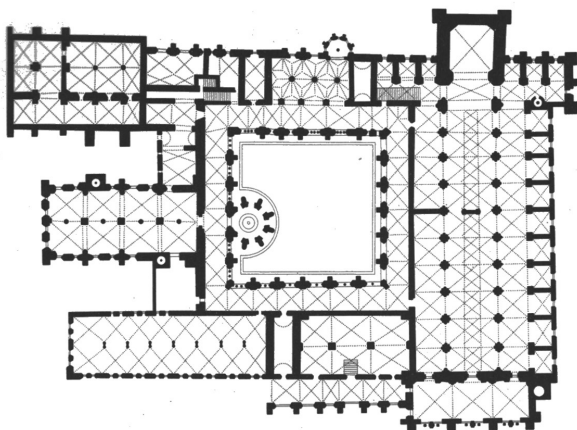
Cosa Mentale.
Plan de l'Abbaye de Maulbronn en 1150–1210.
2021.

the church, representing in the majority of the cases the biggest volume in the monastery composition, depended mostly on the weather conditions of the site. In Mediterranean contexts, it was customary to place it adjacent to the south side of the cloister, so as to provide shade and coolness to the outdoor spaces, while in northern Europe the tendency was to place it on the opposite side, so as to protect the monastic compound from the strong northern winds and allow a good amount of sunlight on the external spaces. The architectural freedom allowed by the Benedictine rule enabled the monastic communities to experiment and build a variety of singular realities, cohesive and unique compositions. "Take the example of an abbey or a convent: made up of a series of buildings which are all different in their forms, types and functions – chapterhouse, refectory, oratory, chapel, library, etc. – the ensemble nevertheless forms one coherent whole which is referred to as *a* building, *a* convent, *an* abbey" [18]. This portrayal resonates with Arís' notion of structure, which applies particularly well to monastic architecture: "Le terme structure se réfère à un ensemble d'éléments non indépendants, liés les uns aux autres par diverses formes d'articulation, de compénétration et de solidarité, au moyen desquelles l'ensemble cesse d'être une simple forme désagrégée d'éléments pour acquérir une cohésion interne" [19].

An architectural system worth being investigated because of its impact on the spatial development of abbeys as well as its exceptional symbolic significance is the cloister. Numerous architects and researchers have tried to define with great precision its origins, yet there is still no shared convictions. The abbey of St. Riquier, founded around 790 AD, presented in its original version a long covered gallery, linking the three churches present on the site through a triangular shape; this could somehow be

Paul Pétau.
Engraving of St. Riquier in 799 AD.
1612.
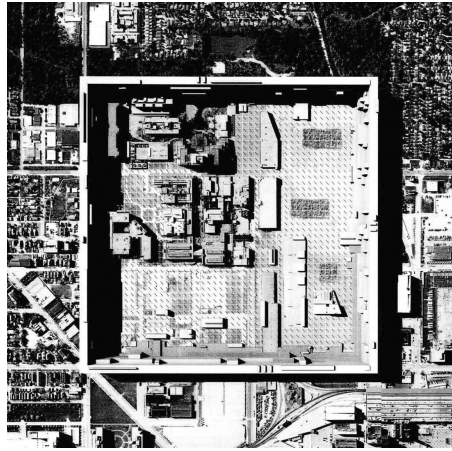
§ - Dogma.
A Simple Hearth. 2002-2009
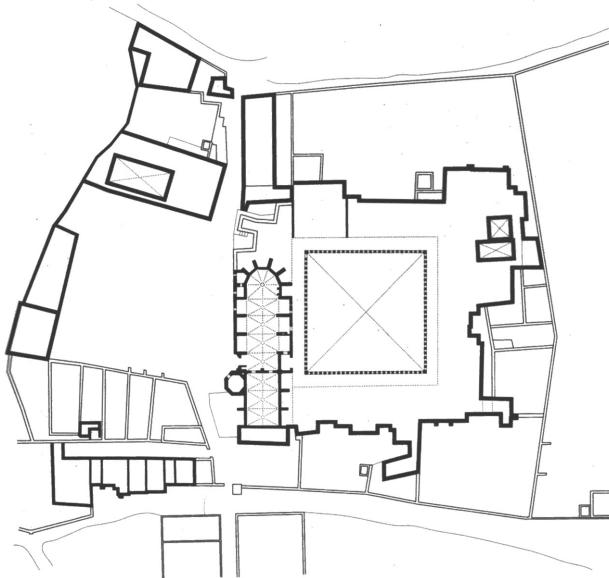
Cosa Mentale.
Plan du Monastère de Petralbes, Barcelone, en 1327.
2021.

20. Horn, Walter. "On the Origins of the Medieval Cloister". in *Gesta*. 1973. p. 40
21. Horn, Walter. *Op. Cit.* p. 42
22. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 23

pointed out as one of the earliest prototypes of the Benedictine cloister. On a formal level, the classical Mediterranean tradition has surely influenced many architectural choices such as the symmetrical organization, the idea of *claustrum* or the intensive use of columns. Nevertheless, it can be agreed that the invention of the cloister coincided with the rise of the feudal identity of monasteries [20]. The inclusion within the monastic enclosure of large-scale productive activities such as gardening, horticulture, livestock, stables, distilleries and crafts of all kinds "called out for an architectural solution allowing the monks to perform their sacred task in quarters isolated from those of serfs and laymen"[21]. The cloister clearly appears as a strictly Benedictine need, a precise architectural response to the question of the co-existence within the monastery of two opposed realities such as the intimacy of the monks' way of life and the productiveness of the surrounding agrarian factory. Although this need seems to call directly for an inner enclosure, an ambiguous delineation of a monastery within the monastery, the cloister stands out as a complex spatial resolution; formally similar to a courtyard, it rather acts as a distributive system, a covered squared gallery surrounded on its four sides by spaces to which it serves as the sole access point. This interiorized distributive apparatus provided the monks with an outdoor space while enabling their complete isolation; the perimetrical walls of the buildings surrounding the cloister acted as an internalized enclosure, often presenting one single and discrete entrance door. Aureli emphasizes the symbolism of such a strong architectural entity: "The introverted space of the cloister, the point of access to most of the facilities, gives a precise form to communal life and the sense of sharing" and thus contributes to reinforcing the communitarian identity and the belonging to a specific place [22]. In

Hisao Suzuki.
Thoronet Abbey. 2006.

23. Coomans, Thomas. *Life Inside the Cloister*. 2018. p. 54
24. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture.* 2021. p. 30
25. Coomans, Thomas. *Op. Cit*. pp. 108-109
26. Ibid.
27. Ibid.
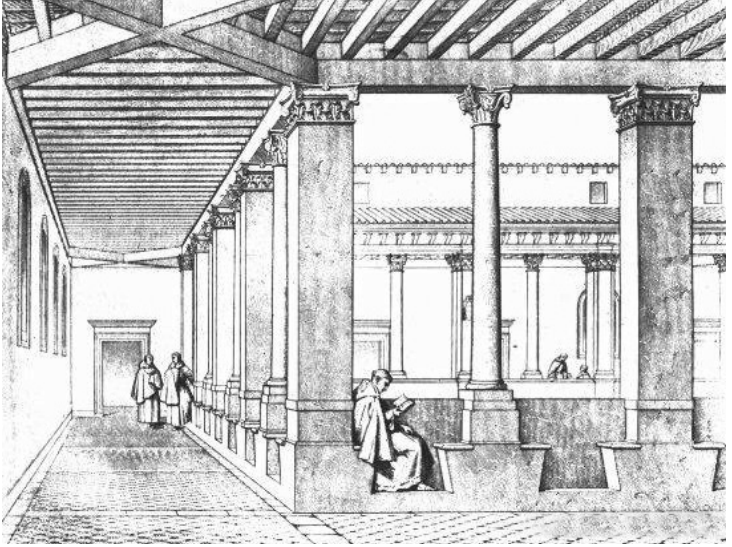
Paul Letarouilly.
Edifices de Rome Moderne. 1840.
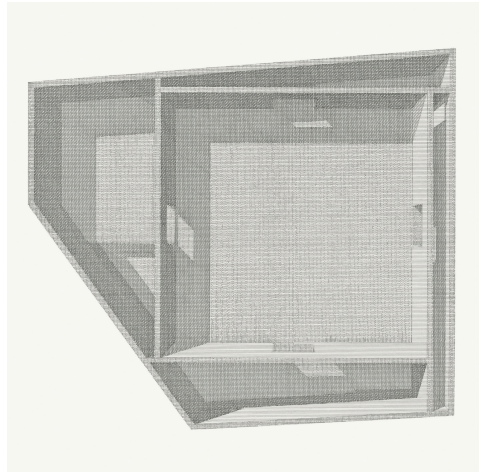
§ - Pier Vittorio Aureli.
The Marriage of Reason and Squalor. 2014.
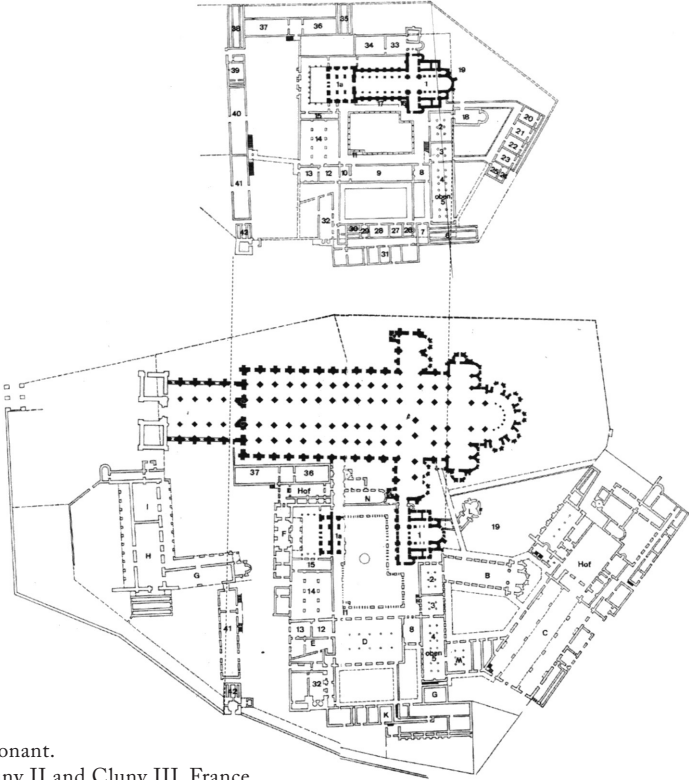
Kenneth J. Conant.
Abbey of Cluny II and Cluny III, France,
in 910 AD and 1080 AD. 1968.
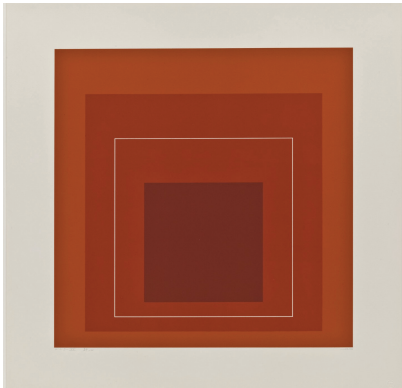
§ – Josef Albers.
White Line Square XV. 1966.

addition, the inaccessible and purely contemplative garden occupying the center of the cloister became the very object and the physical manifestation of this sense of belonging. Furthermore, both Coomans and Irvine insist on the social role of the cloister for the community, as central and multipurpose "place through which to pass but also in which to stay", facilitating human interactions [23]. Despite the variety of its architectural characteristics and the richness of its symbolic meanings, the cloister functions as a generic formal structure, and thus can be typologically described: "Le cloître constitue une idée de l'architecture basée sur la construction d'une galerie couverte qui entoure et définit un espace extérieur clos et régulier, tel un jardin intérieur. Ce portique relie une série de corps ou de pièces et leur confère une unité supérieure, de sorte que l'organisme dans son ensemble tend à l'introversion. Toutes les parties recréent l'intégralité de ce noyau intime, dans lequel l'édifice se contemple et prend le pouls de sa vie quotidienne. Ce principe architectural est très courant et s'adapte à toutes sortes de circonstances"[24]. It is probably because of its flexibility and its conceptual meaning that the two most common principles of growth of monastic compounds developed precisely around the cloister. The first one, defined by Coomans as the process of centrifugal growth, employed the cloister as gravitational center "from which the buildings extended out in all directions, including height"[25]. This principle allowed to respect the delicate threshold of the inner monastic enclosure while allowing the successive extensions of the productive areas, which often "ended up no longer responding to a pre-established overall plan"[26]. The second one, far less common, was characterized by "the multiplication of cloisters and rectangular courtyards according to a grid system", and granted a more organized and geometric growth [27].
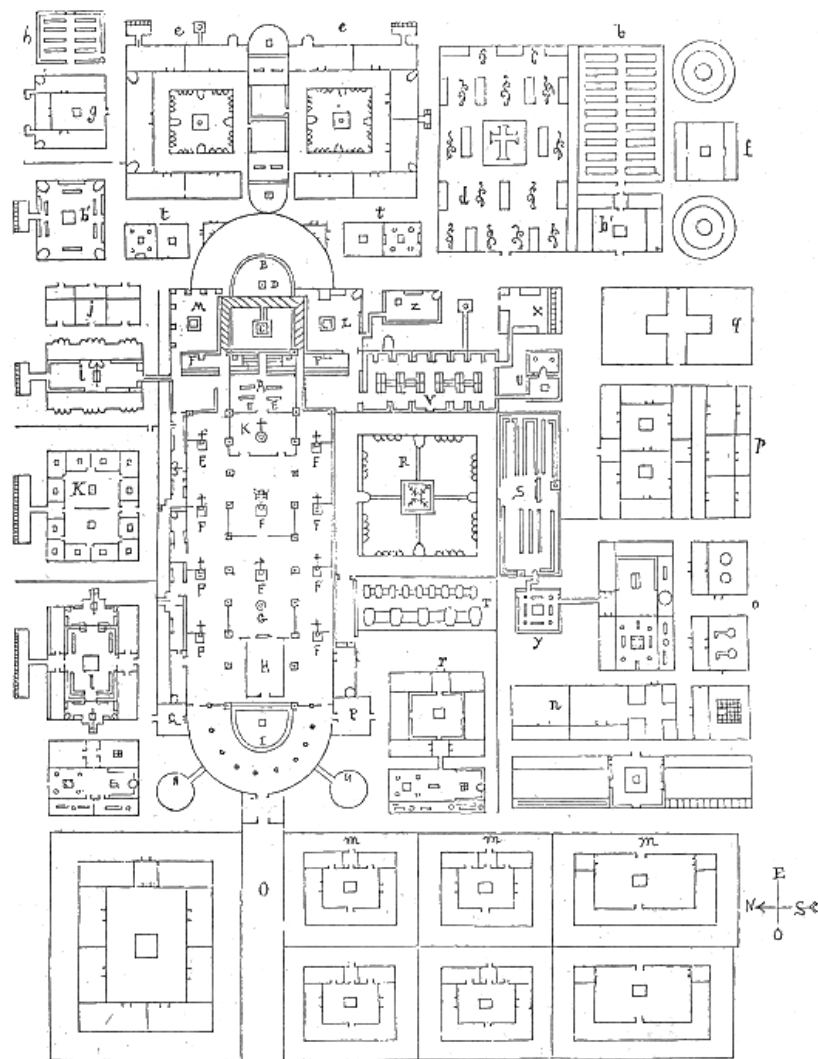
Plan of St. Gallen, simplified. 820 AD.

28. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 23
29. Braunfels, Wolfgang. "Monasteries of Western Europe" in Ábalos, Iñaki. *Palacios Comunales Atemporales*. 2020. p. 38
30. Horn, Walter. "On the Origins of the Medieval Cloister". in *Gesta*. 1973. p. 13

Considering the extreme complexity inbuilt in Benedictine monasteries and the consequent need for an overall design, it is not surprising that the first known architectural drawing is precisely an ideal plan for a Benedictine monastery [28]. The famous Plan of St. Gallen was drawn in 820 AD and is still preserved in its monastery's library. Clearly demonstrating a utopian perfection, this ideal plan proposes a well-regulated system including the temple, the cloister on its southern side and around it the monastic buildings of the dormitory, the refectory, the kitchen and the chapel. In addition, the abbot's house, the rooms for the sicks and novices, the guest houses for pilgrims and guests, the buildings for schools and doctors as well as workshops and auxiliary premises are located outside the core of the monastery[29]. Owing to its rational precision, the Plan of St. Gallen embeds in a clear way all the spatial tensions and the complexity typical of the Benedictine abbey and "reflects the thinking of the leading bishops and abbots […] on the question of what buildings should comprise a paradigmatic Carolingian monastery, and in what manner these buildings should relate to one another" [30]. The graphical qualities of this drawing, lacking of material thickness and composed mainly by simple-line delimitations, could reveal its diagrammatic nature, making it an ideal paradigmatic solution rather than a building example. For these reasons, the Plan of St. Gallen is undoubtedly the typical plan, the purest archetype of the Benedictine abbey, and fully embodies Arís' observation: "Ce qui prime, ce n'est pas le tout ou ses éléments, mais les relations qui déterminent leur structuration et les opérations qui, appliquées aux éléments, permettent de formaliser le tout"[31].

The Benedictine abbey was certainly one of the most radical experiments in collective life and was able to push the cenobitic
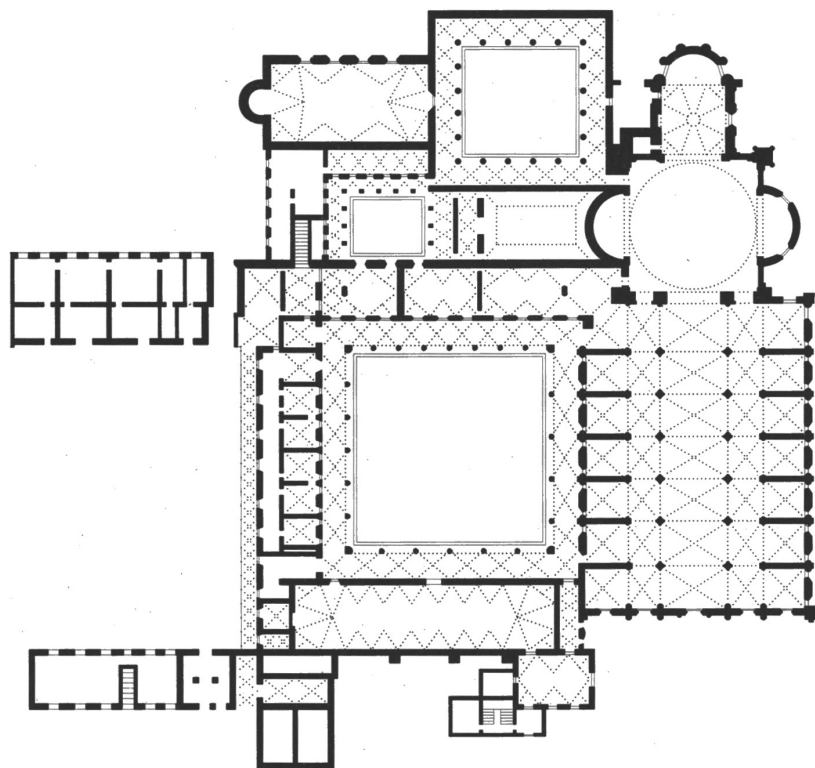
Cosa Mentale.
Plan du couvent de Santa Maria delle Grazie, Milan, au XV siècle.
2021.

31. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture.* 2021. p. 172
32. Aureli, Pier Vittorio. *Less is Enough.* 2013. p. 24
33. Aureli, Pier Vittorio. *Op. Cit.* p. 25

ideals to the excess through the imposition of a shared rule. "The monastery shows in clear terms that a truly communitarian life can only be achieved through a consistent organization of time and space. This is the most controversial aspect of the monastery, because it shows how this institution is the progenitor of disciplinary institutions such as the prison, the garrison, the hospital and the factory"[32]. However, unlike the logic of disciplinary institutions, Benedictine architecture was intended to support the form of life chosen by the monks, to make their life and their rule coincide. If "the goal of monastic life was […] a radical form of fraternal reciprocity where no one prevails over the other"[33], then Benedictine architecture provided a formidable setting for the practice of the most extreme form of collective life.

The Charterhouse

After centuries of a predominant Benedictine supremacy in Europe, the ideological fragilities and the profound contradictions linked to the negation of the individual within monasticism proved to be unsustainable; the Carthusian movement has to be understood primarily as a reaction, anchored precisely in the reintroduction of the individual cell as the basic typological element for the domestic organization of the monastery.

Sensitive to what were the original values of the monasticism, namely the pursuit of an ascetic life devoted to renunciation and the achievement of "a form of reciprocity between subjects freed from the social contract imposed by established forms of power", St. Bruno founded the Carthusian order in Grenoble, in 1084 [1]. Aureli underlines the liberating role of this monastic way of life in respect to those institutionalized social structures, such as the Church, which became very repressive toward individual life [2]. The controversial alliance between the State and the Benedictine order, which brought the latter to the economic and political heights of territorial domination, represented the precise subject to be opposed, the form of power from which to take distance. Aware of both the dangers related to an extreme practice of coenobitism and the concrete risks of a purely hermitic way of life, Carthusians aimed to establish an architectural

Cosa Mentale.
Monastère cartusien de Nuremberg en 1380.
2021.
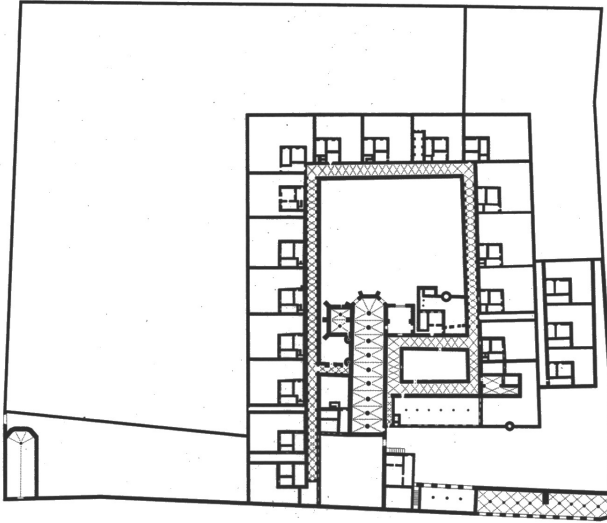
Cosa Mentale.
Monastère cartusien de Miraflores en 1488.
2021.
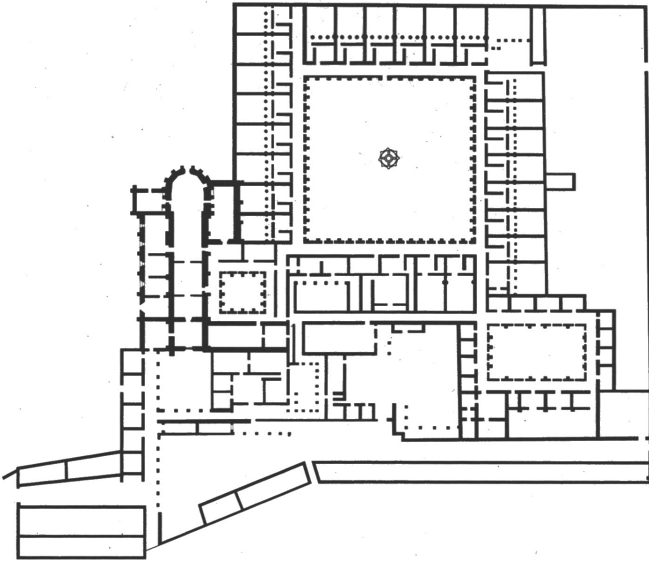
1. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 13
2. Aureli, Pier Vittorio. *Op. Cit*. p. 21
3. Dogma. *Loveless: The Minimum Dwelling and its Discontents*. p. 7

solution allowing the simultaneous possibility of living alone and in a stable community, architecturally not so far from the early examples of pachomian monasticism. "It was precisely in reaction to the forceful collectivism of the Benedictine rule that monastic orders such as […] the Carthusians reclaimed the idea of hermitic life, this time organized as a communitarian pursuit. These monastic communities were invested in the possibility of living at once together and apart"[3]. Even if the charterhouse evolved later as a specific architectural type with a distinct identity, its origins can be defined as a crossing of types, the abbey and the hermitage, representing well what Arís described as "les variantes et combinaisons dans lesquelles se heurtent et se croisent différentes idées typologiques"[4].

From an ideological point of view, Carthusians perfectly embody Barthes' notion of "colony of anachorites": a group of people animated by a will of separation from the world through the isolation in some distant places, nevertheless seeking a communitarian way of life[5]. Barthes' notes provide an interesting synopsis of this idea: "The Carthusian rule: life lived as one + the freedom of solitude"[6]. The reintroduction of the possibility of being alone in the monastic way of life raised again the basic question of the unstable equilibrium between individual and collective, introducing the challenge of combining in the same place two opposed theories; "the idea of a structure where individual and collective life are juxtaposed without being merged is also evident in Carthusian monasticism, which attempted to combine eremitic and cenobitic life in the same place"[7]. Initially giving up on any idea of that agrarian feudalism which represented the ideological corruption of the Benedictines, the Carthusian movement opted instead to seek autarky, namely a combination of the complete autonomy from factors external

W. Thomas.
La Grande Chartreuse, Grenoble. 1791.

Charterhouse de la Valsainte, 1925.
Photography: Walter Mittelholzer

4. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture.* 2021. p. 83
5. Barthes, Roland. *How to Live Together.* 2002. p. 63
6. Barthes, Roland. *Op. Cit*. p. 65
7. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 21
8. Barthes, Roland. *Op. Cit*. p. 65
9. Dogma. *Loveless: The Minimum Dwelling and its Discontents*. p. 42

to the monastery and the interdependence within the members of the community and their resources. Carthusian monasticism and its search for what could be assumed as idiorrhythmy was nevertheless forced to reach an agreement with its recent past and institutional needs, thus making compromises. The first of these is the idea of *stabilitas loci*, materialized through an enclosure wall, often fortified, transforming the original need of protection and retreat into a self-imposed seclusion. This paradox makes the charterhouse an easily corruptible architecture, establishing a dangerous logic not so different from the Benedictine tradition. The second one consisted in the establishment of a strict internal hierarchy, a social stratification of two main categories[8]: the lay brothers, often descendants of humble families, used to live in the coenobium and were committed to domestic labor, farming and crafts in support of the fathers; the elitist religious class, who enjoyed the privilege of solitude and led a life devoted to individual worship, reading and contemplation[9]. The comfortable way of life of the fathers was thus allowed by the consensual exploitation of the lay brothers, recreating within the monastery a social microcosm strikingly similar to the one they were trying to dissociate themselves from. Concerning time scheduling, although Carthusians allowed great freedom to each monk to live according to its own rhythm inside their proper cell, some mandatory collective appointments were prescribed. Wolfgang Braunfels describes in detail the weekly routine within the charterhouse: "Each monk lived in an individual cell. They only came together as a community for the daily mass, the morning prayer and the vespers. The rest of the time, each monk prayed alone. On Sundays and certain feast days, they also ate as a community in the refectory and listened to the readings. On Sunday mornings they were allowed to meet in the chapter
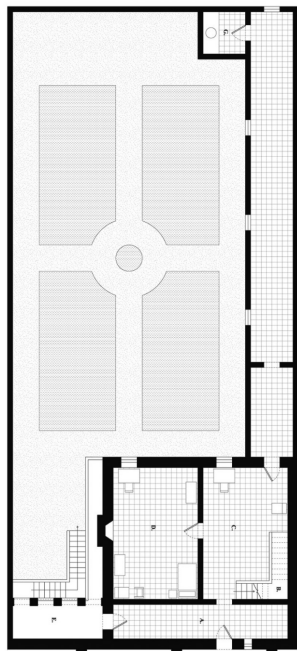
Daniel Heski.
Charterhouse of Padula cell plan. 2019.
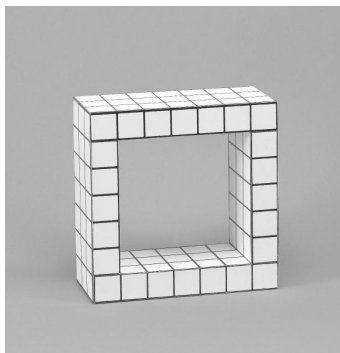
§ - Superstudio.
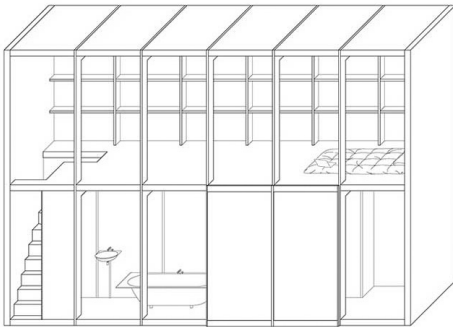Appareil de mesure Cubic frame. 1968.

10. Braunfels, Wolfgang. "Monasteries of Western Europe" in Ábalos, Iñaki. *Palacios Comunales Atemporales*. 2020. p. 55
11. Aureli, Pier Vittorio. *Less is Enough*. 2013. p. 21
12. Barthes, Roland. *How to Live Together.* 2002. pp. 51-53

house. Only later, and for one hour a week, they were also allowed to meet in the cloister and exchange experiences on the spiritual exercises"[10]. It is clear, in the light of these critical aspects, that the very idea of idiorrhythmy was very limited within charterhouses, since the freedom of movement is negated and a certain collective rhythm is nevertheless imposed.

More than any other monastic order, Carthusians developed very specific spatial necessities, having to combine within the same monastery two radically opposed ways of life. The resulting charterhouse is a rich and elaborate aggregation of architectural types, often merged to form new, surprising hybrids. The most impressive example can be found in the union of the cloister, a typically Benedictine distributive apparatus, and the hermitic individual cell. In fact, it is precisely through a cloister, with all the architectural and symbolic meanings it carries, that access is made to the individual cells. In the monastery of Galluzzo, near Florence, "the cloister binds together nine distinct houses, each of them equipped with a garden and basic facilities for individual living. The architecture is modest and austere, but the possibility of individual seclusion supported by the necessary equipment to live alone gives these lilliputian houses an air of luxury, [intended as] the possibility for the inhabitants to live according to their own proper rhythm"[11]. According to Barthes[12], the early hermitic cells were small, autonomous spaces providing a minimal shelter and symbolizing the individuality of the monk, becoming almost the architectural projection of its body. Far from that, the Carthusian individual cell developed into a proper functional house, probably in order to ensure the degree of comfort necessary to eradicate any desire to leave. The cell was generally large enough to include multiple rooms, each of which hosted a specific activity. In the case of Galluzzo,
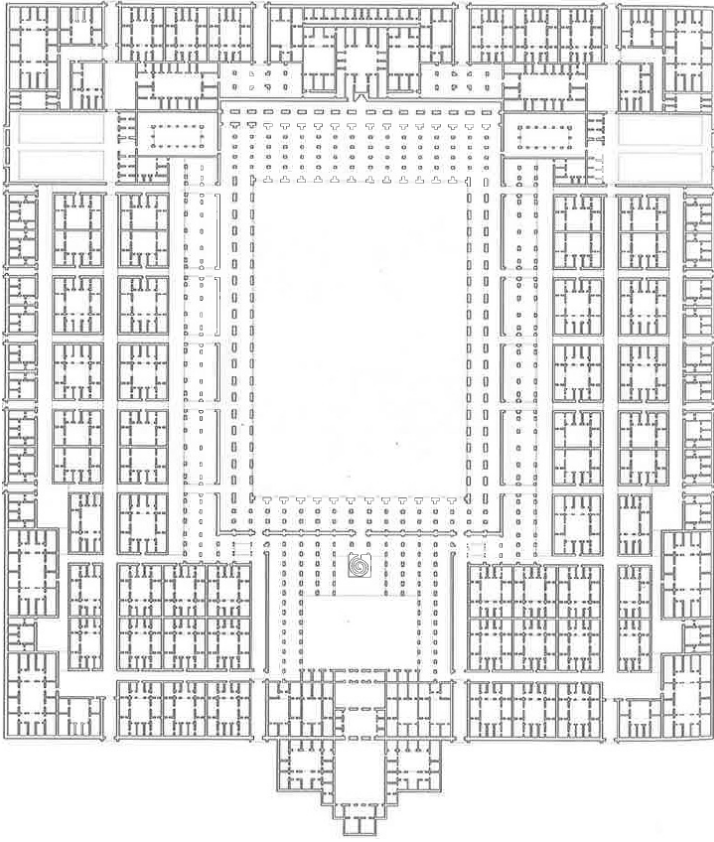
§ – Hamed Khosravi.
Hypothetical plan of the Abu Dulaf Mosque,
Samarra, in 859 AD. 2013.

§ – Dogma.
Communal Villa. 2015.

§ - Plan of the Palace Hotel, San Francisco. 1870.
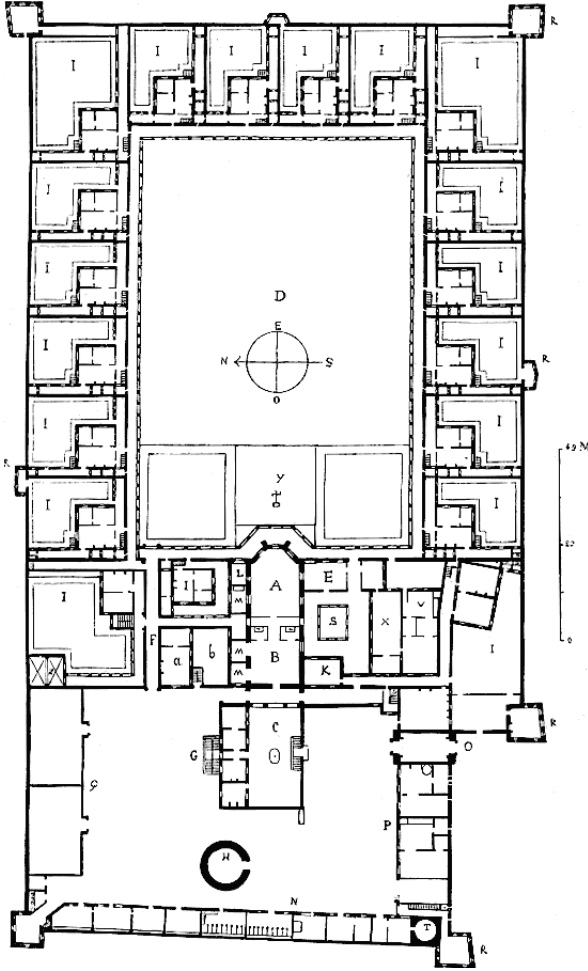
Eugène Emmanuel Viollet-le-Duc.
Plan de restauration de la Chartreuse de Clermont. 1854.

13. Dogma. *Loveless: The Minimum Dwelling and its Discontents*. p. 42
14. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture*. 2021. p. 118
15. Braunfels, Wolfgang. "Monasteries of Western Europe" in Ábalos, Iñaki. *Palacios Comunales Atemporales*. 2020. p. 54

"the fathers' cells are exceptionally big and include a cellar and garden on the ground floor, a dining room, bedroom, chapel, storage and a latrine on the main floor, and a studio on the upper floor"[13]. The Carthusian individual cell gave up on any kind of asceticism and set completely new spatial challenges for the architectural composition of the monastery.

"L'architecture obéit souvent à des schémas prédéfinis avec une précision telle que les conditions auxquelles elle doit répondre apparaissent codifiées dans un schéma formel qui, d'une certaine manière, préfigure le bâtiment"[14]; in the same way as the abbey or the pachomian Laura, the charterhouse represents precisely the architectural formalization of the human rituals to which it provides a specific space. Taking this idea to excess, one could even say that simply through the monastery's plan, it is possible to read and understand the way of life of the monks. The charterhouse of Clermont, founded in 1219 and redrawn by Viollet-le-Duc in 1858, serves as an archetype due to its functional simplicity; the monastery was enclosed by a fortified wall, reinforced by seven defensive towers. The enclosure was entered through a gate situated at the south-west, which could easily be kept under control by two defensive towers. The gate gave access to a large service courtyard, in the center of which stood the prior's house, from which the church could be seen. This courtyard was framed by the guest house, the brothers' rooms and the stables. To the left of the church was the sub-prior's house and to the right was the small monastic cloister, around which the rooms for common life were grouped: the chapter house, the refectory, the library and a chapel. This cloister, known as the *claustrum minus*, corresponded in many details to the Benedictine layout. It could only be accessed from the large cloister and connected with the church on its northern flank. On the
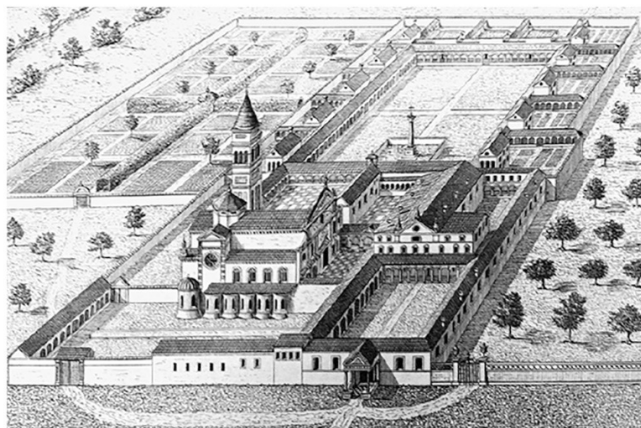
Certosa di Vigodarzere, Padova. 16th century.


Certosa di Vedana, Belluno. 1619.

16. Nagel, Elke. *Five Steps Downhill*. 2015. p. 6
17. Coomans, Thomas. *Life Inside the Cloister*. 2018. p. 52
18. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture.* 2021. p. 119

other side of this intermediate strip comprising the claustrum minus and the church, was the *claustrum maius*. It consisted of a long rectangular corridor, along which was situated a series of 18 cells[15]. The disposition of the individual cells as a strip of terraced houses arranged all around the major cloister resulted in enormous spatial needs, often relating to this particular space the architectural magnificence of the charterhouse and giving it a transcendental significance [16]. The structuring of the monastery over three focal points, constituted by three spatial voids with different proportions, roles and architectural characteristics, satisfies Coomans' assumption that "in a charterhouse, the notion of order around cloister reaches its culmination"[17].

Despite the formal complexity and the infinite architectural specificities that distinguish every particular case, Arís provides an accurate typological depiction of the charterhouse, able to identify the underlying formal structure linking all the singularities: "La règle cartusienne tente de rendre compatible l'isolement individuel du moine avec la célébration des rites et des activités communautaires. Traduite sur le plan architectural, cette aspiration donne lieu à un type de couvent structuré autour de trois centres : la cour d'entrée, le petit cloître et le grand cloître, dans lequel la position, la forme et la taille de chaque pièce répondent à l'ordre préétabli qui prévoit dans le détail le logement des moines. Malgré la rigidité apparente de cette règle, on constate à quel point chaque chartreuse est unique. Pavie, Clermont, Miradores ou encore Montalegre : chaque bâtiment est façonné en fonction de son enclave géographique, la topographie du terrain, la délimitation du couvent, sa relation avec les champs qui l'entourent, les conditions hydrographiques, l'orientation de la route qui y donne accès, etc. Tous ces éléments y laissent leur empreinte. La chartreuse, dont on peut tirer bien
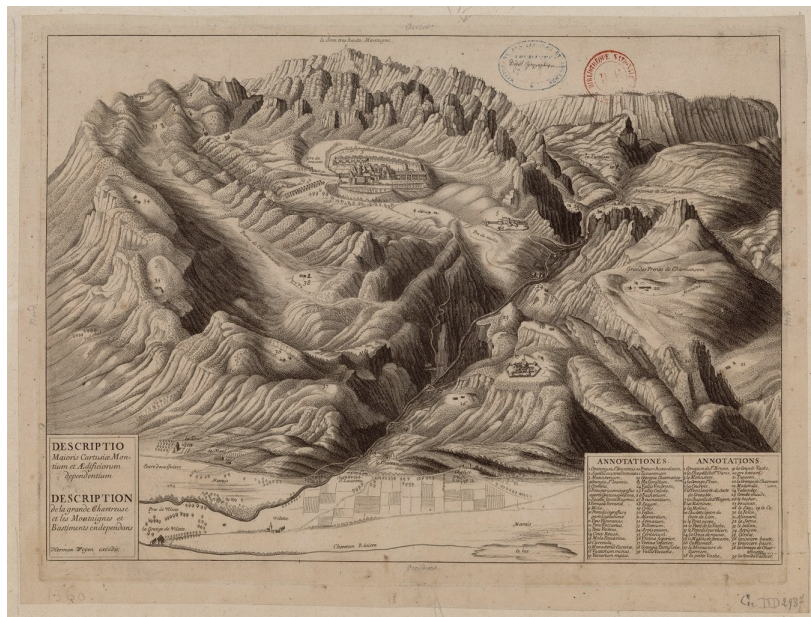
Herman Weyen.
Descriptio maioris cartusiae montium et Aedificiorum dependentium. 17th century.

La Grande Chartreuse, Grenoble.
Carte postale. 1955.

19. Arís, Carlos Martí. *Les Variations de l'Identité: le Type en Architecture.* 2021. p. 118
20. Nagel, Elke. *Five Steps Downhill*. 2015.
21. Nagel, Elke. *Op. Cit.* p. 16

d'autres leçons d'architecture, illustre ainsi à merveille la façon dont on peut concilier l'individualité du bâtiment et l'identité du type"[18]. The dialogue between the typicity of the overall architectural composition of the monastery and the unicity provided by the geographical conditions of the site functions as a generator of variations, all unique although belonging to a common typological family. It is precisely in the relation to the site, which the Carthusians addressed in an accurate way, that lies the subtle architectural beauty which provoked the fascination of many architects: "la relation avec le site où est érigé le monastère oblige à ajuster [la] règle, avec des variantes et des accords qui tendent à le rendre unique, au point d'en faire une part indissociable du site lui-même"[19].

The topic of charterhouses' architectural adaptation to their surroundings has been deeply investigated by the architect and researcher Elke Nagel, who identified many political phases in the history of Carthusian monasticism and its repercussions on the architectural form[20]. The first periods, ranging from 1084 to 1203, were characterized by a strong desire of seclusion and remoteness, leading to the establishment of communities in highly inhospitable places, whose extreme topological situations symbolized the hermitic desert to which they aspired. In this particular conditions the site took over, ruling the design of the monastery and weakening its typological character in favor of an architectural uniqueness. The result were generally small and narrow monasteries, seeking to align all the necessary programs into irregular and compact perimeters. Aware of the difficulties encountered in the construction of monasteries and survival of communities in extremely inhospitable mountainous areas, Carthusians progressively moved to more moderate regions, establishing political and economic contacts with their surroundings;
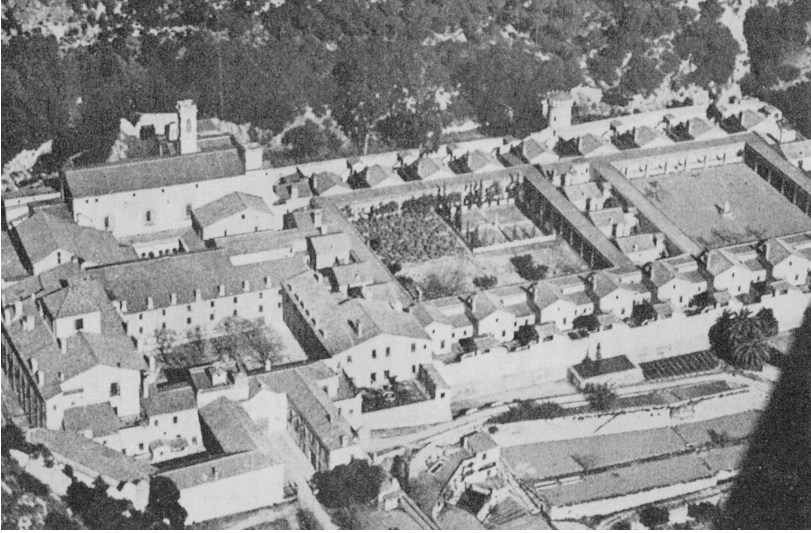
Carthusian Monastery of Montalgre, Barcelona. 1415-1463.
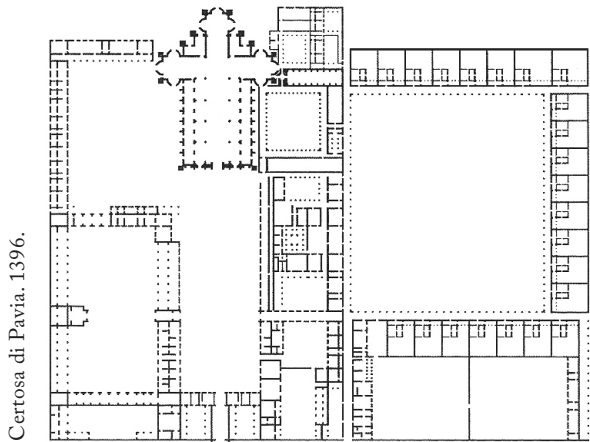
Certosa di Pavia. 1396.

this allowed more flexible plans and the inclusion of economic quarters within the monastic enclosure. The period defined by Nagel as "first representation phase"[21], ranging from 1340 to 1408, revealed through architectural expression the increase of political and economic power of the Carthusian order: "for the first time an intentional design for the complete ground plan is to be observed (in the contrary to the merely pragmatically arranged layouts before): no axial intersection, regularly sized walled gardens and cell houses, uniform situation regarding air and light, extra buildings to screen the major cloister and a larger number of inner courtyards"[22]. From this moment on, a sort of political corruption progressively took place within the Carthusian movement, similar in some ways to the one that conditioned the development of the Benedictine abbeys. In order to strengthen their political autonomy within the clerical patterns, Carthusians started caring about the order's image, striving to represent richness and power through by means of architectural expressions. This provoked at the same time the order's great economic improvement, accompanied by charterhouses of majestic size and architectural complexity, and the collapse of the ideologies underlying the foundation of the order. This process went on until the seventeenth century and gave rise to a later generation of monasteries much closer to settled areas and presenting a great number of courtyards and massive economic quarters. Most of the architectural developments focused initially on the cenobitic quarters, which massively increased their spatial consumption, therefore not affecting the major cloister and the cell houses. Nagel recorded a total surface occupation of about 20'000 m^2 for some charterhouses belonging to the fifteenth century: a surprising number when compared with the 4'000 m^2 of the early ones [23]. Finally, in the last architectural period, the
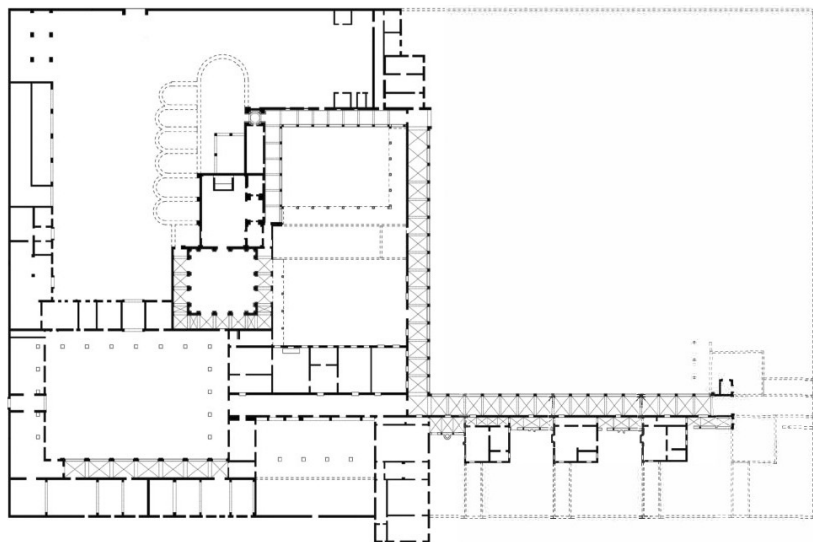
Marina Pasarin.
Certosa di Vigodarzere, survey plan. Padova. 2019.

Marco Lumini.
Certosa di Vigodarzere, Padova. 2019.
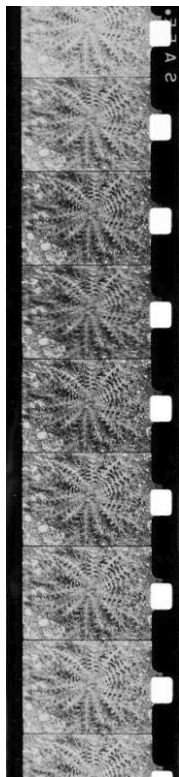
22. Nagel, Elke. *Five Steps Downhill*. 2015. p. 16
23. Nagel, Elke. *Op. Cit*. p. 20
24. Nagel, Elke. *Op. Cit*. p. 21
25. Coomans, Thomas. *Life Inside the Cloister*. 2018. p. 86

Carthusian order opted for a considerable extension of the main cloister as well, in order to increase the number of available cells. In some cases, due to specific topographical features, a duplication of the main cloister can also be observed. Because of the extraordinary sizes that were reached and the implantation into highly populated contexts, the charterhouses took on an important urbanistic role, affecting the surrounding political and economic relations [24]. The notions of place and stability, proper to the whole monastic architecture, can also to be found within the charterhouses' identity, albeit in different ways between the early and late cases; "each settlement belonged, from its foundation, to a precise geographical, historical and social context. Each monastery developed its own specific material culture by interacting with its rural or urban surroundings" [25]. Despite the constant underlying desire for a symbolic and physical retreat from the world, charterhouses were nevertheless sophisticated entities, profoundly rooted in their landscape and continuously establishing political, social, economic and ecological relationships with their environment [26].

As the last monastic architectural type in its own right, the charterhouse has the merit of bringing together in one place many of the architectural principles of its predecessors; the cloister, the individual cell, the shared facilities, the perimeter or the relationship to the landscape all contribute to build a composed, coherent whole. Its architectural complexity, derived directly from precise programmatic necessities, has been able to merge reason and form, generating examples of a rare architectural beauty. Writing precisely about beauty and architecture, Éric Lapierre highlights an interesting feature regarding the plan, intended as the most representative architectural drawing, and its relation to a meaningful architecture: "the plan constitutes

$ - Gaël Badaud.
Le Printemps. 1987.

Ancienne chartreuse de la Verne.
12th century.

26. Coomans, Thomas. *Life Inside the Cloister*. 2018. p. 87
27. Lapierre, Éric. "Onthological Plans: the Pure Beauty of Architecture"in *San Rocco 13: Pure Beauty.* Spring 2017. p. 88
28. van der Laan, Hans. *Architectonic Space*. 1983. p. 24
29. van der Laan, Hans. *Op. Cit*. pp. 28-31
30. Barthes, Roland. *How to Live Together.* 2002. p. 77
31. Barthes, Roland. *Op. Cit*. p. 93
32. Nagel, Elke. *Five Steps Downhill*. 2015. p. 23

§ – Bruther.
Julie-Victoire Daubié Residence for Researchers, Paris. 2018.
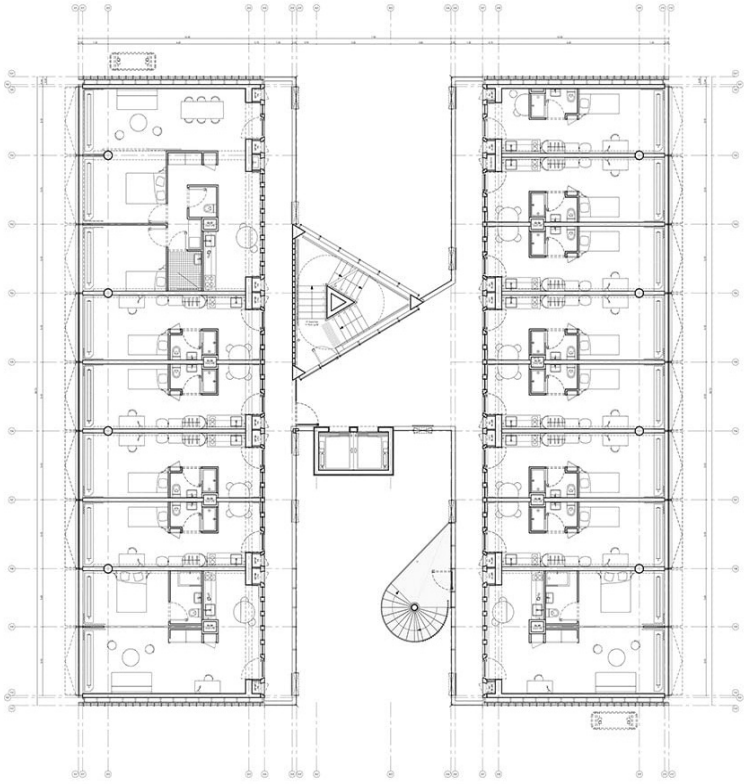
Certosa di Pavia. 1396.
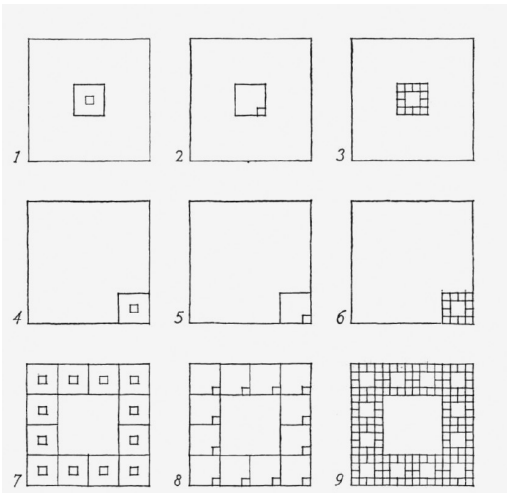
1 Central court with central cell
2 Central court with peripheral cell
3 Central court with peripheral juxtaposition of cells
4 Peripheral court with central cell
5 Peripheral court with peripheral cell
6 Peripheral court with peripheral juxtaposition of cells
7 Peripheral juxtaposition of courts with central cell
8 Peripheral juxtaposition of courts with peripheral cell
9 Peripheral juxtaposition of courts with peripheral juxta-
   position of cells

Dom Hans van der Laan.
Central and peripheral juxtaposition diagram. 1983.

the most abstract 'place' of an architecture considered most of all as a conceptual discipline aiming at providing space with meaning through its purposeful organization; for this reason it is the essence of architecture. In the plan, there lies a secret: a hidden beauty" [27]. The same notion of hidden beauty which Lapierre relates to the architectural plan, and which expresses itself in a particular way through monastic architecture, can be found in the writings and drawings of Dom Hans van der Laan, architect and Benedictine monk devoted to research on numerical relationships in architecture and the impact of form on the human experience of space. Predictably close to monastic compositional principles, van der Laan developed the concept of experience-space, assuming that a "complete human habitat demands a threefold demarcation of space", namely a definition of three well-defined and concentric architectonic entities: the cell, the court and the domain [28]. Establishing consequent sensitive borders and blurring the limits between inside and outside, these three spaces can be juxtaposed in multiple ways, allowing a geometrically controlled growth [29]. Through his theories on the disposition of the human habitat, van der Laan reinforces the architectural value of the charterhouse, combining its complexity and beauty with a great functionality in terms of human habitation.

The charterhouse was born as a laudable reaction against the radical coenobitism imposed by the abbeys, however it was not able to avoid some critical choices that made its form easy to divert; the establishment of a strict hierarchy, a clear inheritance of the Benedictine system, and the impossibility of separating oneself from the very place of the monastery by undergoing a self-imposed seclusion, are undoubtedly among the most problematic aspects of the Carthusian social structure. Barthes
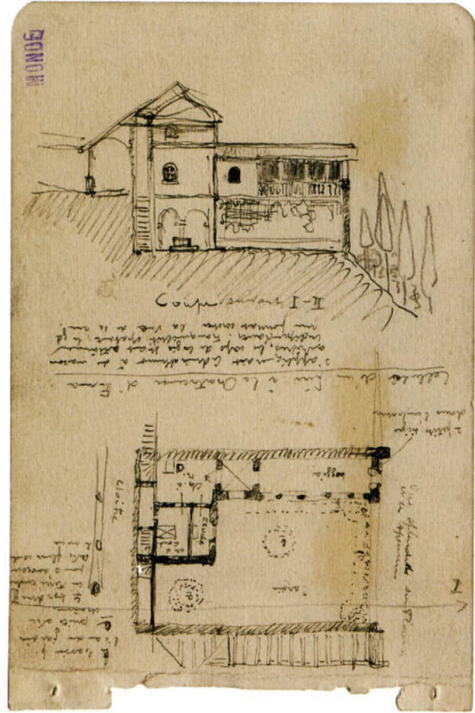
Le Corbusier.
Sketches of a cell, Ema Charterhouse. 1907.
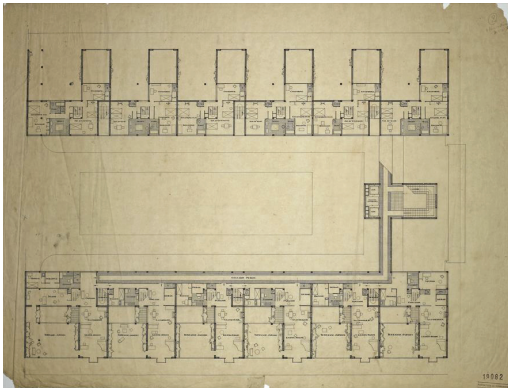
§ – Le Corbusier.
Plan of an Immeuble–Villa. 1922.

announces clearly that this ideological dilemma simply mirrors the major structural problems of all communities: the distribution of labor, class divisions and the reconstruction of a parallel social microcosm at the margins of society[30]. His opinion on the reasons for such social structuring are also particularly interesting, namely the need for control by the governing institutions over marginalities or groups of people wishing to live in a different way; "society keeps a close eye on the margin: hermitages get built within the precincts of abbeys, with the hermits now dependent on the abbey, a negotiation of the basic idiorrhythmic premise, which is to operate outside the remit of any given authority. But society exercises its control through the two values it imposes on the monk: obedience and stability: values that are essential to integration"[31]. These political issues cannot, however, deny the architectural achievements and qualities that these monastic compounds were able to elaborate. The charterhouse has shown a remarkable efficiency in gathering, through sophisticated architectural solutions, different ways of life into a single place. By addressing in a sensitive way the question of the place of the individual within a community and by elaborating, through the cell houses, the first examples of single-person living spaces with an intentional design[32], this architectural type must be regarded as a source of numerous architectural lessons.

Conclusion

Today's circumstances in terms of social struggles and housing production impose to think of new sustainable and resilient alternatives to the issue of collective housing. As a society, we should relearn the sense of community in order to live together in an effective way; it is necessary to acknowledge the importance of an individual space and of personal freedom within a community, thus avoiding the oppressive impositions that caused the failure of many recent and ancient experiments. This reflection must also take into account the social and political impacts that housing production can have on the city at large, since "addressing the project of the city through architecture is a tradition we have completely lost"[1].

The study of specific monastic movements can provide many insights in this regard, as their main architectural solutions addressed precisely the same question: how to live together in a sustainable way? The first monastic settlements proposed, in total contrast to the cultural and living habits of the time, the recognition and development of an individual space as the fundamental precondition for a collective way of life. The cell was intended as a physical expression of individuality, providing its inhabitant with both protection and intimacy and granting its freedom from power institutions. In an attempt to control and

Sanatorium for the treatment of tuberculosis, Davos-Dorf.
19th century.

Jeremy Bentham.
Panopticon sketch. 1791.

1. Montresor, Marina & Lando, Stephan. *Defining Criteria.* 2018. p. 123
2. Dogma. *Loveless: The Minimum Dwelling and its Discontents.* p. 4
3. Ibid.

regulate monasticism, the abbeys brought forward a radical collectivity, characterized by the abolition of that same individual space. Although the introduction of a hierarchical organization and time scheduling proved to be necessary for the functioning of this type of dwelling, the abbeys contributed to the development of a great number of collective facilities and shared spaces, fundamental for establishing a sense of belonging and community. Finally, in reaction to the oppressive impositions of the abbeys, the charterhouse developed as a complex architectural type capable of bringing together the two previous ideologies into one single monastic compound, yet not avoiding certain critical aspects. The juxtaposition of well-developed individual living spaces and collective facilities proved to be effective in terms of habitation, influencing in a significant way the evolution of Western domesticity. Each of these three architectural types also established a precise relationship with its social and economic context, setting up a contradictory dialogue between the pursuit of autarky and the mutual influence with local entities.

At the service of oppressive institutions, these architectural types have nevertheless proved to be easily corruptible, facilitating control over individuals through architecture. Charterhouses themselves are an example of how, through the establishment of an authority and a binding time scheduling, it is easy to convert a liberating type into a reclusion facility. It is not surprising that problematic architectures such as prisons or asylums derive straight from the monastic spatial organization, sometimes directly occupying former monasteries. In general terms, the union of work and dwelling under an authority proved to be a risky ground regarding the installation of oppressive mechanisms. For this reason, the notion of choice assumes fundamental impor-

Dogma.
Frame(s), Westerlo. 2011.

Collectivist reconstruction of dwelling

kitchen	dining	salon = club
house-keeping	bathing	children's space
services	physical culture	individual living cell

centralized and collectivized

Schema of a collective dwelling:

the centralization and collectivization of the economic, cultural, and social factors of the dwelling process;

the reduction of the "apartment" to an individual living cell. One room for each adult person,

whose content (function) is a living room and a bedroom;

the reproduction of a single space undifferentiated dwelling on a higher level;

material and organizational basis for socialist forms of life.

Karel Teige.
The collectivist reconstruction of dwelling.
1932.

tance; the success of a collective living model can never lie in the pure result of economic or political impositions, rather it should be the outcome of a conscious choice of the inhabitant and its personal desire to dwell in this particular way.

Monastic architectural history has nevertheless generated spatial experiments whose heritage has become part of the modern domestic tradition. The establishment of the individual room as basic typological component for the organization of the living space is a clear example of this influence. The artist and researcher Karel Teige, one of the most important figures of avant-garde modernism of the 1920s and 1930s, developed a radical theory based on the room to counter the trend of that time regarding the issue of minimum dwelling. Very close to the monastic architectural model, Teige proposed an alternative to the widespread reduction of bourgeois apartments: "a collective dwelling in which every adult would be provided with a 'minimal but adequate, independent, habitable room', while all domestic services […] would be collectivized"[2]. Teige's vision of collective life was based on a gathering of individual living cells "fully supported by shared domestic facilities"[3]. This concept can be easily read as a modern application of the same principles underlying the Carthusian spatial organization, reinforcing the impression that "living together is only possible if there is always the possibility to be alone"[4]. In a world characterized by an increasing uprootedness and precarity, of which the rise of single dwellers is the most representative product, monastic architecture can act as a source of thinking not only because of the relevance it attaches to the individual, but also because of its regionalist character. "It is in this context that the counterfactual architecture of the monastery comes into its own [and] challenges the proliferation of non-places with its insistence on household,

Dogma.
Communal Villa. 2015.
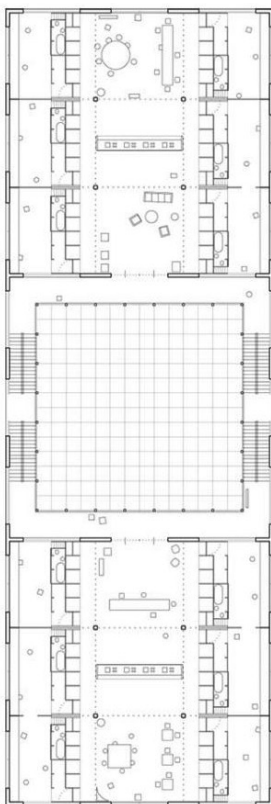
4. Korody, Nicholas. *Living together is only possible if there is always the possibility to be alone*. Accessed June 21, 2021.
5. Irvine, Richard D.G. "Stability, Continuity, Place", in *Religious Architecture*. 2013. p. 41
6. Korody, Nicholas. *Op. Cit.*

stability and place"[5]. The single dweller could even be described as a contemporary kind of monk; one that is devoted to work in order to ensure his own independence, constantly looking for an appropriate housing solution in cities which are not suited for this sort of inhabitant. In such an unstable context, society should enhance the notion of community, understood as an aggregation of individuals united by the conviction that through the sharing of domestic spaces it is possible to have an impact not only on local living conditions, but also on the city at large. This theoretical statement, although based on elements of architectural history, has the aim to stimulate reflections on contemporary issues, namely the search for alternative forms of dwelling more suited to our times, and thus share the belief that "history is a formidable instrument to understand the present"[6]. The complex articulation of well-designed individual spaces of absolute intimacy and the sharing of collective facilities, accompanied by the necessary architectural thresholds and distribution systems, is a frequently reapplied solution worthy to be considered for a constructive rethinking of collective housing.

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