

Designing Knitwear with Aran Motives -In Search of Spatial Continuity Theory with Its Application-

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아란모티프를 응용한 니트웨어 디자인 -공간적 연속성 이론을 중심으로-

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Abstract

The purpose of this study is to explore the meaning and depth of traditional knitwears, and to develop knitwear designs by using Aran motif, one of major motifs of traditional knitwears and on the basis of the 'continuance' theory of Henri Bergson and Jill Deleuze. Connectivity, the sense of space and deconstructive fluidity--basic concepts of the continuance theory--are felt in such forms as pleats, origami, and air pumping systems, blob and twisting used in the modern fashion. The motif of Aran knitwear which has a long historical tradition can be reinterpreted in terms of those concepts of the continuance theory. In this study, we designed five pieces of knitwear while applying cable motif, an important motif of Aran knitwear, and the concepts of the continuance theory to them. This study will make a contribution to the designing of knit wears through reinterpretation of a traditional motif in terms of a modern philosophical thought.

Key words: Spatial continuity, Aran motif, Knitwear design; 공간적 연속성, 아란 모티프, 니트웨어 디자인

I. Introduction

There are various categories of the continuity and discontinuity in our circumference. Generally, characteristics of postmodernism including between the difference and the variety have been regarded as a discontinuity(Lee, 1999). But, this has been caused by a shortsighted viewpoint that catches the moment occurring qualitative skip through the flowing of the everlasting time.

The chaotic characteristics of postmodernism of the variety, overabundance, meaningless, and so on expressed in modern fashion have not being by new independent elements, but combining and dissolving by existing elements. Therefore, complex social conditions and various relationships reflected in modern fashion can be understood in terms of the 'continuance' theory of Henri Bergson and the 'continuous formation of the difference' theory of Jill Deleuze.

On the basis of those theories, this thesis categorized qualitative continuity into spatiotemporal and spatial continuity, and explored their aesthetic characteristics. On the basis of these concepts of the

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space and cable motif of Aran knit, the purpose of this study is to explore the meaning and depth of traditional knitwear and to develop modern knitwear designs by developing hand knitwear with Aran motif, and by using a low gauge hand knitting technique, five pieces of knitwear were designed in this thesis.

Knit has different characteristics from fabric because of its curvally connected loop structure. Knit has merit such as elasticity, insulation, flexibility, drape and porosity but it also has demerits like run and curl-up. Recently these characteristics of knit are frequently applied to knit design. From the design perspective, knit is a good material that enable to creative design. It can easily make three dimensional textures and allow more various expressions by different selection of yarn-twisting, knitting and gauge.

The knit fashion of the 20th century developed following the trend and change of fashion, structure, material, and design. For the development of the knit industry, we should seek high quality and differentiation of product through the new translation of texture, structure and design, which requires exact understanding of knit and its current states.

II. Aran Knit

Hand-knitting has gone into and out of fashion many times in the last two centuries, and at the turn of the 21st century it is enjoying a revival. According to the industry group Craft Yarn Council of America, the number of women knitters in the United States age 25-35 increased 150% in the two years between 2002 and 2004(Mary, 2008). While some many say knitting has never really gone away, this latest reincarnation is less about the make do and mend of the 1940's and 50's and more about making a statement about individuality as well as developing an innate sense of community. Additionally, many contemporary knitters have an interest in blogging about their knitting, pattern, and techniques("Women find creativity, comfort in knitting circle", 2006).




The most famous textured knitting of all is Aran. Developed on the Irish Aran Islands to protect fishermen from the hostile elements, Aran sweaters are

knitted in natural white wool which does not detract from the bold, raised patterns of cables and bobbles. Aran Sweater was born of this environment, passed down from generation to generation, and has since become the ultimate symbol of Irish Clan heritage.

From its origins, the sweater has been intimately linked to clans and their identities. The many combinations of stitches seen on the garment are not incidental, far from it. They can impart vast amounts of information to those who know how to interpret them. The sweaters were, and remain, a reflection of the lives of the knitters, and their families. On the islands, patterns were zealously guarded, kept within the same clan throughout generations. Aran sweaters are often sold as a "fisherman sweater", suggesting that the jumper was traditionally used by the islands' famous fishermen. Fishermen all around the coasts of Britain have relied for generations on warm, weather-proof pullovers, knitted for them by their womenfolk. Navy blue is the most typical color, but textured patterns on selected parts of the garment-neck, chest, sleeves or shoulders-were once a sure way of knowing whether a fisherman was from Whit by, Lowestoft or Guernsey. They were often used to help identify bodies of fishermen washed up on the beach following an accident at sea. An official register of these historic patterns has been compiled, and can be seen in the Aran Sweater Museum on the Aran Islands("History of Aran Sweaters", 2008). Fishermen and knitted pullovers from 『World Textiles』 are as follows: <Table 1>.

The sweater has many attributes which made it suitable clothing for the island's community of fishermen and farmers. It is water repellent, not allowing the rain to penetrate the sweater thus keeping the wearer dry. An Aran sweater can absorb 30% of its weight in water before feeling wet. The natural wool fiber used in the sweaters is breathable, drawing water vapor away from the skin and releasing it into the air, thus helping the body to maintain an ideal temperature. Most importantly, of course, the sweater kept the wearer warm on the cold days and nights at sea or on the farm. Wool has an excellent insulating capacity due to the high volume of air in it, and this helps protect the wearer from excessive cold and heat. As a

Table 1. Fishermen and knitted pullovers

		
Scottish fisherman in a knitted hat.	An English fisherman wearing a knitted pullover that identifies his homeport as Lowestoft.	An Aran Islander, from Inishmaan, wearing a textured pullover under his jacket.

From John, G. & Bryan, S. (1993). *World textiles* (1st ed.). London: Thames Hudson.

craft, the Aran sweater continues to fascinate audiences around the world. A finished sweater contains approximately 100,000 carefully constructed stitches, and can take the knitter up to sixty days to complete. It can contain any combination of stitches, depending on the particular clan pattern being followed. Many of the stitches used in the Aran sweater are reflective of Celtic art, and comparisons have been drawn between the stitches and patterns found at Neolithic burial sites such as Newgrange in Co. Meath.

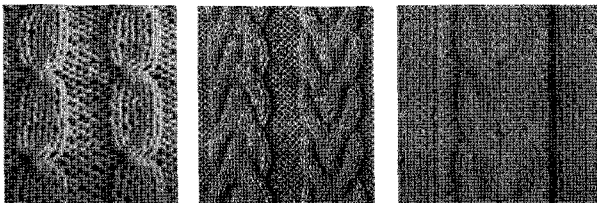
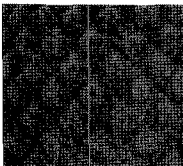
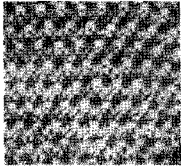
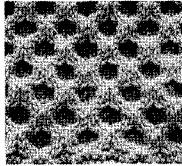
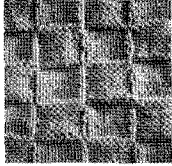
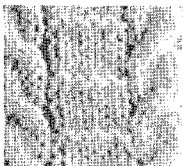
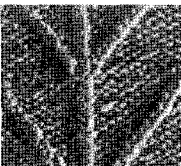
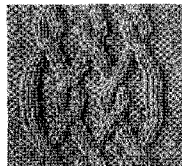
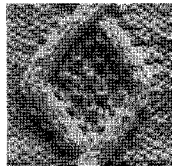
Each stitch carries its own unique meaning, a historic legacy from the lives of the Island community many years ago. The Cable stitch is a depiction of the fisherman's ropes, and represents a wish for a fruitful day at sea. The Diamond stitch reflects the small fields of the islands. These diamonds are sometimes filled with Irish moss stitch, depicting the seaweed that was used to fertile the barren fields and produce a good harvest. Hence the diamond stitch is a wish for success and wealth. The ZigZag stitch, a half diamond, is often used in the Aran Sweaters, and popularly represents the twisting cliff paths on the islands. The honeycomb is a symbol of the hard-working bee. The tree of life is one of the original stitches, and is unique to the earliest examples of the Aran knitwear. It again reflects the importance of the clan, and is an expression of a desire for clan unity, with long-lived parents and strong children. Some meanings attributed to Aran stitches are as follows: <Table 2>.

Today, the demand for the Aran sweater continues to grow. The lack of skilled knitters, and the economic gains to be had from machine-production of the sweaters, has resulted in a huge fall in the number of hand-knits available. Aran sweaters by hand knitting have become rare and valuable. They are highly sought after for their quality, their history, and the clan heritage they represent. Despite the huge increase in fashion goods available, the Aran sweater remains an item of timeless beauty, synonymous with pride in an Irish heritage. As the craft spreads far beyond its humble origins on the wind ravaged islands of the west coast of Ireland, so too does its recognition as a fine work of art and an emblem of Irish Clan identity. Nowadays Aran sweaters have become one of the fashion items and many people wear Aran sweaters regardless of sex, age, and clan. Examples of Modern Aran sweaters are as follows: <Table 3>.

III. Concept of Spatial Continuity-theories of Bergson and Deleuze





Continuity expresses on the indistinct boundary connected with organization, process and different phases. In dictionary's definition, first, Continuity is the fact that something to happen or exist, with no great changes or interruptions. Second, Continuity is Continuous probability distribution or random variable in probability and statistics in mathematics. The

Table 2. Some modern attributed Aran stitches

			
<p>The most commonly seen Aran stitch is the cable, of which there are many variations. These are said to symbolise fishermen's ropes.</p>			
			
<p>The blackberry stitch represents nature. Some call it the trinity stitch and give it religious significance.</p>	<p>The Moss stitch, said to symbolise abundance and growth. It is often used as a 'filler' in diamonds.</p>	<p>The Honeycomb is said to be a lucky stitch, signifying plenty and in the case of fishermen a good catch.</p>	<p>Lattice or Basket stitches to represent the fisherman's basket - again an omen of a good catch.</p>
			
<p>The Ladder of Life and Tree of Life represent the stages of life. They are sometimes given a religious significance, symbolizing a pilgrim's path to salvation.</p>	<p>Plaited or braided stitches said to represent the interweaving strands of life.</p>	<p>Diamonds to represent the shape of the fishing mesh, and wealth and success.</p>	

From The Harmony Guides.(1998). *220 Aran stitches and patterns*. (Vol. 5.). New York: Anova Books.

Table 3. Examples of modern Aran sweaters

			
Kenzo, F/W 2005	Kenzo, F/W 2005	D&G, F/W 2006	D&G, F/W 2006

Retrieved from www.samsungdesign.net

similar meanings of continuity are continuance, sequence, series, succession etc. Generally, continuity is

a relative concept that can be recognized differently according to view from a different standpoint. In this

study, continuity is understood as continuous doing or movement based on continuous difference of Deleuze. The happening of Deleuze, which is forming the difference continuously, is theory of the formation that means positive movement for differentiation and recognizes un-restorable multiplicity(Williams, 2003). And that, this explains the continuance of Bergson grounded on ontology, and focuses on concept of the difference.

Deleuze understood Bergson as perhaps the greatest theorist of difference, the theorist whose. Insistence brought difference into philosophy and showed that philosophy was irresistibly drawn, insofar as it is directed by real questions and problems, those that impinge on us without relief, to that which differs from itself, to that which exists only as becoming. Deleuze's difference is not a concept bound up with units, entities, or terms. It characterizes fields, and indeed reality itself. Difference is an ontological rather than a logical, seismological, political or historical category. It is a relation between fields, strata and chaos. It is a movement beyond dualism, beyond pairs, entities or terms. Difference is the methodology of life, and, indeed, of the universe itself. In their specificity and generality, and not just terms, are the effects of difference, though difference is not reducible to things insofar as it is the process that produces things and the reservoir from which they derive(Deleuze, 1993).

As a whole, as undivided, as open, the material universe is also duration, although when divided and rendered analyzable, it presents itself as the other, the opposite of duration. Mind and matter, life and matter, rather than binary terms, are different degrees of duration, different tensions, modes of relaxation or contraction, neither opposed nor continuous - different nuances, different actualizations of one and the same that is, ever differing, internally and eternal differing, duration(Elizabeth, 2004).

Above continuity based on Deleuze's theory can explain the various phenomena by and large, including fashion design. Contemporary fashion has communicated between body and environment. And also, that is recognized as the second body and compact environment and useful information system creating the new relationship between two of them. Complex

social conditions and various relationships reflected in modern fashion can be understood in terms of the 'continuance' theory of Henri Bergson and the 'continuous formation of the difference' theory of Jill Deleuze. On the basis of those theories, this thesis categorized qualitative continuity into spatiotemporal and spatial continuity, and explored their aesthetic characteristics.

In Yang's(2006) preceding study, these aesthetic characteristics apply to modern fashion design. Aesthetic characteristics of continuity in modern fashion based on continuance theory of Bergson and Deleuze are as follows: <Table 4-5>.

Especially, spatial continuity was explored in terms of the enlargement of the space by pleats, origami, and air pumping systems, the inter-merger of the space by blob and twisting, and the fluidity of the space by blurring, reconstruction, and de-construction(Yang, 2006). In this study, focused on the inter-merger of space by blob and twisting among spatial continuity. In fact, originally blob was utilized as a term for moving large amounts of data from one database to another without filters or error correction. This sped up the process of moving data by putting the error checking and filtering on the new host for the data. The act of moving huge amounts of data was called 'blobbing'. 'Just blob that data over'. This came about by the image of somebody grabbing fistfuls of material from one container and putting it in another without regard to what was in the 'blob' they were grasping. Blob of fashion is expanded the body to a big molding by using plentiful pleats or lines, regardless the body silhouette. Blob fashion on the body form a new silhouette and various layer. These forms mean interactivity and inter-merger spatial continuity. The examples of blob in contemporary fashion are <Fig. 1-2>. <Fig. 1> is Alexander McQueen's work in 2003 S/S. This work looks like a valley or a ravine in nature and forms uneven and irregular shape. These shaped not fixed and correctly but fluently and flowing as nature. <Fig. 2> is Hussein Chalyan's work in 2003 F/W. Holes are made and many straps of zipper are intersected each other, so cannot be branched from each layer. This work looks like a flow of water swirling and shape a space changing

Table 4. Aesthetic characteristics of continuity in modern fashion based on continuance theory of Bergson

Continuance theory of Bergson	Aesthetic characteristics of continuity in modern fashion	
Intuition	Becoming	Perceptual continuity
Space alteration	Perceptual continuity	
Alteration	Expanse	Spatial continuity
Motility	Inter-merger of the space	
Chaos	Fluidity space	
Alteration, motility	Folding system	Transferring continuity of physical experience

From Yang, H. Y. (2006). *Formative characteristics of the continuity expressed in modern Fashion-focusing on the theory of hermi bergson and Jill Deleuze*. Unpublished doctoral dissertation, Sookmyung Women's University, Seoul.

Table 5. Aesthetic characteristics of continuity in modern fashion based on continuance theory of Deleuze

Continuity theory of Deleuze	Aesthetic characteristics of continuity in modern fashion	
Openness	Inter-merger of the space	Spatial continuity
Spatial continuity	Fluidity space	
Openness, multiply	Folding system	Transferring continuity of physical experience
Multiply, openness	Fluid with social environment	Fluid continuity with environment

From Yang, H. Y. (2006). *Formative characteristics of the continuity expressed in modern Fashion-focusing on the theory of hermi bergson and Jill Deleuze*. Unpublished doctoral dissertation, Sookmyung Women's University, Seoul.



Fig. 1. Alexander McQueen, S/S 2003.

Retrieved from www.firstview-korea.com



Fig. 2. Hussein Chalayan, F/W 2003.

Retrieved from www.hussein-chalayan.com



Fig. 3. Alexander McQueen, F/W 2006.

Retrieved from www.firstview-korea.com



Fig. 4. Issey Miyake, F/W 2006.

Retrieved from www.firstview-korea.com

as free.

A twisting in something is unexpected and significant development and the shape that something has when it has been twisted. A twisting cannot be separated the end which is inside and outside, because of being intersected each other like as Möbius. This is inter-merger, communicated and after all form the continuous space. Just only structure of twisting creates

three-dimensional space and features plastic as flexible flow. The examples of twisting in contemporary fashion are <Fig. 3-4>. <Fig. 3> is Alexander McQueen's work in 2006 F/W. This is a sweater design using twisting structure. Buttons are under hemline and connected with holes upper collar, so the shape of inside is changed to outside each other. A grade of ranks can be changed between inside and outside.

<Fig. 4> is Issey Miyake's work in 2006 F/W. Black jersey and colorful traps are used crossly to express a space of twisting and inter-merger.

IV. Results

Designed knitwear using Aran motif based on spatial continuity theory of Bergson and Deleuze. Aran motif involves twist, continuance and blob in spatial continuity. Knitwear is comfort and can express various modes in anytime and anywhere for active people. The design works are as follow: <Table

6-7>.

Aran motif cannot be separated the end which is inside and outside, because of being intersected each other as twisting. This is inter-merger, communicated and after all form the continuous space. This structure of Aran motif creates three-dimensional space and features plastic as flexible flow. Designs 1-3 are hand-knitted using Aran motif. Designs 1-2 are use Aran motif on the whole, and design 3 on the muffler continuously. Aran motif of thick gauze expresses the spatial continuity connecting with front and back. Design 4 expresses inter-merger shape crossing the

Table 6. Knitwear design based on Aran motif(Design 1-3)

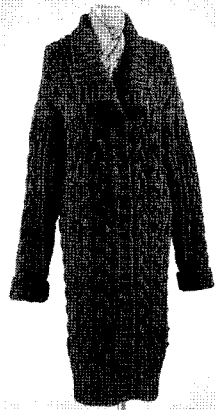


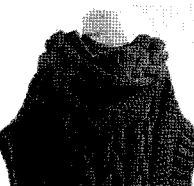
	Design 1	Design 2	Design 3
Front			
Back			
Detail			
Description	<ul style="list-style-type: none"> - a long cardigan with a big collar - harmony between cable and ball motifs - thick gauze expresses the spatial continuity connecting with front and back 	<ul style="list-style-type: none"> - a long vest with a hood - thick gauze expresses the spatial continuity connecting with front and back 	<ul style="list-style-type: none"> - harmony between woven and knit - a woven coat with a knit hood and knit pockets - a muffler with cable motif - thick gauze expresses the spatial continuity

Table 7. Knitwear design based on Aran motive(Design 4-5)

	Design 4	Design 5
Front		
Back		
Detail		
Description	<ul style="list-style-type: none"> - a half coat style cardigan - variant motifs of cable - expresses inter-merger shape crossing the vertical Aran motif and horizontal fur trimming. 	<ul style="list-style-type: none"> - a shawl cape and hat - design with variant expressions - occupies a different space how to adjust the closet and communicates inside and outside

vertical Aran motif and horizontal fur trimming. The horizontal fur trimming means the skyline of nature, so expresses the effect of blob and twisting. Design 5 is hand knitted using Aran motif on hat and shawl. This occupies a different space how to adjust the closet and communicates inside and outside.

V. Conclusions

Complex social conditions and various relationships reflected in modern fashion can be understood in terms of the 'continuance' theory of Henri Bergson and the 'continuous formation of the difference' theory of Jill Deleuze. On the basis of those theories, this thesis categorized qualitative continuity into spatiotemporal and spatial continuity, and explored their

aesthetic characteristics. Especially, spatial continuity was explored in terms of the enlargement of the space by pleats, origami, and air pumping systems, the inter-merger of the space by blob and twisting, and the fluidity of the space by blurring, reconstruction, and deconstruction.

Knit is a good material that enable to creative design. It can easily make three dimensional textures and allow more various expressions by different selection of yarn-twisting, knitting and gauge. The Aran is a style of sweater that takes its name from the Aran Islands off the West Coast of Ireland. Aran Sweaters are a common form of knitted cabling and Aran motive is the most applicable pattern to knit. Each stitch carries its own unique meaning, a historic legacy from the lives of the Island community many years ago. The

Cable Stitches is a depiction of the fisherman's ropes, and represents a wish for a fruitful day at sea.

On the basis of these concepts of the space spatial continuity and Aran(Cable) knit motive, by using a low gauge hand knitting technique, four pieces of knitwear were designed in this thesis.

Conclusively speaking, this study attempted to reflect philosophical thoughts of Bergson and Deleuze in decorative and creative knitwear designs by using Aran motive. This study will make a contribution to theoretically and practically connecting between philosophical thought and knit fashion design.

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요 약

본 연구의 목적은 전통적인 니트웨어에 대한 의미와 깊이를 파악하고 베르그송과 들뢰즈의 연속성 이론을 배경으로, 전통 니트의 대표적 패턴인 아란 모티프를 응용한 니트웨어의 디자인 전개와 개발을 해보는데 있다. 현대패션에서 보여지는 주름, 종이접기, 공기주입시스템, 방울이나 꼬임 등에서 느낄 수 있는 소통, 공간적 느낌, 해체적 유동성 등이 연속성 이론의 기본이 된다. 아란 니트는 역사적 전통성을 가지고 있으며, 아란 니트에서 보여지는 모티프는 이러한 연속성의 이론에 부합하고 있다. 본 연구에서는 아란 모티프에서 연속성의 대표적인 케이블 모티프와 연속성 이론을 바탕으로 5점의 핸드 니트웨어를 디자인, 제작하였다. 전통적인 아란 니트와 연속성이론에 기초한 작품 제작 결과를 통하여 새로운 의미를 전달할 수 있는 니트 디자인 개발이 지속적으로 이루어지길 바란다.
